Erasmus+

University of Ruse

Faculty of Natural Sciences and Education

University of Ruse Angel Kanchev

FACULTY OF NATURAL SCIENCES AND EDUCATION

Erasmus+ ECTS Information Package

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THE ECTS SYSTEM

The Information Package provides a description of the University of Ruse, of the Faculty of Electrical Engineering, Electronics and Automation and the courses offered by the Faculty in order to help prospective ECTS students to prepare for their study period at this institution.

What is ECTS?

ECTS, **The European Credit Transfer and Accumulation System,** was developed by the Commission of the European Communities in order to provide common procedures to guarantee academic recognition of studies abroad. It provides a way of measuring and comparing learning achievements and transferring them from one institution to another. The European Commission promotes the system and the international cooperation between universities as a means of improving the quality of education bringing benefits both to students and higher education itself. In this respect, student exchange is the basic element in university cooperation. Recognition of education and diplomas is the necessary condition for establishing an open European higher education space where students and lecturers can “move” with no restriction.

ECTS provides **transparency** through the following means:

- **ECTS credits** which are a numerical value allocated to course units to describe the student workload required to complete them;
- **The Information Package** which supplies written information to students and staff on institutions, departments/faculties, the organization and structure of studies and course units; it also provides useful information about the location of the University, its admission procedures, accommodation opportunities, academic calendar, etc.
- **The Transcript of Records** which shows students’ learning achievements in a way which is comprehensive, commonly understood and easily transferable from one institution to another;
- **The Learning Agreement** covering the programme of study to be taken and the ECTS credits to be awarded for their satisfactory completion, committing both home and host institutions, as well as the student.

The ECTS Credits

ECTS credits are allocated units to describe the student workload required to complete them. They reflect the quantity of work each course requires in relation to the total amount of work required to complete a full year of academic study at the institution, i.e. lectures, practical classes, seminars, self-study – in a library or at home - and exams or other assessment activities. ECTS credits express a relative value.

In ECTS, **60 credits** represent the workload of a year of study; normally **30 credits** are given for a semester and **20 credits** for a term. It is important that no special courses are set up for ECTS purposes, but that all ECTS courses are mainstream courses of the participating institutions, as followed by the home students under normal regulations. Credits are awarded only when the course has been completed and all required examinations or other assessment activities have been successfully passed. Detailed information about disciplines (short description of course contents, teaching methods, types of assessment, etc.) is given in the information package of each degree programme.

ECTS Students

Students participating in ECTS receive full credit for all academic work successfully carried out at any of the ECTS partner institutions. These credits are transferred to the home university and fully replace the annual/semester workload including exams and other forms of assessment. In this way students can study abroad for a certain period of time and when they come back, they are able to continue their education without any loss of semesters and exams. Some students may also decide to graduate from the host university, and permission for that is given by the academic authorities based upon the student’s transcript of credit points and his/her performance at the home university.

DATA ABOUT BULGARIA

The Republic of Bulgaria is a country situated in South-East Europe. In the north it borders the Republic of Romania, in the east it ranges to the Black Sea, in the south it neighbours the Republic of Turkey and the Republic of Greece, and in the west it borders (former Yugoslavian) Republic of Macedonia and Republic of Serbia.

Area: 110,993.6 sq km

Population: 6 911 661

Capital city: Sofia

Official language: Bulgarian

Alphabet: Cyrillic

Religion: There is freedom of religious confessions. Traditional religion in the Republic of Bulgaria is Eastern Orthodox Christianity

National holiday: March 3, the Day of the Liberation of Bulgaria from Ottoman domination (1878)

Public (non-working) holidays:

3 March – Liberation Day (national holiday)

1 January – New Year

Easter (Resurrection of Christ) – two days (Easter Sunday and Easter Monday)

1 May – Labour Day (the Day of International Working Class Solidarity)

6 May - Day of Bravery and Bulgarian Army, Gergyovden (St. George's Day)

24 May – Day of Bulgarian Education and Culture, and of the Slavonic Alphabet

6 September - Unification Day

22 September - Independence Day

1 November – Day of the National Revival Leaders

24 December – Christmas Eve

25 and 26 December - Christmas

Monetary unit: the Bulgarian Lev (BGN)

Administrative division: 28 regions, named after their respective regional centres

State system: a parliamentary republic with a one-chamber parliament (National Assembly), consisting of 240 national representatives, elected for a four-year term of service. The head of state of the republic is the President, elected for a five-year term of service. The Council of Ministers is the main body of executive power.

Climate: moderate continental with Black Sea influence in the east and Mediterranean in the south

Waters: rivers (main rivers are the Danube, Maritsa, Mesta, Strouma, Iskar, and Yantra); warm and cold mineral springs (more than 600)

Transport: railway, automobile, air and water

International automobile sign: BG

International telephone code: +359 ……..

International telephone code for Ruse: +359 82 ……..

Official Symbols of Bulgaria

The national flag of the Republic of Bulgaria is in three colours: white, green and red bands, following horizontally from top to bottom.

A legend associates the origin of these three colours with the colour symbols of the Old Bulgarian Army. Its left wing was set apart by white strips on the spears, the right one by red, while arranged in the centre were the elite troops with a green strip, the traditional colour of the ruler. The three-colour flag was first used by the First Bulgarian Legion of Georgi Rakovski (1861). By force of the Turnovo Constitution (1879), the three-colour flag - white, green and red, was confirmed as Bulgaria's national flag.

The coat-of-arms of the Republic of Bulgaria is a rampant gold crowned lion against a dark-red background in the form of a shield. Above the shield there is a big crown, whose original shape was that of the crowns of medieval Bulgarian rulers, with five crosses and one other cross, separately, over the crown itself. The shield is supported by two golden crowned rampant lions, facing the shield from the left and right heraldic side. They are standing on two crossed oak tree twigs with acorns. Inscribed in golden letters onto a white strip with a three-colour edging, placed under the shield across the ends of the oak twigs, is ***Union is Strength***.

The Bulgarian Landmarks in the UNESCO List of the World Natural and Cultural Heritage

Kazanluk Tomb
A Thracian tomb, dated to the late 4th-early 3rdcentury B.C. The murals in the burial chamber and in the corridor are of exclusive artistic value. The tomb is located in the Tyulbeto Hill near the town of Kazanluk.

Ivanovo Rock Churches
A rock monastery compound of the Holy Archangel Michael, with partially preserved churches. The murals in the Church of the Holy Virgin have been described as some of the most significant achievements of 14th century Bulgarian medieval art. The churches are located about 20 km away from the city of Ruse, east of the village of Ivanovo, in the rocks of the Rusenski Lom Nature Park.

Boyana Church
It has unique murals from 1259, considered among the masterpieces of medieval European painting. It is at a distance of about 8 km from the centre of the city of Sofia (in the Boyana residential district), in the foothills of Mount Vitosha.

Madara Horseman
A rock relief, cut into the Madara rocks on the northern slope of the Provadiisko Plateau at a height of 23 m. This is the most significant monumental piece of art from the early Middle Ages, unique of its kind in European cultural history. It is close to the village of Madara, about 16 km away from the city of Shumen.

Rila Monastery
The most impressive monastery compound in Bulgaria of exceptional architectural and artistic merits. Founded in the 10th century, rebuilt in the 13th-14th century, a literary centre in the 15th century and completed in its present-day striking appearance during the 19thcentury. A spiritual centre of the Bulgarian people, it is located in the northwest part of the Rila Mountain, about 20 km from the town of Rila and about 120 km from Sofia.

Nessebur, the old part of the town
An architectural, historical and archaeological reserve at the Black Sea coast with valuable archaeological relics from different periods, original churches from the 5th to the 17th century and authentic National Revival Period houses.

Sveshtari Tomb
A Thracian tomb from the first half of the 3rd century B.C. The central burial chamber has exceptionally lavish decoration and impressive caryatides in high relief. It is located close to the village of Sveshtari, 7 km northwest of the town of Isperih.

Sreburna Reserve
A biosphere reserve in the valley of the Danube, including the Sreburna Lake and its surroundings. It has been established for the preservation of rare plant and animal species. It is 16 km west of the town of Silistra.

Pirin National Park
It is part of the scenic Pirin Mountain. Located in the high parts of the Northern Mount Pirin, it is characterized by a specific relief and an inimitable plant and animal world. It also incorporates the Bayuvi Dupki - Dzhindzhiritsa Biosphere Reserve and the Yulen Reserve.

INFORMATION ON THE CITY AND THE UNIVERSITY

THE CITY OF RUSE

Welcome to Ruse

" ... All that I experienced afterwards had already been in Roustchouk"
Elias Canetti

Ruse is the biggest Bulgarian port town on the bank of the river Danube. After the opening of the Rhein - Main - Danube canal which covers 3,500 km and connects thirteen European countries with the Near and Far East via the Black Sea, the river becomes the longest inland waterway on the planet.

This key position has determined the nineteen century long co-existence of town, river, and people, carrying the unique atmosphere of history as a precious heritage, and of future as an open road full of promises. The Romans were the first to build the fort which they called Sexaginta Prista (the port of sixty ships). Then came others, from Europe, leaving their indelible imprint in this intersection of material and spiritual culture, followed by the imbued with the zeal of drive and enterprise Bulgarians, who gradually turned the place into a centre of the Bulgarian national revival. The very name Ruse became a synonym of economic growth and cultural rebirth.

The nineteenth century saw here the opening of the first Bulgarian printing house, the first model farm, the first Bulgarian railroad connecting Ruse with Varna, the first Bulgarian weather service, the first technical school and technical society, the first professional teachers' club, the first insurance agency, the first chamber of commerce and industry, the first inland navigation service on the Danube, the first teletel, the first moving picture show, the first Bulgarian newspaper, the first geography map.

New industries sprang up, banks and trade agencies were founded and European shipping agencies, as well as 17 foreign consulates were established. A large number of Bulgarian, Austrian, Italian, and Swiss men of arts created the wealth of architectural forms and styles characteristic of the period in Europe: Neoclassicism, Neo-baroque, Neo-gothic style, Art Nouveau, and Fin du siecle.

The town hosted a vast variety of multinational ethnic groups, which the Nobel writer Elias Canetti defined as a microcosmos of two dozen nationalities. French, German, Italian, Jewish, Armenian, Turkish, and other schools, boarding houses and churches, reading clubs, theatres and music halls, museums and bookshops, opened their doors to help diversify the cultural life of the city in its steady march towards enlightenment. In this completed picture of social life, today the town is still rediscovering its true face, spanning a bridge across cultures in the new context of integrated Europe.

THE UNIVERSITY OF RUSE

On **12 November 1945** the first out-of-capital higher education institution was founded in Ruse as an engineering school. Its three departments were specialized in Engineering for the purposes of the agricultural sector.

On **13 June 1966**, as a result of its intensive growth, the Minister of Education issued an Order No. 2583 to set up a Higher Institute of Mechanical Engineering, Mechanization and Electrification of Agriculture.

On **9 April 1981,** due to the widened scope of its engineering provision, including the sectors of transport, electronics and computing, it was transformed into 'Angel Kanchev' Technical University by a Decree No. 584 of the Council of Ministers.

On **1 August 1995** a Decision of the National Assembly was made to convert the Technical University in "Angel Kanchev" University of Ruse, thus recognizing its academic expertise not only in the engineering fields, but also in natural sciences, education, law, public health and healthcare, business and management, which were introduced as a response to the needs of the regional businesses and the community.

Mission statement of Ruse University

The University aims to provide:

Dissemination of knowledge,

excellence in fundamental and applied research and

introduction of innovations in practice,

which will help it to train highly-qualified specialists and

maintain the sustainable development of the region and the country.

Academic Calendar

The academic year at the University of Ruse starts in September and is divided into two semesters – Fall and Spring. Each semester consists of:

- 15 weeks of classes;
- 4 weeks of regular examination session;
- 1 week for supplementary examination and 1 vacation week after the fall semester;
- Summer holidays (4-8 weeks) start after the end of the examination session and last till the beginning of the new academic year or till the beginning of the annual supplementary examination session in September for those students who have to resit exams left from the previous year.

The organisation of the training process is realised in the framework of the *Academic Calendar*, which is adopted each year by a resolution of the University's Academic Council.

PROFILE OF THE UNIVERSITY OF RUSE (UR)

Name of higher education institution	**University of Ruse Angel Kanchev**
Type of higher education institution	**State University**
Location and address	**8 Studentska Street, 7017 Ruse, Bulgaria**

Rector Prof. Gencho Popov, PhD, Eng

Number of students for the academic 2023-2024 year: 6295

Number of international students: 210 from **27** countries

Number of PhD students: 258

Full-time academic staff: 382 (200 full and associate professors; 20 Doctor of Sciences; 341 with a PhD degree)

Non-academic staff: **140**

Number of the degree programmes offered:

51 Bachelor and 120 Master degree programmes in **7** of the **9** fields of study in higher education in Bulgaria (Engineering and Technology, Social Studies, Economics and Management, Law, Education, Humanities, Mathematics and Natural Sciences, Health Care and Sport, Security and Defence).

The University of Ruse is the only university in Ruse, Razgrad, Silistra and Targovishte districts (with a population of approximately 1 million), which complies with the international index "one higher education institution per one million people".

The University of Ruse is a full member of:
- European University Association;
- Danube Rectors' Conference;
- Visegrad University Association;
- Interuniversity Center-Dubrovnik.
- Balkan University Association.

The University of Ruse was accredited by the National Evaluation and Accreditation Agency for a six–year period with the grade – 9,44 out of 10.

International activity

The University of Ruse develops its international activity through:

- Participation in scientific programmes of the EU: FRAMEWORK PROGRAMMES, HORIZON 2020;
- Participation in academic programmes of EU: CEEPUS, ERASMUS+, ERASMUS MUNDUS, TEMPUS, etc.;
- Participation in other EU funding schemes: Operational Programmes 2007-2013 and 2014-2020 in Bulgaria, Romania-Bulgaria Cross Border Cooperation Programme 2007-2013, COST, Competitiveness and Innovation Framework Program (CIP), Intelligent Energy Europe Programme, South East Europe Transnational Cooperation Programme, Europe for Citizens, etc.
- Programmes for cooperation with Germany – DAAD, Baden-Wuertemberg Stiftung
- Participation in bilateral exchanges with above 60 signed bilateral agreements for institutional partnership with other universities and scientific-research institutes.
- Organization and participation in international events

The University of Ruse is one of the first Bulgarian universities which started its participation in the ERASMUS programme. Now there are more than 250 bilateral agreements signed with universities from 28 European countries. At least 80 undergraduate, post-graduate and PhD-students are annually involved in all EU exchange programmes. The University of Ruse is the only university in Bulgaria which coordinates fourth thematic networks of about 70 participants each from 35 countries.

Admission of foreign students

Terms of study:

- ***For a Bachelor's degree*** - 4 years;
- ***For a Master's degree*** – 1 or 2 years depending on the Bachelor's degree acquired;
- ***For a Doctoral degree*** – at least 3 years.

Degree programmes at the University of Ruse

Faculty of Agricultural and Industrial Engineering:

- Agricultural Machinery and Technologies
- Ecology and Environmental Protection
- Industrial Design
- Air-conditioning, Hydraulics and Gas Supply
- Agricultural Engineering
- Plant Growing
- Equipment Maintenance and Management

Faculty of Mechanical and Manufacturing Engineering:

- Mechanical Engineering
- Quality Management and Metrology
- Industrial Engineering
- Civil Engineering

Faculty of Electrical Engineering, Electronics and Automation:

- Electrical Power Engineering
- Electronics
- Automatics and Mechatronics
- Computer Systems and Technologies
- Internet and Mobile Telecommunications
- Information and Communication Technologies
- Information and Communication Technologies (in English)

Faculty of Transport Engineering:

- Transport Engineering
- Transport Engineering and Management
- Technology and Logistics of Water Transport

Faculty of Natural Sciences and Education:

- Computer Science
- Informatics and Information Technologies in Business
- Software Engineering
- Financial Mathematics
- Pedagogy of Education in Mathematics and Informatics
- Bulgarian Language and History
- Pre-school and Primary School Education
- Primary School Education with a Foreign Language
- Social Pedagogy

Faculty of Business and Management:

- Business Management
- Marketing
- International Economic Relations
- Economics
- European Studies and Multilevel Governance
- European and Global Studies (in English)
- Business Administration
- Industrial Management

- Euro-Atlantic and Global Security
- Security of citizens and property in cross-border environment

Bulgarian-Romanian Interuniversity Europe Centre (BRIE):
- European Studies and Regional Cooperation (in English and German)
- European Studies and Public Administration (in English)

Faculty of Law:
- Law

Faculty of Public Health and Health Care:
- Kinesitherapy
- Occupational Therapy
- Nursing
- Midwifery

Silistra Branch:
- Bulgarian Language and Foreign Language
- Physics and Informatics
- Electrical Engineering
- Automotive Engineering

Razgrad Branch:
- Biotechnologies
- Chemical Technologies
- Food Processing Technologies

Vidin Branch:
- Agricultural Machinery and Technologies
- Electronics
- Transport Engineering and Management
- Computer Science
- Industrial Management

Other University Units and Services
- Quality of Education and Accreditation Directorate
- Public Relations Directorate
- Foreign Students Directorate
- Student Admissions and University Registrar
- Scientific Research Sector
- University Computing and Information Services Center (UCISC)
- Center for Distance Learning
- European Integration and International Cooperation Sector
- Center for Continuing Education
- Center for Career Development
- University Library

The language of instruction for students in Bachelor and Master Degrees is Bulgarian.
The University of Ruse offers 2 Bachelor and 2 Master degree programmes in English

Bachelor degree programmes
- Information and Communication Technologies;
- European and Global Studies.

Master degree programmes
- European Studies and Regional Cooperation (in English and German);
- European Studies and Public Administration.

Application Procedures

General Conditions and Documents for Admission of Foreign Students

Foreigners, who hold a high school diploma, giving them access to universities in the country issuing this diploma, are eligible for admission into the University of Ruse.

Preparatory Year

During their first year at the University foreign students study Bulgarian in a 10-month intensive course, tailored to meet the needs of linguistic and specialist training of international bachelor, master and PhD students. The course is organized by the Foreign Students Directorate.

Tuition Fees

Foreign citizens, studying at Ruse University, pay tuition fees. The fees are paid in two installments: at the beginning of the academic year and at the beginning of the second (Spring) semester.

For sending applications and for more detailed information foreign applicants can address:

Foreign Students Directorate
University of Ruse
8 Studentska Street
7017 Ruse
Bulgaria
tel: +359 82 888 281
e-mail: chs@uni-ruse.bg

Application documents and procedures for admission of foreign students within exchange programmes of the European Union

Application and admission of international students to different programmes of the European Union are prepared in compliance with the individual bilateral or international agreements.

For international students, who wish to study at the University of Ruse within the ERASMUS programme, selected courses are offered in English. The list of these courses can be found on the university WEB site. http://erasmus.uni-ruse.bg/en/?cmd=cmsPage&pid=29

For sending application forms within ERASMUS and for more detailed information foreign applicants can address the International Relations and Erasmus Office:

International Relations and Erasmus Office
University of Ruse
8 Studentska Street
Ruse 7017
Bulgaria
tel/fax: +359 82 888 650
e-mail: eims@uni-ruse.bg
http://erasmus.uni-ruse.bg/bg/?cmd=gsIndex

General Information

Visa Requirements

According to the Law for Foreigners' Stay in the Republic of Bulgaria, each foreigner may enter the country with a valid passport (or other ID document) and an entry visa for Bulgaria. Entry visas are issued in all Embassies or Consulates of Bulgaria abroad. *No visas are required* for citizens of the countries of the European Union and of a number of other countries as well. On arrival in Bulgaria, every foreigner, if not accommodated in a hotel, should, within 24 hours, register his/her address with the Passport Service for Foreigners. Foreigners who are admitted as students at the University of Ruse should present their documents for admission issued by the University. This will allow them to get permission for longer stay in the country after their entry visas expire.

Traveling to Ruse

The distance from Ruse to Sofia (the capital city of Bulgaria) is 315 km.

The distance from Ruse to Bucharest (the capital city of Romania) is 60 km.

Travel to both capital cities is by train and by bus.

There are also provisions for quick and easy transport to various parts of the city and other regions of the country

After arriving at the University each international student is welcome to contact the office of the Foreign Students Directorate while Erasmus students have to contact the Center for European Integration, International Cooperation and Mobility.

Living Expenses

The optimum amount of living expenses is connected with a balanced budget, including subsistence costs, accommodation costs, medical services, public transport, food and public services, tuition costs (for EU member country students) and some other expenses. Minimum living costs are achieved through the use of the refectory and through modest expenses for transport and other public services. Under these conditions, the average living expenses may range from 150 to 250 Euro per month.

Accommodation and on-campus facilities

Accommodation can be found in several sectors:

In one of the many hotels in Ruse. The approximate price for a single room is about 40 – 80 Euro per night. ***In one of the cheaper hotels***. Offering less comfort, or in single rooms in hotel chains at prices about 15–25 Euro per night. ***Renting a flat*****.** The rent for such a flat (1 to 3 rooms) varies from 60 to 250 Euro per month depending on the degree of comfort, furniture and location. Rents exclude expenses for electricity, hot water, central heating and telephone, which may cost about 50–100 Euro per month.

The University of Ruse offers very good on-campus accommodation for 2400 students at rents of about 35 Euro per month. There are eight student hostels, two of which are for families.

The University of Ruse on-campus facilities offer excellent opportunities for study, research, recreation and sport. The student hostels, the refectory, the medical centre, the post office, the sports facilities and the student culture club are all situated on campus, which is surrounded by green parkland and is within easy reach of the city parks, the river Danube and the city centre.

The University of Ruse offers on-campus sports facilities for volleyball, basketball, table tennis, bodybuilding, football, field and track events and other sports. The sports teams and clubs for football, athletics, volleyball, basketball, handball, aerobics and calisthenics are the responsibility of qualified teachers, which explains why they often win first prizes at various competitions.

There is a variety of amateur clubs, forming the Student Cultural Club Society, which was established in 1954. Examples are the Folk Dance Theatre, the Artists Club, the Pantomime Studio, the Drama Society, the Photographer's club, the Literature Club, the Modern Dance Society, and the folk dance band. Their guidance is entrusted to distinguished performers, artists and musicians.

The Tourist Society ACADEMIC unites a variety of clubs: for mountain climbing, water sports, skiing, cycling, rock climbing, mountaineering, speleology and cross-country walking. They attract large numbers of students, faculty members and administrative staff, who can take holidays in the university resort centres on the Black Sea coast, in the Balkan mountains, or along the bank of the Danube.

Medical Services and Insurance

There are many clinics, hospitals and private surgeries where you may ask for qualified medical help paying cash at quite reasonable rates. You may also get medical insurance in one of the numerous insurance companies in Bulgaria.

Other Useful Information

Public Transport: Trams, buses and trolley buses are the main public transport in Bulgaria. Tickets are sold at bus stations (bus stops), at newspaper stands or in some cases by drivers. Tickets should be perforated in the vehicle. There are also season travel cards for one day, one week or one month. The price of the ticket for public transport is 1.00 Lv. (about 0.50 Euro).

Taxi: There are many taxis in Ruse, provided mostly by private firms. Information about the firm and charge rates (day and night) can be seen on stickers on the front or rear windows of the car. Charge rates for 1 kilometre are between 0.70 and 0.90 Lv. (about 0.35–0.45 Euro).

Money Exchange: Popular currencies in Bulgaria are the USD and EURO. Open hours of the banks are usually between 9.00 a.m. and 4.00 p.m. There are also a lot of foreign exchange offices.

Food Stores. Restaurants: All food stores work usually till 7.00 or 8.00 p.m., but there are also 24-hour open stores and stores that work on Saturdays and Sundays. Most foodstuffs, vegetables and fruit are sold at prices, similar to those in Western Europe. Restaurants offer highly varied prices depending on their category. In some small and inexpensive restaurants the price of a meal is about 10 Euro.

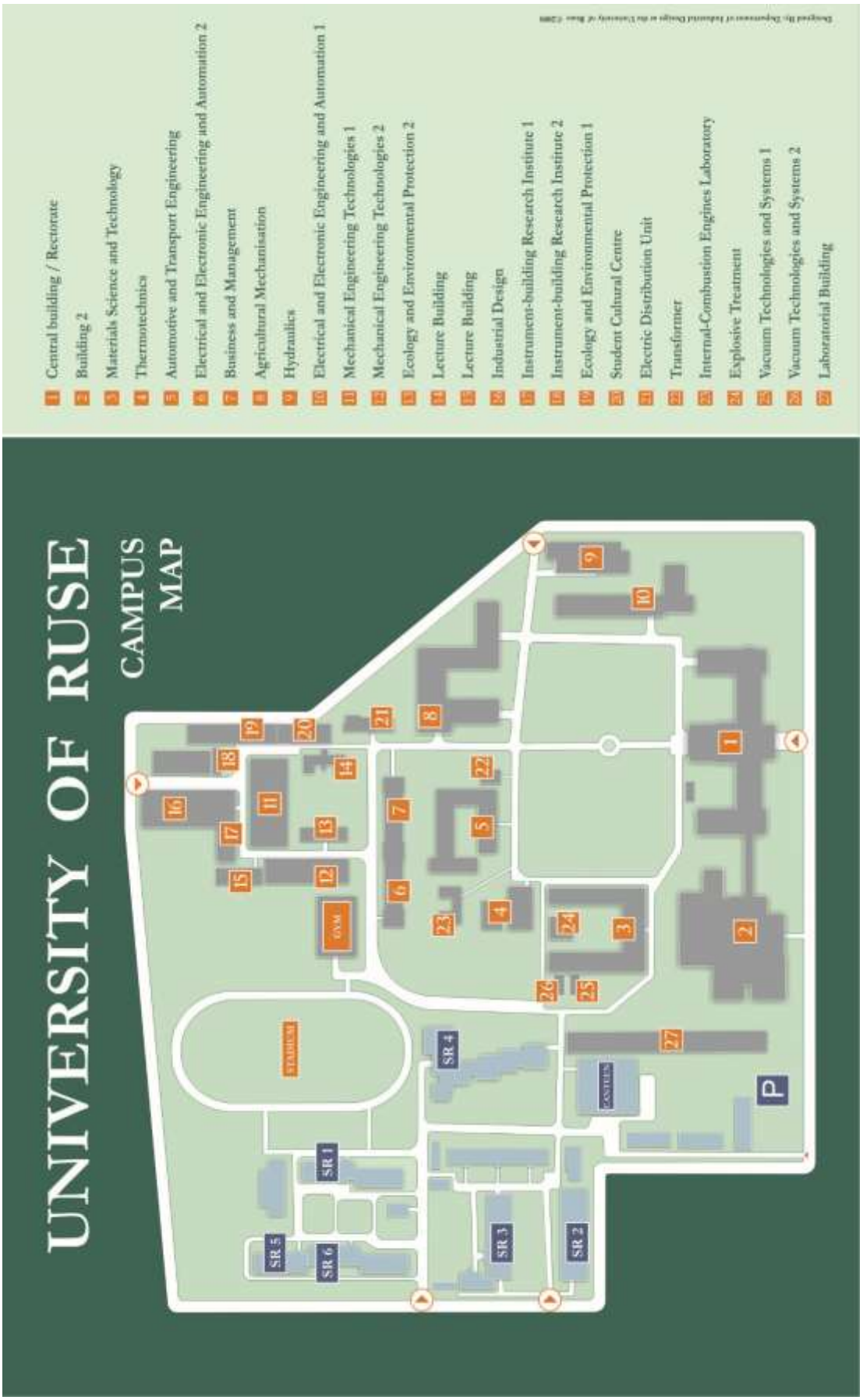
Phone Services: There are 3 large mobile network operators on the territory of Bulgaria and these are M-Tel, GloBul and Vivatel.: Pre-paid cards are available at the offices of the mobile operators. For international calls you may also use the services of the national post offices.

Bookshops and Photocopying Services: Copy services, books, textbooks, manuals and other training aids are offered in the University bookshop and stationery shop.

Student Organisations

The Student Council is a body which protects the interests of the students. It is elected by full-time bachelor, master and doctoral students and includes student representatives in the General Assembly of the University. The Student Council at the University of Ruse maintains an information centre, located on the first floor of the Central Building.

Campus Map of the University of Ruse



INFORMATION ABOUT THE FACULTY OF NATURAL SCIENCES AND EDUCATION

FACULTY OF NATURAL SCIENCES AND EDUCATION

(Faculty of NSE)

The Faculty of Natural Sciences and Education was founded with Decision No. 413 of 11 October 1994 issued by the Council of Ministers of the Republic of Bulgaria.

The Faculty of Natural Sciences and Education has been awarded with the 2019 Award “Ruse” (category “Educational Institution, teaching and research staff”) for its active educational and research work, for the training of pedagogical staff and on the occasion of its 25 years of its founding.

The faculty trains students and doctoral students in 6 professional fields: 1.2. Pedagogy, 1.3. Pedagogy of the education in ..., 2.1. Philology, 2.2. History and Archeology, 4.5. Mathematics and 4.6. Informatics and Computer Science in 9 undergraduate programmes, 16 postgraduate programmes and 9 doctoral programs.

The structure of the faculty comprises of 5 departments: Pedagogy, Psychology and History; Bulgarian Language and History; Mathematics; Applied Mathematics and Statistics; Informatics and Information Technologies. The academic staff includes 61 lecturers hired under a main employment contract out of which: Professors – 3, Associate Professors – 28, Principal Assistant Professors – 28, Assistant Professors – 2 which all hold a PhD degree and one holds the scientific and research “Doctor of Science”. Former academic staff, as well as prominent practitioners, with valuable long-term training and research experience also take part in the education of students in the faculty.

The faculty cooperates actively with educational,cultural and financial insitutions, schools, business companies, software companies, institutes of the Bulgarian Academy of Sciences and other higher educational insitutitions on a national and international level. Cooperation agreements are signed with more than 60 universitys and educational institutions from Germany, Romania, Slovenia, Slovakia, Hungary, Austria, Ukriane, Serbia, Bosnia and Herzegovina, Italy, Moldavia, Northern Macedonia, Albania, the Czech Republic, Montenegro, Poland, Spain, Turkey, Belgium, Estonia etc. Students have the opportunity to take part in academic mobility for study or practice in many prestigious European universities and to participate in educational and scientific forms in Bulgaria and abroad.

The faculty participates actively in research activities in various scientific fields. A significant part of the publications of the academic staff are done in journals indexed in Web of Science and Scopus. Staff from the faculty is also involved in international and national projects developed under various research programmes, as well as in projects under the national research fund and the research fund of the University of Ruse. The Faculty is the coordinator of the *Universities for Science, Informatics and Technologies in e-Society* (UNITe) project which is developed under the Science and Education for Smart Growth Programme and which aims to create a functioning Centre of Excellence in the area of Infmormatics and Information and Communication Technologies (ICT).

The following scientific and research centres function in the faculty:

- St Dimitar Basarbovski Centre for Folklore, Literature and Linguistics – the scientific and research work is focused on aspects of folklore, ethnology, ethno-linguistics, ethno-semiotics and theory of literature.
- "Laboratory for the Reseach of the Linguistic Heritage of the writer Yordan Valchev" where the students work with the personal archive materials of the writer;
- A Scientific Laboratory on the Problems of Teacher Training at University Level – its scientific and research activities are focused on the study of the quality of the education process and its referencing to the European educational standards;
- Scientific laboratory for research and modelling of real processes.

Dean

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tharakchiyska@uni-ruse.bg

ECTS Coordinators

Faculty ECTS coordinator:

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Departmental ECTS Coordinators:

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Department of Informatics and Information Technologies

Pr. Assist. Prof. Valentin Velikov, PhD

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Department of Mathematics

Pr. Assist. Prof. Ralitsa Vasileva-Ivanova, PhD

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Department of Pedagogy

Assoc. Prof. Lora Radoslavova, PhD

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Department of Applied Mathematics and Statistics

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DEPARTMENTS IN THE FACULTY OF NATURAL SCIENCES AND EDUCATION

DEPARTMENT OF BULGARIAN LANGUAGE, LITERATURE, HISTORY AND ART

Business Card of the Department

HEAD OF THE DEPARTMENT

Assoc. Prof. Mira Zhivodareva Dushkova, PhD

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https://www.uni-ruse.bg/en/departments/BLLAD

The Department of Bulgarian Language, Literature and Art was founded in 1994 with a decision of the Academic Council according to which the department became an integral unit of a new academic structure – the Faculty of Pedagogy. Nowadays the department is part of the *Faculty of Natural Sciences and Education* and is responsible for the education and training of the students enrolled in the *Bulgarian Language and History* undergraduate programme. At the same time the academic staff of the department takes part in the training of students from other undergraduate programmes – *Pre-primary and Primary School Education, Primary School Education with a Foreign Language* and *Social Pedagogy.* The following postgraduate degree programmes are offered by the department: *Modern Bulgarian Studies and Education*, *Linguistics and Didactics for Primary School Teachers of English, Linguistics and Didactics for Lower Secondary School Teachers of English, Modern Bulgarian Studies and Education*.

The academic staff of the department comprises 10 lecturers: four Associate Professors, five Principal Assistant Professors with a PhD degree and one Assistant Professor currently a PhD student. Renowned Bulgarian researchers and scientists from other higher educational instructions or the Bulgarian Academy of Science have worked as guest lecturers at the department at different periods.

The research fields of interest in which the academic staff of the department delivers seminars are: Linguistics, Theory of Literature, Methods of Teaching Bulgarian Language and Literature, Methods of Teaching Music, Methods of Teaching Arts, Methods of Teaching English as L2.

The members of the department **conduct research in a wide area of linguistic disciplines**: semiotics, syntax, language and culture studies (linguoculturology), text linguistics, Bulgarian literature, methods of teaching languages etc.

The department is the initiator of the ***Arnaudov Readings*** – a prestigious scientific forum which is attended by prominent researchers and scientists from Bulgaria and abroad. The materials from the readings are published in a series of volumes – the *Arnaudov Collection.* The event was organized for the first time in October 1998 when the Department of Bulgarian Language, Literature and Art initiated it in tribute to the Academician Mihail Arnaudov on the 120th anniversary of his birth. The forum has had 9 editions since 1998. The main organizers of it are the Department of Bulgarian Language, Literature and Art and the St Dimitar Basarbovski Centre for Folklore, Literature and Linguistics along with the Regional Museum of History in Ruse.

The **St Dimitar Basarbovski Centre for Folklore, Literature and Linguistics** was founded in 1993 by members of the department as a meeting point not only for academics but for all those interested in research. This underlying idea of the centre aims to revive the longstanding Bulgarian tradition of the university being a focal point of scientific and cultural life in town. That is why the department has been a host of different meetings with authors and intellectuals from Ruse for many times. A huge project aimed at studying the work of literature writers and publishers in Ruse has started in cooperation with authors and intellectuals from the town in 2011.

The Department of Bulgarian Language, Literature, History and Art is an organizer of a large number of round tables devoted to the problems of Bulgarian spelling and speech norms, as well as to the works of many local authors. An essential aspect of the work of the department is the organization of many scientific seminars focused on different methodological problems of the history of literature, on the role of humanitarian studies in a digital world, on the development of the speaking skills of L2 young learners etc.

A central priority for the department is the involvement of students in research activities. A students' conference is organized every year where the academic staff of the department helps students in the preparation of their first scientific papers. The best papers are included in a conference volume. A new laboratory – **Laboratory for the Research of the Linguistic Heritage of Yordan Valchev** has been created in 2015 at the department. The main founders of this laboratory are lecturers from the department along with students from the *Bulgarian Language and History* undergraduate programme.

A competition entitled *Do you know Bulgarian?* is organized by the department for the students from the teacher training programmes. The competition is the place where students demonstrate their knowledge in the field of Bulgarian language – the speech and spelling norms of the language.

Two students' clubs function at the department: *Palette* and *Affect* which unite students with artistic skills from all programmes. The poetic skills and performances of young poets and short-story student writers are also encouraged.

The academic staff of the *Department of Bulgarian Language, Literature, History and Art* work devotedly not only **in the field of humanitarian studies, but also in the field of humanity**. Every year the department organizes a charity theatre performance for children of low socioeconomic status, while the young artists of the *Palette* club organize a Christmas market to help their colleagues of low socioeconomic status.

The Department of Bulgarian Language, Literature, History and Art has active international cooperation with the Volgograd State University with which it exchanges academic staff and students and with the Maria Curie-Skłodowska University in Lublin (Poland) where courses in Bulgarian Studies are offered.

DEPARTMENT OF INFORMATICS AND INFORMATION TECHNOLOGIES

Business Card of the Department

HEAD OF DEPARTMENT

Assoc. Prof. Rumen Ivanov Rusev, PhD

tel.: +359 82 888 754

E-mail: rir@uni-ruse.bg

https://www.uni-ruse.bg/en/departments/CSD

The Department of Informatics and Information Technologies was established in 1981.

The Department staff consists of 16 academic (2 Professors, 6 Associate Professors, 7 Principal Assistant Professors and 1 Asistant Professors), and 1 support member.

The Department is responsible for the teaching of students enrolled for the professional field 4.6 Informatics and Computer Science of **Bachelor** and **Master** Degrees. It also conducts relevant courses of Informatics and Information Technologies to students of all Ruse University programmes, which differ by contents and curriculum hours.

The curricula of all programmes in Informatics and Computer Science have been worked out in accordance with the requirements of the modern software industry and the recommendations of the Association of Computing Machinery (Computing Curricula 2001).

The scientific research fields of the Department include:

- Modern trends in Software Engineering
- Visualization of algorithms
- 3-D computer graphics
- Modelling of cloths and physical objects
- Modelling of business architectures
- Information and expert systems
- Education of talented students and pupils

Students of the Informatics and Computer Science professional programme have the opportunity to actively participate in the scientific researches carried out at the Department. The results are presented on regular local scientific seminars and are submitted for publishing by national and international conferences, scientific journals and proceedings.

The academic staff of the Department is involved in various international educational and research programmes as **Erasmus+, Horizon among others**. The research projects contribute to raising staff's qualification. The educational projects allow the academic staff and students participate in academic exchange programmes at leading universities in Belgium, Hungary, Greece, UK, Portugal, Turkey, Slovenia, Romania, etc.

The quality of education is of permanent care for the department staff. The close contacts with companies from the software industry provide an opportunity to discuss different aspects of the programme curricula, as well as to present relevant company's activities and requirements for employing graduates who are wishing to join their work teams.

For carrying out effective teaching process, scientific researches and student's individual work, the Department is in charge of 6 computer rooms provided with state-of-the-art computer equipment. Servers configured for students and teachers are linked to the University computer network giving a constant access to the Internet and to resources of general usage.

The Department conducts training in the Software Engineering master degree programme. It is one of the first programmes in Bulgaria that is jointly developed by the academic institution and an industrial software producer (Sirma Group).

Students, who have graduated Informatics and Computer Science programmes, find a wide range of working opportunities to make professional careers at software and other companies as software designers, developers or team members. They are provided with competency and skills for designing, developing and managing of software systems that allow them professionally grow and take leading positions at different levels in business structures of the software industry.

DEPARTMENT OF MATHEMATICS

Business Card of the Department

HEAD OF THE DEPARTMENT

Assoc. Prof. Urij Dimitrov Kandilarov, PhD

tel.: +359 82 888 634

E-mail: ukandilarov@uni-ruse.bg

https://www.uni-ruse.bg/en/departments/Mathematics

The Department of Mathematics is responsible for the education and training in mathematics of all engineering and economic undergraduate programmes at the University of Ruse as well as for the education and training of the students from the undergraduate programme in Pedagogy of the Education in Mathematics and Informatics. The latter has been accredited in 2021 with an evaluation grade of 9.28 granted by the National Evaluation and Accreditation Agency. The Department of Mathematics is the successor of the Department of Algebra and Geometry and the Department of Mathematical Analysis since 2012.

The Department of Mathematics is responsible for the teaching and training of students in the following Postgraduate programmes:

- Postgraduate Studies in Mathematical Modelling (since 2011).
- Postgraduate Studies in Methodology of Teaching Mathematics (since 2017) for applicants holding an undergraduate degree in pedagogy;
- Postgraduate Studies in Methodology of Teaching Mathematics (since 2017) for applicants holding an undergraduate degree in fields other than pedagogy;

The following PhD programmes are accredited:

- Differential Equations;
- Mathematical Modelling and Applications of Mathematics.

The Department of Mathematics comprises of 11 lecturers. The staff members are as follows: 1 Professor, Doctor of Science, 6 Associate Professors, 3 Principal Assistant Professors holding a PhD degree. 6 PhD students are trained at the department.

The mission and aims of the **Department of Mathematics** are to provide highquality training of students and PhD students, to work with motivated and gifted students, to develop efficient and internationally renowned research and to contribute to international integration.

The department conducts research in the areas of:

- Computer Algebra, The Sturcture Theory of Rings, Algebra with Polynomial Identity;
- Geometric Transformations and Computer Graphics;
- Differential Equations and the Application of the Differential Equations, Nonlinear Analysis;
- Matematical Models in Economics and in the Natural Sciences;
- Teaching of Mathematics, Training of Gifted Pupils and Students, Matematics Competitions;
- Mathematical and Computational Linguistics;
- Recognition Systems and Radiolocation.

The academic staff of the deparment take an active part in various international projects providing opportunities for research and exchange of teaching staff and students with higher educational institutions from Austria, Belgium, Canada, Cyprus, Estonia, Greece, Hungary, Israel, Italy, Poland, Portugal, Romania, Slovakia, Spain, the UK and the USA among others.

The teaching staff at the department organizes a variety of forums such as the International Conference “Numerical Methods and Applications”, the NODDEA International conference and seminars, competitions in Mathematics and Olympiads in Mathematics and Informatics. Students who work under the supervision of the lecturers from the department are awarded with certificates and medals which recognize their achievements as a result of their participation in Olympiads, competitions and conferences.

The Department of Mathematics cooperates with other research institutions working in the area of Mathematics such as the *Institute of Mathematics and Informatics at the Bulgarian Academy of Science* and departments from other universities on national and international level.

DEPARTMENT OF PEDAGOGY

Business Card of the Department

HEAD OF DEPARTMENT

Assoc. Prof. Valentina Nikolova Vasileva, PhD

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E-mail: vvasileva@uni-ruse.bg

https://www.uni-ruse.bg/en/departments/PPHD

The Department of Pedagogy (former Department of Pedagogy, Psychology and History) is a successor of the Department of Pedagogy and Social Science since 2002. The latter was established on 17.06.1998 after uniting two departments – the Department of Pedagogy and the Department of Social Sciences. The Department of Pedagogy was the older of these two and was founded in 1966 as a substructure of the former Institute for Pre-school and Primary School Teachers. The foundation year of the Department of Social Sciences is 1992 when it became part of Angel Kanchev Higher Technical School. In 1994 both departments became independent units of the Faculty of Education of the "Angel Kanchev" University of Ruse.

The Department staff comprises 12 academic members (1 Professor, 6 Associate Professors, 3 Principal Assistant Professors with a PhD degree, 1 Assistant Professor with a PhD degree, 1 Assitant Professor) and one administrative secretary. 12 PhD students are working over dissertation theses at the Department.

The Department is accredited to train students in Undergraduate and Postgraduate study programmes.

The Department of Pedagogy is responsible for the Undergraduate studies in:

- *Pre-school and Primary School Education;*
- *Primary School Education with a Foreign Language;*
- *Social Pedagogy.*

and the Postgraduate studies in:

- *Social and Pedagogical Work with Children and Families;*
- *Pedagogical Prevention of Crime and Probation Practices;*
- *Pre-school and Primary School Education (for gradutes holding a BA or MA level);*

The academic staff is involved in the teaching process of students in the following u**ndergraduate study programmes**:

- Bulgarian Language and History;
- Mathematics and Informatics;
- Physiotherapy;
- Social Activities;
- Law.

The academic staff works in the following scientific research fields:

- Modern Educational Technologies for Working with Pre-Primary and Primary School Pupils and Comparative Education;
- Theory of Education;
- History of Pedagogy and Bulgarian Education;
- Social and Special Pedagogy;
- Pedagogical and Psychological Research.

The Department of Pedagogy has bilateral agreements with organisations like:

- The Faculty of Pedagogy of the University Centre Pitesti – part of the POLITEHNICA Bucharest (National University of Science and Technology in Bucharest), Romania, the Faculty of Education, ABO Academy, Finland – for exchange of academic staff and students and for exhcnage of insights on various pedagogical practices, as well as participation in scientific events;

- the Taraclia State University of the Republic of Moldova whose students are trained annually at the University of Ruse;
- Universities in more than 20 EU countries (e.g. Greece, Belgium, Italy, Austria, Matla, Spain etc) where students and PhD students spend one semester for study, traineeship or research under the Erasmus+ programme, as well as with a higher educational institution in the USA.




The modern facilities and premises, the up-to-date curricula, the digital teaching materials and the potentialof the academic staff guarantee the high level of the teaching process offered by the **Department of Pedagogy, Psychology and History.**

DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS

Business Card of the Department

HEAD OF DEPARTMENT

Assoc. Prof. Iliyana Petrova Raeva, PhD

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https://www.uni-ruse.bg/en/departments/AMSD

The Department of Applied Mathematics and Statistics was established in 1981.

The Department trains students in the following undergraduate programmes:

- Engineering in the field of Applied Mathematics and Statistics;
- Economics in the field of Mathematics Applications and Statistics in Economics;
- Mathematics and Informatics and Informatics and Information Technologies in the fields of Numerical Analysis, Probability Theory And Statistics, Operations Research, Optimization Methods, Mathematical Texts Processing Systems, Introduction to the Numerical Computing Environment MATLAB;
- Kinesitetherapy and Occupational therapy in the field of Medical Statistics.

The scientific research of the Department of Applied Mathematics and Statistics includes the following scientific areas:

- Mathematical Modelling;
- Computational Mathematics;
- Operations Research;
- Differential Equations;
- Programming Systems;
- Statistics;
- Psychology.

The Department members have scientific publications predominantly in the fields of Numerical Analysis for Differential Equations, Linear Algebra Numerical Analysis, Algorithms Stability, Optimization Methods, Statistical Methods in Engineering and Social Investigations, Programming Systems for Mathematical Texts Processing, Multimedia Presentation.

The department cooperates with specialists form the Departments of Mathematics at:

- the St. Kliment Ohridski University of Sofia;
- the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences;
- the Beograd University, Serbia;
- the University of Miskolc, Hungary;
- the University of Ljubljana, Slovenia;
- the University of Ioannina, Greece.

UNDERGRADUATE PROGRAMMES

UNDERGRADUATE STUDIES IN PRIMARY SCHOOL EDUCATION WITH A FOREIGN LANGUAGE

PROFESSIONAL STANDARDS

OF A BACHELOR IN PRIMARY SCHOOL EDUCATION WITH A FOREIGN LANGUAGE

Degree Programme: **Primary School Education with a Foreign Language**
Educational Degree: **Bachelor**
Professional Qualification: **Primary School Teacher, Foreign Language Primary School Teacher**
Term of education: **4 years (8 terms)**

The main goal of the **Primary School Education with a Foreign Language** Bachelor degree is a specialised methodical training of future primary teachers, aimed at providing knowledge in psychology and pedagogy that revels features of cognitive, emotional and physical development at ages 7-11; acquainting the students with the basis of technology of learning in varieties of specific scientific branches of knowledge, the linguistic features of mastering a foreign language at children's age and the relevant methods of learning; introducing modern informative and communicative technologies in teaching; familiarizing them with the special features and requirements of the European dimensions of education.

The quality of training of students doing the Primary School Education With a Foreign Language Bachelor degree is assured through:

- The use of modern laboratories and computer facilities;
- The availability of highly qualified academic staff;
- The courses included in the curriculum, which fall into the following categories:
  - ***fundamental courses*:** Phonetics and Lexicology of the Bulgarian language, Morphology and syntax of the Bulgarian language, Mathematics, Basics of natural sciences, Pedagogical communication, Foreign language, etc.
  - ***core courses***: Theory of Education, Didactics, General Psychology, Basic Theory of Music, Introduction to Primary School Education, Pedagogical Communication, Basics of Natural Sciences and some others.
  - ***highly specialised courses*:** Didactics, General and age psychology, Theory of education, Linguistics, Age psychology, Comparative education, Pedagogical communication, Pedagogical psychology, etc. Training in information and communication technologies and working in a digital environment enables the future primary teacher to successfully use electronic learning materials and electronic forms of learning
  -

The Bachelor that has graduated in Primary School Education With a Foreign Language has to possess the following **knowledge and skills:** plan, organise and implement the teaching process at the primary school and auxiliary units; diagnose and estimate achievements or personal development of students; interact and cooperate with family, public and state institutions, non-governmental organisations, media and etc.; work in an intercultural environment and accomplish an intercultural dialogue; form and develop civil behavior of students; work for confirming equality of all children regardless of their religious and ethnic belonging or specific educational needs; use a foreign language.

The Bachelor in Primary School Education with a Foreign Language **can work as** an expert or manager in:

- primary teacher;
- primary teacher of a foreign language;
- pedagogic advisor;
- home teacher;
- director of different types of schools;
- other activities connected with a university degree.

CURRICULUM
OF THE DEGREE COURSE IN
PRIMARY SCHOOL EDUCATION WITH A FOREIGN LANGUAGE

First year

Code	First term	ECTS	Code	Second term	ECTS
SB15565	Mathematics	4	S02406	Basic Theory of Music	3
S00840	Didactics	4	SB15557	English Grammar	3
SB14538	Inclusive Education	3	S02022	Pedagogical Communication	1
SB16559	General and Age Psychology	4	S02405	Phonetics and Lexicology of Bulgarian Language	4
S02398	General Linguistics	3	SB15598	Information and Communication Technologies in Education and Work in Digital Environment	5
S00430	Theory of Education	4	SB10097	Foreign Language 2	8
SM13114	Introduction to Primary School Education	4		***Elective courses (students elect a course)***	
SB16560	Foreign Language 1	4	SB16561	Family Interaction	3
			SB16562	Inclusive Education of Children and Pupils with Special Needs	3
			SB16563	Civic Education	3
				Elective courses (students elect a course)	
			SB16564	Health and Ecological Education	3
			SB16565	Leadership in Education	3
			SB16566	Managing Relationships in Learning Environments	3
			SB16567	Digital Competence and Digital Creativity	3
	Total for the term:	**30**		**Total for the term:**	**30**
SB13965	Sport	1	SB13965	Sport	1

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
SB16568	Methodology of Teaching Music in Primary School	5	S03880	Methodology of Teaching Mathematics in Primary School	9
SB16569	Foundations of Visual Literacy	3	S03903	English Language Lesson Observation	3
S03868	Morphology and Syntax of Bulgarian Language	4	SB16576	Threshold Concepts in Economics	4
SB15619	Statistical Methods in Pedagogical Research	4	SB15571	Foundations of Natural Sciences	1
SB16574	Foreign Language 3	9	SB15572	Methodology of Teaching Art in Primary School	5
	Elective courses (students elect a course)			***Elective courses (students elect a course)***	
SB15567	Children's Rights	3	SB15569	Professional and Career Development	3
SB16571	Pedagogical Conflictology	3	SB15568	Pedagogical Ethics	3
SB16570	History of Pedagogy and Bulgarian Education	3	SB16612	Children's Folklore	3
S02404	Literary Studies	3	SB16577	Project-based Education	3

Elective courses (students elect a course)					
SB16573	Development of Children's Artistic Abilities with the Instruments of Music	2			
SB16572	Group Training	2			
SB16611	Pedagogical Rhetoric	2			
	Total for the term:	**30**		**Total for the term:**	**30**
SB13965	Sport	2	SB13965	Sport	2

Third year

Code	***Fifth term***	***ECTS***	***Code***	***Sixth term***	***ECTS***
SB16578	Methodology of Teaching National Studies, Man, Society and Nature	6	SB16585	Methodology of Primary School Physical Education	9
S03944	Lesson Observation in Primary School	3	S03943	Teaching Practice	4
S03886	Methodology of Teaching Bulgarian Language and Literature in Primary School	9	SB16586	Children's Literature	5
SB15578	Academic Writing	1	SB14643	Pedagogical Psychology	4
SB16579	Foreign Language 5	2	SB15585	The Art of Speech and Performance	2
SB16580	Methodology of Foreign Language Teaching	7	SB16587	Foreign Language 6	2
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
SB16583	Management of Educational Institutions	2	SB16609	Communication Skills in the Foreign Language	2
SB16581	Communication Skills in an Educational Environment	2	SB16613	Extracurricular Work in the Primary School	2
SB16582	Pedagogical Interaction in a Multicultural Environment	2	SB16588	Techniques for Art Integration in the Primary School	2
SB16584	E-learning Lesson Design	2	SB16589	History of Music	2
			SB17106	Development of Pre-school and Primary School Learners' Creativity	2
			Elective courses (students elect a course)		
			SB17124	Fun and Tourism Games for 1st to 4th Grade Learners	2
			SB15576	Educational Work of the Class Teacher	2
			SB16610	British Studies	2
			SB15615	Organisation of the Wholeday Educational Process in the Primary School	2
	Total for the term:	**30**		**Total for the term:**	**30**

Fourth year

Code	***Seventh term***	***ECTS***	***Code***	***Eighth term***	***ECTS***
SB14582	Methodology of Teaching Technologies and Entrepreneurship in Primary School	6	S03914	Comparative Education	3
			SB15595	Hygene and Health Education	2
			S01429	Pre-Diploma Teaching Practice	11

SB15586	Pedagogical Diagnostics	4	S01430	Self-preparation for Graduation	4
SB15587	Speech Culture	2			
S03952	Foundations of Special Education	4	***Graduation Procedure (Option 1)***		
SB11048	English Language Teaching Practice	3	S00534	State Written Exam in the Foreign Language	4
			S03919	State Written Exam in Pedagogy, Psychology and Methodology of Teaching at Primary School Level	4
SB15588	Working with Educational Documents	1			
SB16590	Linguistic Aspects of Acquisition of Foreign Language by Young Learners	4	SB15596	State Board Practical Exam	2
SB16607	Foreign Language 7	3	***Graduation Procedure (Option 2)***		
SB16608	Foreign Language Children's Literature	3	S00534	State Written Exam in the Foreign Language	4
			S03919	Bachelor Thesis Defence on a Topic in Pedagogy, Psychology and Methodology of Teaching at Primary School level	4
			SB15596	State Board Practical Exam	2
	Total for the term:	**30**		**Total for the term:**	**30**

Total for the course of study: 240 ECTS credits

SB15565 Mathematics

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Angelova Velikova, MMath, PhD, Departmen of Mathematics
tel.: 082/ 888 848, E-mail: evelikova@uni-ruse.bg,
Pr. Assist. Prof. Ralitsa Krasimirova Vasileva-Ivanova, MMath, PhD, Department of Mathematics
tel.: 082/ 888 848, E-mail: rivanova@uni-ruse.bg
Abstract:
The course aims to extend the basic knowledge and skills on arithmetic and geometric concepts and the application of mathematical relationships in mathematics education in grades 1-4; to form and develop key and professional competences for mathematics education in grades 1-4.
Course content:
Sets. Mathematical logic. Numerical systems. Natural, Integer, Rational and Real numbers - operations, properties, recording, geometric interpretation, transitions, specific problems. Geometric figures in the plane and in the space - elements, properties, algebraic representations. Measurement – types of units, transitions. Algebraic expressions, equations, inequalities and systems of linear equations - specific problems. World problems - modelling of real situations by mathematical symbols. Application of mathematics in everyday life. Problem-solving for the national external assessment.
Teaching and assessment:
The lectures include the integration of interactive learning methods such as creative problem solving, discussion, brainstorming, multimedia presentations, videos, internet links, and during the practical exercises, learning and practical problems are solved, the possibilities of mathematical software and mobile applications for tablet / mobile phone are applied. The final grade is formed as an arithmetic average of two control works on the studied topics.

S00840 Didactics

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0,5se
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD Department of Pedagogy
tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
Didactics has a fundamental role for the professional development of students. The course aims at introducing students to the subject matter in a systematic way; revealing the most topical problems in the development of Didactics; analysing the procedural and functional character of education.
Course content:
Scientific status of Didactics; Character of the teaching process; Principles of teaching; Methods of Teaching; Systems of organizing the teaching process; Common teaching problems; Personalisation and differentiation of education; Tutoring; Work with poor and talented pupils.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At seminars the dialogue is widely used; relevant articles on the topics included in the syllabus are discussed. Active participation is encouraged by awarding students additional points

SB14538 Inclusive Education

ECTS credits: 3
Weekly workload: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department Involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lectur:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel: 082 / 888 544; E-mail: jdoncheva@uni-ruse.bg
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.

SB16559 General and Age Psychology

ECTS credits: 4
Weekly workload: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The aim of the course of General and Age Psychology is to present to students the contemporary trends in the science of human mentality and behavior and their development in different age periods.
Course content:
Subject and object, methods of psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc. The stress point is put onto personality and activity theory in psychology, structure of personality, self-regulative mechanisms, reflexion and interpersonal interactions. It reviews characteristics of the psychic processes, abilities and conditions; development of intellectual, emotional and will, motivational spheres on personality in different age periods.
Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues.

S02398 General Linguistics

ECTS credits: 3
Assessment: continuous assesment
Weekly classes: 2lec+0sem+0labs+0ps+0,5se
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Department. of Bulgarian Language, Literature, History and Arts
tel.:082 / 88 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course aims at acquainting students with the main problems related to the nature of language, its form and functions, while at the same time it also highlights the theoretical platforms and methodological frameworks used by the different linguistic schools when defining and describing the different aspects of the language system and structure. The course covers topics related to the origin and the main stages of language development; the sign character of language, the link between language and speech, the relationship between language and thought and language and society; the system of language and the functions of each language element; classifications of languages; the link between language and the other non-linguistic systems.
Course content:
History of Linguistics; Nature and functions of language; Language and society; Language and thought and their correlation; Aspects and levels of study of language and speech; Processes and laws guiding language changes and development; Classification of languages: genealogical, morphological, etc; Languages on the Balkan Peninsula; International natural and artificial languages; Intralinguistics: Phonetics, Lexicology, Morphology, Syntax, Text linguistics, Stylistics; Extra Linguistics: Sociolinguistics, Psycholinguistics, etc.
Teaching and assessment:
The course content is delivered in the form of lectures. Students prepare and submit a seminal essay on a topic given by the course tutor at the start of the semester. The seminal essay has to be up to 10 pages. The final grade is an arithmetic mean of the grades on the two tests during the semester.

S00430 Theory of Education

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: sonya@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail:eivanova@uni-ruse.bg
Abstract:
The objective of the course is to present, in a systematic way, the problems of the theory of education as part of General Pedagogy. A starting point of teaching is to consider upbringing as a kind of social reality and a kind of intercourse relation as well as an object of the theory of education. The course accentuates on the models of up-bringing, on the specific conceptual apparatus of the subject and the up-bringing as a pedagogical activity and an active process with its complicated relations, contradictions and technologies.
Course content:
Character of upbringing as a socio-pedagogical phenomenon, its functions and structural components; Approaches, principles, methods, means, forms and factors for successful education; Relations between content and aim of the educational process, between preventive and re-educative activities,, prognosis and leading of educational precess.
Teaching and assessment:
The lecture course comprises traditional and euristic ways of presenting new information. The seminar classes involve case studies and teacher-led discussions. Students should do reading before each seminar. The exam involves answering two questions with a different level of difficulty.The course task is been given through the third studing week from the term. They aer given at the end of the semester.They and their participation in work during the term are determining the receiving of counter sign.Their work in contentive meaning and their presentation at the exam are basing the final assessment.

SM13114 Foundations of Primary School Pedagogy

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: gggeorgieva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD Department of Pedagogy
tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The aim of the course is to build on the fundamental knowledge pedagogy students have acquired and specify and adapt it to the field of primary school education.
Course content:
Scientific status of primary school pedagogy. Historical roots of primary school pedagogy. Bulgarian system of education. The pedagogical process in primary school. Development in the context of primary school discipline. The disciplinary and educational processes in primary school. Primary school lessons. School adaptation. Socializing functions of a school class. The teacher as a factor. Issues and challenges facing Bulgarian primary education. Modernization of primary school.
Teaching and assessment:
The course is carried out mainly in lectures and seminars and includes trainings, groupwork, a research project, practical assignments, discussions and observation. The final grade is determined by a written exam at the end of the course.

SB16560 Foreign Language 1

ECTS credits: 4
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

S02406 Basic Theory of Music

ECTS credits: 3 **Weekly classes**: 1lec+0sem+0labs+1ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course of Basic Theory of Music aims at developing the main musical abilities in the students through different musical activities. It builds up a system of musical and theoretical knowledge, skills and habits of perception, comprehending and reproducing the musical means of expression. It also forms an aesthetic criteria and taste, musical and emotional response, knowledge and skills for creative and educational work with children.
Course content:
Special features of musical art. Musical means of expression; Major and minor tonality to 4 signs. Tempo and dynamics in music; Accords and transponing, main manual techniques: Elements of musical form.
Teaching and assessment:
Each seminar follows immediately after the lecture and thus creates a good bond between theory and its practical application. Tasks for independent work are given, which aim at mastering the main theoretical questions. Students sit a written exam at the end of the term.

SB15557 English Grammar

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps+1cw
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course introduces students to the basic structural organization of the English language, while at the same time placing emphasis on the specifics of word formation in the studied foreign language. The training program is tailored to the overall preparation of the students and to their future professional realization - as English language teachers in the elementary course.
Course content:
The educational content is oriented towards mastering the essence and specificity of the phonetic system of the English language, the main semantic relations in the lexis, the origin of words in the English language, phraseological units and stable word combinations, the etymological sources of the modern English language, the sources of enrichment of the phraseological fund, the word-formation system of the English language and the morphological structure of the word in the target language, as well as the morphological and syntactic features of the English language.
Teaching and assessment:
Training in the discipline is carried out in the form of a theoretical course of lectures. Each lecture has questions that are intended for independent work and that aim to help students build practical skills on topics covered in the lecture course. The questions related to the previous topic are discussed at the beginning of the next lesson, thus strengthening the connection between learned and new knowledge.

S02022 Pedagogical Communication

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the Pedagogical Communication is to acquaint students with the necessary knowledge, skills and competences necessary for the democratization and humanization of the pedagogical process in the kindergarten, elementary school and the socio-pedagogical institutions. Communication is a complex and multifaceted process of identifying and developing people-to-people interaction, depending on their needs in collaborative work. Communication involves not only the exchange of information but also the elaboration of a unified strategy for interaction, perception and understanding. as equal partners in this process.
Course content:
The concept of "communication" and its essence. Structure of communication. Objectives and functions of pedagogical communication. Content of pedagogical communication. Essence of verbal communication. The specificity of nonverbal communication. Communication and activity. Essence of interpersonal interaction. The concept of "style of communication" and its essence. Types of communication. The communicative task as the basic unit of the communicative process.
Teaching and assessment:
The course is taught through lectures, which are a continuation of the theoretical disciplines of the pedagogical and psychological cycle. Lectures are read in a stream. The course has a certain application and research direction. This approach is noticed both in the lectures and in the examination procedure in the form of a continuous assessment. The focus is on pedagogical communication at pre-school and primary school age, as well as on the impact of the teacher's communication style on students' emotional experiences. There are various examples and facts from the work of the pedagogues. Students are acquainted with theoretical and empirical studies conducted on this issue by well-known Bulgarian and foreign authors. Testing the teacher's communication skills, introducing initial knowledge to solve communicative tasks.

S02405 Phonetics and Lexicology of Bulgarian Language

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082/888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Abstract:
The course aims at introducing students to:
1) the science of speech, which integrates knowledge about the physiological processes of the production and perception of speech, the acoustic and articulation features of verbal sounds and the super-segmental organisation of speech.
2) the science of the lexical system of the Bulgarian language - gnoseologic, semiological and semantic features of the lexical units, their use in the different styles of speech;
3) methods and means of phonetic and lexical analysis.
Course content:
Acoustic, articulation and functional aspects of sounds; Segment and super-segment system of the modern Bulgarian literary language; The word as a unit of the lexical system; Nature and particularities of the word as a language sign; Nature and structure of lexical meaning; Systematic relations; Structure, classification and stylistic features of set phrases.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. The final exam is in a written form.

SB15598 Information and communication technologies in education and working in digital environment

ECTS credits: 5
Weekly classes: 2lec+0sem+0lab+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, Dsc, Department of Informatics and Information Technologies, tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Department of Informatics and Information Technologies, tel.: 082 / 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The aim of the discipline is to familiarize the students with the tools used for audiovisual presentations in school. Particular attention is paid to school extracurricular electronic media, computer methods and programmed education. In order to achieve good results at the time of attending this discipline, the students should have studied General Pedagogy and Didactics prior to the course.
Course content:
Educational technologies. Basic concepts and definitions. The media in the educational process. Models of training. Planning an active and interactive learning process using media in learning. Visual tools for advanced training. Methodological guidelines for the integration of information and communication technologies in the educational process. Methodical guidelines for using multimedia projectors. Technical devices of sound (audio) type. Interactive Whiteboard. Basic principles when using an interactive whiteboard.
Teaching and assessment:
For the workshop session students study in advance pre-set specific problems. Each student makes a presentation at the assigned time of the workshop and gets relevant evaluation in compliance with the pre-set criteria. Students know the criteria requirements in advance. The final grade is formed on the basis of student's results during the semester, the presentation mark.

SB10097 Foreign Language 2

ECTS credits: 8
Weekly classes: 0lec+0sem+0labs+6ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Tsvetana Atanasova Shenkova, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

SB16561 Family Interaction

ECTS credits: 3 **Weekly workload:** 2l+0sem+0lab+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, Department of Pedagogy
tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The content of the lecture course of the curriculum is oriented to acquaint students with the basic theoretical issues of education and socialization of adolescents within the family. The included topics help to expand their knowledge about the specific role of the family as a primary socializing environment and educational factor in modern conditions. Emphasis is placed on current issues of family interaction with educational institutions.
Course content: The lecture course focuses on issues concerning the fundamental theoretical and applied aspects of the systematics and technology of family education. The content of the lecture course is focused on clarifying the current approaches, concepts and practical models for family interaction with educational institutions.
Main topics: Characteristics of the family as a cultural-historical phenomenon. Theoretical approaches to determining the nature and functions of the family unit. Categorical characteristics of the family. Historical and pedagogical approach to the study of the family, childhood and upbringing. Definitive markers of family education in the context of the pedagogical approach (essence, purpose, tasks, features, meaning). Coordination of the family and other agents of socialization / kindergarten, school /. Pedagogy of parents. Pedagogical models of interaction with the family.
Teaching and Assessment: Basic method of teaching - information-explanatory, illustrative (method of oral presentation). Additional methods (non-traditional): problem statement; stimulating heuristic method (partial research). The lectures use interactive methods and tools, multimedia presentations, schemes, tables, models, electronic educational platforms, aimed at synchronizing traditional and innovative approaches to the study of the discipline, as well as to present options for technological implementation of practical aspects of its subject. - interaction and work with families.

SB16562 Inclusive education for children and pupils with special needs

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract: The goal of teaching is broadening the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: international principles and legislative framework of education of children with special needs, with organizations and structures through which realize. The preparation is directed to acquire knowledge about innovative processes in theory and practice of special education, knowledge about integration and examine them in different aspects; forming skills to choose of strategies and technologies for supporting interactions, education rehabilitation children with particular needs according to radical changes in general and special pedagogy; mastering methodic of integrative education and etc.
Course contents: Special education – international principles, referent to education of children with special needs; legislative framework of education of children with special educational needs; organization of special education – kindergarten and special schools; diagnostics of special educational need and orientation to special schools; competent organ to realizing education of special needs; structures without system of national enlightment; comparative study of order special education in European countries and USA.
Teaching and Assessment: Lectures are carried out mostly frontally, with illustrations and descriptions of the different psychophysical disorders and behaviour deviations, using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The final mark is based on the results of three tests as an arithmetic mean.

SB16563 Civil Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course familiarizes the students with the organisational forms and methodological tools for conducting the educational process involving acquiring knowledge about the Civil Education in primary and secondary school. Provides future teachers with methodical preparation for adequate from a psychological and educational point of view conducting the interactions ‚pupil – environment' in primary and secondary school.
Course content:
Basic accents of the contents are: Introduction to the methods; Structure; Principles for natural selection and arranging the program contents; The lesson and excursion, form of pedagogical interaction; Methods for educational work; Analysis of the contents for children's knowledge about the areas of social and natural environment.
Teaching and assessment:
The following means for teaching the subject are used: 1. Lectures; . Action, connected with the topics in the lectures; 3. Analysis of moves that illustrate the educational processes in kindergartens; 4. Doing course assignments - description, exploration creativity; 5.Testing procedure in a written form on a theoretical questions (written test).

SB16564 Health and Ecological Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc.Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219; E-mail: bilieva@uni-ruse.bg
Abstract:
The aim of the training is for students to acquire the necessary knowledge for the health education of adolescents. Certain thematic areas in the lecture course are focused on getting acquainted with the health and environmental components of the environment: natural air, water, soil, food and nutrition; and school: school yard and school building, school furniture and furnishings, microclimate, heating, lighting and harmful factors. Getting acquainted with the institutions involved in the implementation of health and environmental education and upbringing, etc.
Course content:
Nature, tasks and importance of health and environmental science; Physical development of students and morpho-physiological characteristics of school age; Personal hygiene of students; Medical care and health care for students; Microbiological causes and carriers of diseases in children and school age; Environmental problems and impact on natural resources, flora and fauna, etc.
Teaching and assessment:
The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical and applied aspects of environmental education and health education.

SB16565 Leadership in Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.:082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the course Leadership in Education is to provide students with a comprehensive understanding and knowledge of aspects and approaches to leadership and management in the education sector, to expand their critical understanding in the field of leadership in education, based on analytical commitment to current educational theory, research, policy and practice. The module in the discipline is conducive to the acquisition of the full range of theoretical and practical knowledge, skills and competencies corresponding to the subject area.
Course content:
Contains topics dealing with innovative educational technologies, business communication skills, negotiation and conflict resolution; organizational culture and management of educational resources; philosophy of leadership in education, theories of leadership styles.
Teaching and assessment:
The main methods of teaching are information-explanatory, illustrative and problematic exposition, bringing to the fore the scientific logic of knowledge. Interactive methods are used to test certain views of students for decision making, formulation of conclusions, formation of communication and organizational skills: discussions, brainstorming, business games and more. A 60-minute test is conducted on the course. It includes questions from the proposed synopsis. The student, at his request, is given the publicity of the assessment.

SB16566 Managing Relationships in Learning Environments

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to provide knowledge about the elements of the educational environment and the various forms of relationships within it. The main factors and current forms of interaction between subjects in the educational environment are analyzed.
Course content: The concept of educational environment. Organizational culture and teacher leadership. Social interaction in the educational environment. The teacher's role in successful relationship management. Discipline through cooperation. Relationship management in the inclusive educational environment. Managing relationships in a digital environment. Aspects of interaction between participants in education - teachers, parents, institutions.
Teaching and assessment:
The course includes only lectures. Active forms and methods are also used. The final grade is formed on the basis of the results of a written test and the participation in the discussions.

SB16567 Digital competence and Digital Creativity

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the dimensions of digital competence and digital creativity.
Expected results: will know and be able to apply the concepts of digital competence and digital creativity.
Course content:
Competence. Basic concepts. Competences and competence approach for teaching and learning. Framework for defining digital competences. Professional development and digital competence of teachers. The qualification and professional development of teachers as a key element of the quality of Bulgarian school education. Creativity in learning - basic concepts and concepts. Scientific and theoretical foundations of creativity. The essence of creative activity. Models for analysing creativity. Creativity in the context of learning. Digital creativity. Digital creative skills. Components of digital creative pedagogical practices.
Teaching and assessment:
The learning process includes lectures. During the course students learn about the competencies and competence approach to teaching and learning, creativity with its basic concepts and concepts, digital creativity, and digital creative skills. Students receive a certificate in the discipline if they have attended lectures according to the “Rules for the organization of educational work” at the University of Ruse. The assessment of students’ knowledge and skills is continouous during the term.

SB16568 Methodology of Teaching Music in Primary School

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+1ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The aim of the course is to upgrade the theoretical knowledge of the future teachers on the methodology of music education in primary school. The practical seminars provide an opportunity to test the acquired theoretical knowledge and lay the foundation of the future creative and professional expression of novice teachers in the classroom.
Course content:
Methodology of music in elementary school follows modern methods and systems for music education, and build on the Bulgarian research and achievements of European music educators in the field. Provided a more detailed introduction to the musical material of perception and reproduction in primary school. Attention is drawn to innovative methods and forms of work in music in formal and informal settings.
Teaching and assessment:
The lectures and practical seminars are designed to build on the theoretical knowledge and practical training of student teachers in the discipline of music Methodology in elementary school, which ends with a written exam.

SB16569 Foundations of Visual Literacy

ECTS credits: 3 **Weekly classes:** 2l+0sem+0labs+0ps
Assessment: exam **Type of exam:** written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Ivanov Doychinov, MA, PhD, Department of Industrial Design
tel.: 082 / 888 426, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with basic concepts in the theory of fine arts, with its most general characterization and classification and to allow them to develop fundamental knowledge of the theory of fine art. The course content focuses on the specific features of the main types of fine arts and their genres, the characteristics of the materials used in these genres, and the specific types of expression in them. Special attention is placed also on important problems related to the correct composition in an artistic work, the harmony in combining its different elements, the principles of image construction, the optimum organization of space in the canvas, etc.
The expected results of the overall training are relevant to the knowledge, skills and competences specified in Level 6 of the National Qualification Framework of the Republic of Bulgaria.
Course content:
Nature of Fine arts. Types of Fine Arts. Painting – Types and Sspecific Features. Sculpture – Types, Genres and Materials. Graphics – Types of Printing. Materials and Techniques. Decorative and Applied Arts – Types. Stylistic Devices and Means of Expression. Composition – Types and Means of Expression. Colour in the Fine arts – Types. Problems with the Shape Outlining in Arts. Colour Awareness. Perspective. Plastic Anatomy.
Teaching and assessment:
In the lectures the course tutor uses basically the whole-class interaction pattern and visualizes a variety of accessible didactic materials. The final grade is formed on the basis of a positive result on the exam and it also takes into account the overall results on the individually prepared works.

S03868 Morphology and Syntax of Bulgarian language

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082/ 888 467, E-mail: enedkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082/ 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
Grammar, with its two branches – Morphology and Syntax, is the science about language. Morphology studies the structure and grammatical meaning of words. Syntax is the science about the structure of coherent speech. There is a special emphasis on the significance of syntax for the mastering of punctuation. Its connection with intonation helps students develop correct, accurate and expressive speech.
Course content:
Definition of the term “word” as the subject of morphology; Parts of speech. Subject matter of Syntax; Combination of words, Classification of simple sentences; Main parts of the simple sentence; Subject; Predicate; Secondary parts of two-compounded sentences; Object; Adverbial modifiers; Definition; Apposition; The attribute; Syntactic realisations of the parts of speech; Parenthetical syntax units; Complex sentences; Complex composed sentence - types; Complex compound sentences - types; Multicomponent complex sentences.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At the end of the semester there is a written exam which includes also a practical part.

SB15619 Statistical Methods in Pedagogical Research

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+1ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MMath, PhD, Department Applied Mathematics and Statistics
tel.: 082/ 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assist. Prof. Maya Markova Stoyanova, MEng, PhD, Department Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: mmarkova@uni-ruse.bg
Annotation: The course aims to acquaint students with the use of basic statistical methods for data processing and analysis in pedagogical research. Basic concepts of applied statistics are introduced and classical applied statistical methods for data collection, processing and analysis are considered. The course includes lectures and practical exercises in a computer room. During the exercises students get acquainted and study the software product for statistical analysis SPSS (Statistical Package for Social Sciences). The acquired knowledge is especially important and useful for the development of theses, scientific reports and creative performances of students.
Course syllabus: Basic concepts in statistics. One-dimensional and two-dimensional statistical distributions. Graphic images. Variation analysis. Development of normative tables in pedagogical research. Sampling statistical surveys. Statistical evaluation. Interval estimates. Sample volume planning. Statistical testing of hypotheses. Regression and correlation analysis. Opportunities for forecasts and analyzes. Applications in pedagogical research. Empirical pedagogical research. Common feature. Sampling methodology. Questionnaire. Construction technology. Organization of field work.
Teaching and learning methods:
During the lectures the teaching material is presented theoretically. The goal of the practice classes is theoretical knowledge to find their practical application. Students get acquainted during these classes (held at computer laboratories) with the opportunities of the software product SPSS.

SB16574 Foreign Language 3

ECTS credits: 9 **Weekly classes**: 0lec+0sem+0labs+7ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Tsvetana Atanasova Shenkova, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

SB15567 Children's Rights

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstract:
The purpose of the training in the discipline of the Rights of the Child results in acquaintance with the rights of the child and a more general presentation of the fundamental rights enshrined in the UN Convention on the Rights of the Child; with the types of the rights of the child and the protection against discrimination as a basis for the development of the child in a group, community and state;
Course content:
The included topics contribute to the enrichment of the social horizon of students, as well as will provoke in the discussion plan the content, scope and evolution of children's rights. From the very first hours the students get acquainted with the essence and significance of the UN Convention on the Rights of the Child; the types of rights; methods used in carrying out a verification of the child's rights and a procedure for verifying the observance of the rights.
Teaching and assessment:
In the course of the training, current control is carried out through discussions on the topics covered in the curriculum. The current assessment is performed by a written presentation on a specific issue (individual or group task), as a representative of the group presents the finished product on the specific topic to the group. The final grade is formed according to the individual test results on questions from the provided material and the developed presentations prepared during the semester.

SB16571 Pedagogical Conflictology

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268: E-mail: vvasileva@uni-ruse.bg
Abstract:
The purpose of the course is to provide students with the basic knowledge and skills and competences in the field of conflictology necessary for the organization of an effective pedagogical process. Discipline plays an important role in the general system for psychological and pedagogical preparation of social pedagogues. enables students to be guided in the specifics of work in different conflict situations; to master the nature of the conflicts, contradictions and crises experienced by the human being; they are one of the sources of personality development, they determine their constructive or destructive scenario.
Course content:
Basic knowledge related to the historical conditions for the emergence of conflictology is provided. Object and tasks of conflictology. Emphasis is placed on the structural model and elements of the conflict; signals for the emergence of conflict. The characteristics of the structural elements of the conflict are examined; conflict as a social phenomenon; functions and typology of conflict. Particular attention is paid to the causes of the conflict; participants and dynamics of the conflict. The types of conflict personalities and strategies of behavior in the conflict are discussed. Basic knowledge of interpersonal conflict, interpersonal and group conflicts, organizational conflict, etc. is mastered. Cases for conflict prediction, prevention and resolution are being addressed.
Teaching and assessment:
The training in the course is in the form of lectures. The lectures are conducted frontally with the whole group. Videos and active learning methods are used in the lectures. Combining individual and group modes of work makes it possible to master the intended material.

SB16570 History of Pedagogy and Bulgarian Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD Department of Pedagogy
tel.: 082/ 888 268: E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the course is to build on the fundamental knowledge pedagogy students have acquired and specify and adapt it to the field of primary school education.
Course content:
The course covers topics related to the history and development of the most significant pedagogical ideas, theories, forms and means of teaching; systems of up-bringing and teaching from the pre-class society to the present. There are topics dedicated to the life and work of eminent thinkers and pedagogues as Ian Amos Comenski, John Lock, Jean Jack Rousso, J.H.Pestalozzi, A.S.Macarenco. The development of education and pedagogical thought in Bulgaria is also examined.
Teaching and assessment:
During the lectures active methods of teaching are used. For homework assignment every student works on a task of his/her choice or on another topic. The final assessment is based on the results from the test and evaluation of the course assignment.

S02404 Literary Studies

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course acquaints students with the methodological problems of literary theory. It presents the theoretical bases of the different literary schools and approaches and motivates students to develop an active and positive attitude towards literature as a narrative art and specific social system.
Course content:
Literature as narrative art. Character, subject of study, branches and tasks of literary theory. Classification of style patterns. Poetical phonetics. Poetic imagery. Myth – folklore – literature. Literary forms and styles. Features of the lyrical work. Strategies for analysis and approaches to interpretation.
Teaching and assessment:
The course is delivered in the form of lectures.
The course includes three control tests on the material taught. At the end there is a written exam and coursework.

SB16573 Development of Children's Artistic Abilities with the Instruments of Music

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course aims at developing and enriching the creativity of students with the help of the means of music through the use of contemporary works and research papers on similar topics. It covers a wide range of topics that focus on the main theoretical issues and enrich the context of the problems discussed in areas such as musical psychology, psychophysiology, perception and influence of music, sound and musical expressions, communicative potential of the sound and music and a syncretic approach in the musical and creative thinking.
Course content:
Music as Universal Language for Communication. Methodological System of Music Education. Analysis and Discussion of Different Types of Music in Relation to their Educational Effect. Music and the Art of Speaking. Multi-aspectual Influence of Music. The Relation between Sound, Colour and Speech. Musical and Artistic Approaches for Working with a Literary Text. Social and Esthetic Functions of Dance. The Folklore Dances. Musical Instruments as Non-verbal Means of Communication. Child Musical Genres as a Stimulus for Developing Children's Creative Potential.
Teaching and assessment:
The course is delivered in the form of lectures which cover nine topics that aim at presenting theoretical knowledge to students and increasing their practical training for developing children's potential for creativity through the means of music.
The course is based on continuous assessment and the final mark is formed on the basis of two tests.

SB16572 Group Training

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Ass. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
This course aims at acquainting students with the basic models and strategies of pedagogical interaction and setting up an ability for communication at certain levels of pedagogical work.
Course content:
Information-psychological aspects of communication in pedagogical process. Characteristics. Pedagogical content of communicative instruments. Speech and communicative behaviour. Dimensions of teacher's profession. Characteristics and interactive education. Techniques for organization of the interaction in class.
Approaches of setting up personal and social skills in students. Basic social skills.
Teaching and assessment:
Students get acquainted with the theoretical and practical foundations for developing social and personal skills characteristic of the teacher's profession. Students work in groups. Interactive methods are used to set up ideas and skills for productive pedagogical interaction. The course ends with the submission of a paper (based on one of the topics given above).

SB16611 Pedagogical Rhetoric

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Annotation:
The course is designed for students of the “Pimary school Education with foreign language" undergraduate programme studied in the University of Ruse. It contains seminar exercises.
Course content:
More important topics: Historical and theoretical foundations of rhetoric; Oratory style; Rhetorical figures and tropes; Verbal and non-verbal communication in pedagogical communication; Methods and techniques of communication; Speech culture and techniques.
Education methods:
The course contains seminar exercises. The most actively used forms and methods of learning are talk, analysis and interpretation, exercise, mental attack, speaking and listening, rhetorical persuasion.

S03880 Methodology of Teaching Mathematics in Primary School

ECTS credits: 9
Weekly classes: 2lec+2sem+0labs+2ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 08 2/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 211 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The objective of the course is to introduce students to the principles of mathematical education at the start of primary school and to form abilities for presenting, practising and systematizing mathematical information and knowledge. Students master basic planning skills for mathematics lessons.
Course content:
Subject, goals and tasks. Didactic foundations. Principles and methods. Methods for teaching notions about one-digit, two-digit, three- digit and poly-digit numbers and operations with them. Mathematical problems with text conditions. Ways for fast verbal arithmetic. Geometrical knowledge. Units of measurement and operations with them.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. Seminars are designed to complement and reinforce the notions introduced at lectures; class work involves discussions, doing tests, devising lesson plans, analysing and discussing lessons, analysis of school documentation, creating didactic and other materials for curricular and extracurricular work in mathematics.

S03903 Lesson Observation (English Language Lessons)

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The training of students for the qualification “primary school teacher of English” is based on the combination of theoretical knowledge with the acquisition of practical skills in the real classroom. In relation to this lesson observation aims to introduce students to the direct educational practice in schools though the observation of lessons delivered by mentor teachers of English. Simultaneously to this are developed students’ basic skills for analysis and evaluation of the process of teaching and learning a foreign language.
Course content:
The lessons observed in English present the ways in which: a) the four skills (listening, speaking, reading and writing) are developed in the primary school English language lesson; b) grammar and vocabulary are taught and reinforced; c) development of learners’ sociocultural competence. Students pay attention to the: stages of the English language lesson; the interaction patterns in the English language lesson; the teacher talk – giving instructions, checking understanding, eliciting; error correction and giving feedback.
Teaching and assessment:
Students are divided in groups of 10 and observe English language lessons taught by mentors at selected lower secondary schools. The students write down the lesson plan. The observed lessons for the day are discussed after the observation. All students and the university methodologist participate in the discussion

SB16576 Threshold Concepts in Economics

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+0ps+ca
Assessment: continuous assessment **Type of exam**: written
Department involved:
Management and Social Activities
Faculty of Business and Management
Lecturers: Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Irina Vasileva Kostadinova, MEcon., PhD, Department of Management and Social Work
tel.: 082 / 888 518, E-mail: ikostadinova@uni-ruse.bg
Assoc. Prof. Svilen Nikolaev Kunev, Mecon., PhD, Department of Management and Social Work
tel.: 082 / 888 617, E-mail: snkunev@uni-ruse.bg
Abstract:
The discipline presents students with basic knowledge in the field of economic systems, tools and approaches in the context of overall social development. The aim of the course is to acquaint students with the nature and importance of the main economic processes, both at the macro level (state) and at the micro level (person, household, enterprise) with a view to mastering key economic concepts, phenomena and processes, basic principles of the market economy and formation of economic thinking, as well as their subsequent presentation to trainees in pedagogical activity.
Course content:
Introduction to the discipline. Basic economic problems of societies; Types of economic systems. Economic Growth; Factors of production - capital, labor. Search and supply of goods and services; Demand and supply of labor. Unemployment and employment. Labor relations and wages; Market competition. Porter's model; Fixed and variable costs. Cost; Saving and investing. Loans; State intervention. State budget; Macroeconomic Indicators. Fiscal and monetary policies. Countercyclical measures; Stocks, bonds, financial markets. Asset and liability.
Teaching and assessment:
The lectures introduce the students to the topics - the main issues and specific features, approaches, elements and tools of the economic systems, their application at the macro and micro level are explained. Given the lack of exercises (according to the Curriculum), the tools used by the teacher in lectures include presentations and written materials with theoretical statements, case studies and examples from practice, discussions with students.

SB15571 Foundations of Natural Sciences

ECTS credits: 1
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course's aim is to provide studets with a system of knowledge about Natural Sciences which is necessary for the future primary teachers who will teach "Man and Nature" and "Household Maintenance Skills and Techniques".
The lectures in this course are structured on the basic Natural Sciences concepts – forces, movement, energy, substances and materials.The content of every concept is presented integrally – as knowledge about life sciences and about inanimate nature. Thus the lectures correspond to the integral character of the subject "Man and Nature" which the students are preparing to teach at school.
Course content: History and Methodology of Natural Sciences; Time and space in Natural Sciences; Material structures in the Universe and their hierarchy – from the atom to the Universe; Movement and Energy; Substances and Materials; Cellular structure of the organisms, water, air and soil; The problem Space-Time and Matter and General Natural Pattern of the World.
Teaching and assessment: The course is taught through lectures. There is a certain number of points that should be accumulated in order to obtain semester continuous assessment for this course. The way of forming the final grade includes the results from the continuous assesment.

SB15572 Methods of Teaching Art in Primary School

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+1ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Ivanov Doychinov, MA, PhD, Department of Industrial Design
tel.: 082 / 888 426, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
The aim of the course is to provide students with a rich spectrum of knowledge on the goals and main tasks of introducing children to fine arts in the primary stage of the Bulgarian educational system. Students are also introduced to the expected results of the training at each age group, as well as to the importance of the development of artistic abilities of children at the primary school period. Students are acquainted with the approaches of pedagogical interaction and teaching methodology in the kindergarten, with the specifics of the forms of pictorial activity and other essential aspects of the teaching of art in the primary stage.
Course content:
The course of lectures focuses on: the objectives, the main tasks, the specifics and the new trends of art education in the kindergarten; the specificity of the methods and techniques; the forms of pictorial activity in the kindergarten, etc. The practice focus on the specifics of colour combinations, painting, graphics and sculpture creation and their implementation in the arts education in the primary school. Special emphasis is placed on the specific of the decorative applied arts as well as on the problems of drawing shapes, the specifics of the teamwork, group work and the project activities.
Teaching and assessment:
In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. During the seminars the students demonstrate their skills for presenting their artistic ideas through the means of fine art and they also demonstrate the level to which they have acquired the relative fine art material and technique. The final grade is formed on the basis of a positive result on the exam and it also takes into account the overall results on the seminars and the level of mastery on the individually prepared course work.

SB16575 Foreign Language 4

ECTS credits: 5 **Weekly classes**: 0lec+0sem+0labs+4ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract: At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

SB15569 Professional and Career Development

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel: 082 / 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The purpose of training in the discipline is, on the one hand, to acquaint students with the essence, planning, development and management of careers; to clarify the essence of the competitive personality and introduce them to technologies for its development - workshops, professional counseling, psychological diagnostics, technologies forming a positive self-attitude, readiness for changes and the ability to see alternatives, taking responsibility, free choice and with the possibilities of professional and career development of pedagogical specialists in the field of education. On the other hand, with a view to their future professional realization in the education system, the purpose of the lecture course is to form knowledge, skills and competencies in the future pedagogical specialists, related to the implementation of professional guidance and counseling of children and students.
Course content: Professional Development. Professional orientation. Nature and development of the career. Stages in career development. Organizational systems for career management. Development of career plans. Status and career development of pedagogical specialists. Introductory and continuing qualification of pedagogical specialists. Certification of pedagogical specialists. Professional profile of the pedagogical specialist. Professional pedagogical portfolio. Development of an individual career plan. Competitiveness. Competitive personality. Self-development of the culture for business communication. Self-development of the culture of conflict resolution and controversy management Professional guidance in general education. Career guidance program. Vocational guidance of primary school students. Professional guidance in class time and in interest activities.
Teaching and assessment:
The following forms and methods are used to implement the learning content: lecture, conversations-discussions, solving cases. Modern information technologies are used for visualization and interactions. During the training, practical tasks are assigned, aimed at helping the students regarding their realization as pedagogical specialists.

SB15568 Pedagogical Ethics

ECTS credits:3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract: The aim of the course is to introduce students to the fundamental principles of pedagogy – helping formulate the ethical and temperamental standards of behaviour when executing their professional tasks, when communicating with different subjects under various conditions and affirm positivity and an assertive disposition.
Course content: Ethics as the science of morality. Applied and professional ethics. Pedagogical ethics – subject, tasks, origins and evolution, categorization. Nature and functions of professional morality. Professional and personal codes of ethics. Ethics and education – the moral actions of teachers. The moral aspects of the relationship between teachers and the parents of students.
Teaching and assessment: The fundamentals are covered throughout the duration of the course and are complemented with self-preparation. The course is comprised of topics and activities which are intended to allow student to reach a deeper understanding of the nature of ethical moral norms and their importance regarding ethical conflict avoidance or resolution. Activities and methods include lectures, discussions, work with various sources, working individually or in a group, tests, cases, etc. The final grade is based on test results during the semester, participation in discussions and the creation of a portfolio on the discipline.

SB16612 Folklore for Children

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc.prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Course description:
The course aims at providing the future teachers with the necessary knowledge about the specific features of Bulgarian folklore. The course introduces students to the foundations of Bulgarian culture and its spiritual aspects. The course focuses on the problems, aims and tasks of Folklore studies, the prominent figures in the field and its relations to other sciences – e.g. Literature, Social and Cultural Anthropology, Didactics, Sociology, etc. It examines all branches of Bulgarian children folklore, the resources and their interpretation. The course also traces back the development of Children's Folklore in the process of national self-awareness and tackles its present-day implications. It explores children's folklore genres and provides an opportunity for their field research.
Course content: Bulgarian Mythology. Myth and History. Myth, Legend, Saga. Myth and Folklore. Contemporary Problems of Bulgarian Children Folklore. Raising Children's Awareness of the Folklore Traditions. Origin and Development of the Folklore Studies. Folklore Schools from the 19th century. Historic Sources of Bulgarian Folklore. General Characteristics and Poetic Features of Folklore. Classification Systems. The Bulgarian Folklore Studies in the Period of the Revival – the Contribution of Venelin, Rakovski, Bratia Miladinovi. The Bulgarian Folklore after the Liberation.
Folklore Calendar. Folklore Traditions and Celebrations. Family Traditions – Beliefs, Child Birth and Upbringing Rituals. Children Folklore – Genres, Origin, Development and Classification. Christmas Rituals. Participation of Children in the Rituals. Spring Festivities – Rituals, Songs. Omens, Proverbs and Riddles and Anecdotes. Stories. Characteristic Features of the Genre. Games for Children. Field Research Methods. Family Tree.
Teaching and assessment: The lectures include discussions or talks. Students have to note down or record folk tales, songs, etc. from their home region. This rich collection of their recordings will allow for the development of a detailed children folklore map of Ruse and the region. The final mark is formed on the basis of students' active participation in the classroom during the discussions, the quality of the produced assignments.

SB16577 Project-based Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The purpose of the course training is to acquaint students with the theoretical and applied aspects of project-based learning. Emphasis is placed on the possibilities for integrating the project method in the educational process. Students are introduced to the technological model of planning and implementation of project work in elementary school age, as well as the criteria for evaluating the project presentation and project product.
Course content:
The course covers: theoretical foundations of project-based training; reformist pedagogy and the ideas of John Dewey, Ellen Parkhurst, Roger Cousinet and others; group activity as a major component of project-based training; project-based training in a multi-age classroom organization; learning through collaboration; prospects for realization of project-based training as an educational technology in modern conditions; "Project Method" and project-based training; technological model of planning and realization of the project work; classification of project types; managing project activities and the role of the teacher. Criteria for evaluating project work.
Teaching and assessment:
The learning process is conducted through lectures. Interactive methods and tools, multimedia presentations, diagrams, tables, models are used.

SB16578 Methodology of Teaching National Studies, Man, Society and Nature

ECTS credits:6
Weekly classes: 2lec+2sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course takes into consideration the unique conditions in the personal development of children with their specific experience and stage of accepting and processing the information about objective reality, as well as their orientation in natural and social events. Through his/her pedagogical interactions with the subject, the teacher is obliged to take out the experience of the children from their condition of pre-school and pre – theoretical disunion and lack of a system to the cognitive and intellectual ability for absorbing the social sciences in upper grades.
Course content:
Goals and Assignments of the educational work in the subjects Man and Society and Man and Nature; Program contents in primary school; The Lesson; The Excursion; Contents and Characteristics of the subjects Man and Society and Man and Nature; Social areas.
Teaching and assessment:
The educational process goes through lectures and seminars. The students have to achieve a certain number of skills for unaided solving of creative tasks in the area of programming and conducting the forms of educational work in Man and Society and in Man and Nature.

S03944 Lesson Observation in Primary School

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The observation aims to introduce students to the immediate learning environment at the initial stage of the basic education level through direct observations of lessons taught by experienced teachers.
Course content:
Lessons are observed in Bulgarian language and literature, Mathematics, Man and society, Man and nature, Technology and entrepreneurship, Music, Fine arts, Physical education and sports. A portfolio is completed in the discipline.
Teaching and assessment:
The observation is led by the pedagogue and methodologists, who assign observation tasks to the students in advance. After the observation, a conference is held together with the base teacher and guided by the methodology. Students analyze, express an opinion, discuss the methodical analysis of the observed lessons. The content of the portfolio is evaluated.

S03886 Methods of Teaching in Bulgarian Language and Literature in Primary School

ECTS credits: 9
Weekly classes: 3lec+1sem+0labs+2ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course aims at giving students theoretical and practical knowledge about the nature and specific features of teaching and acquiring the native language in the primary school age. It focuses on the problems of native-language and literary education in the primary school with regard to new concepts and recent developments in the field.
Course content:
Specifics of the subject Bulgarian Language and Literature in the primary school. A system of teaching elementary literacy. Language acquisition; Development of coherent speech and written speech abilities in the elementary school class; The connection of the work for developing speech abilities with the literary and language education.
Teaching and assessment:
The course is taught through a combination of lectures and seminar classes. The lectures and seminars consider a selection of theoretical problems and perspectives on teaching and learning languages and literature, and relate these to different practical solutions and examples.

SB15578 Academic Writing

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The main goal of this course is to prepare students for successful application of different genre of academic writing.
Course content:
Emphasis is put on the stylistic markers of scientific style; authorial ethics; manuscript formatting and editing; presentation and scientific speaking in front of an audience.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB16579 Foreign Language 5

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
The basic aim of the course is to improve the level of students from A2+ to B1 according to the European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and listening.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes, the children's world, Primary School in Britain and Bulgaria.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, three compositions, two written tests and a course paper, requiring students to give a presentation on a material from English children's literature. The semester is validated.

SB16580 Methodolagy of Foreign Languege Teaching

ECTS credits: 7
Weekly classes: 2lec+0sem+0labs+2ps+2cw
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course content is in compliance with the current developments in the field of foreign language teaching in Europe and the world which introduce new methodological approaches for teaching and learning a foreign language. The content focuses on the development of students' theoretical knowledge and practical skills for teaching English as a foreign language to primary school pupils (grades 1 to 4).
Course content:
Specific Characteristics, Scope and Tasks of the Discipline. Approaches to teaching a foreign language – a historical overview. Profile of the young learner, psychological characteristics and specific features of the foreign language young learner lesson. Factors affecting the acquisition of a foreign language by children. Lesson planning. Introducing new vocabulary. Teaching grammar to children. Development of listening and speaking skills. Integrating songs in the L2 classroom. The role of games in teaching English as L2 to children. Integrating stories in the L2 lesson. Mixed ability learners. Language and culture teaching in the young learner English language classroom. Error correction. Grading and assessment of young learners' English language knowledge and skills.
Teaching and assessment:
The course content is delivered in the form of lectures and practical seminars. The lectures present the main theoretical issues, while the seminars contribute to the development of students' practical skills for planning young learner English language lessons. Students prepare a course assignment in which they apply various techniques for planning the course content of an English language lessons to primary school learners. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars.

SB16583 Management of Educational Institutions

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva MA, PhD, Department of Pedagogy
tel.:082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract: The purpose of the course is for students to gain additional knowledge about the school as an educational organization - a professional field, management in nature, pedagogical in nature; requiring knowledge and competencies in economics, law, political science, healthcare and other social fields. Emphasis is placed on the latest current trends for expanding school autonomy and decentralization in terms of administrative management and delegated powers; on the favorable opportunities for stimulating the creativity and initiative of both teachers and students themselves.
Course content: School legislation in Bulgaria. Periods. Current school laws determining the functioning of the Bulgarian educational system. Law on Preschool and School Education. Methodological basis of the management of education and school. Basic approaches to school management. The school as an organization. Modern organizational models. Effective and innovative schools. Human resource Management. Administrative bodies and services in the Bulgarian school. Main functions of the director and deputy director. The director as a manager and leader. Diagnosis and evaluation of teachers' classroom activities. Basic state documents for the functioning of educational institutions. Modern prerequisites for expanding the autonomy of the school. More important parameters for the realization of school autonomy in Bulgaria. School funding. Financial autonomy in terms of delegated budgets. The activity of the pedagogical councils - technological variants.
Teaching and assessment: The training is in the form of seminars. Students get acquainted with the peculiarities of educational management, and in the course of training are introduced examples from practice.

SB16581 Communication Skills in an Educational Environment

ECTS credits: 2 **Weekly classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva,MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, e-mail: vvasileva@uni-ruse.bg;
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, e-mail: eivanova@uni-ruse.bg;
Abstract: The training aims to acquaint students, and future teachers, with basic models, strategies, and techniques in pedagogical interaction, to form their ability to communicate at certain levels of the educational process. Attention is paid to the practical options for developing and applying interactive techniques to realize the main goals and objectives in the work of the primary school teacher. Through the seminars included in the curriculum, attitudes and readiness of future pedagogues for the practical application of the forms and the means of communication in the work with pupils, parents and other pedagogical specialists are created.
Course content: Communication - essence and characteristics, stages and elements; Interpersonal communication. Barriers to communication; Techniques and skills for acquaintance and acquaintance; Speech communication; Models of communication. Formation of skills for transmission and reception of information; Hearing and contact; Planning, organizing and conducting speech communication with communication partners; Conversation skills. Research and ask questions; Dialogue: etymology, meaning, types. Conducting dialogue; The art of presenting - one of the important communication skills of our time; The social-communicative competence of the teacher; Formation of skills for non-verbal communication; Approaches and methods for the formation of personal and social skills in pupils; Formation of skills for adequate and non-aggressive behavior in school; Communication of the partnership between teachers and parents, teachers and other pedagogical professionals, teachers and pupils.
Teaching and assessment: The basic preparation is realized by acquainting the students with the theoretical and practical bases for the formation of social and personal skills, characteristic for the profession of primary school teacher in accordance with the age of the pupils. The specified topics envisage reaching the students to a deeper awareness of the essence and formation of attitudes and skills for productive pedagogical interaction. The planned activities and methods are visuals, didactic materials, technical and information tools, discussion, work with different sources, group and individual work, solving tests, cases and more.

SB16582 Pedagogical Interaction in Multicultural Enviroment

ECTS credits: 2 **Weekly classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about educational process in multicultural environment.
Course content:
Globalization and intercultural education; goals, content and methods of intercultural education.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.
Ss do five tests during the term which check their knowledge on the topics discussed. The final grade is an arithmetic mean of all the grades on the tests.

SB16584 e-Learning Lesson Design

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about educational process in multicultural environment.
Course content:
Globalization and intercultural education; goals, content and methods of intercultural education.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB16585 Methodology of Primary School Physical Education

ECTS credits: 9
Weekly classes: 2lec+1sem+0labs+2ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Ilieva, MA, PhD, Dept. of Physical Education and Sports
tel.: / 888 252, E-mail: isilieva@uni-ruse.bg
Pr. Assist. Prof. Kamen Simeonov, MA, PhD, Dept. of Physical Education and Sports
tel.: 082 / 888 252, E-mail: ksimeonov@uni-ruse.bg
Abstract:
The course is intended for undergraduate students of Primary Education. Students should gain an understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.
Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary and primary school physical education; Diagnosis of the physical activity of children at a primary school age.
Teaching and assessment:
During the lectures and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education.

S03943 Teaching Practice

ECTS credits: 4
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: zhilieva@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Assist. Prof. Kamen Vaskov Simeonov, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 225, E-mail: ksimeonov@uni-ruse.bg
Abstract:
The aim of the course is for every student to acquire practical skills, develop professional qualities for individual organisation and carrying out lessons.
Course content:
Students plan and carry out lessons on curriculum subjects. They are divided into different classes of the primary stage and according to the thematic division of leading teachers.
Teaching and assessment:
Current Pedagogical Practice is taught by a pedagogue and methodologist teachers. Students are assigned to a lead teacher and prepare lessons on curriculum subjects in grades one through four. The leading teacher and a methodologist from the University of Ruse consult on the organization, methodology, content and resources for achieving the educational goals and ensuring students are ready to carry out the lesson. Students are then observed during the lesson by a methodologist, a leading teacher and the other students after which the lesson undergoes discussion and methodological analysis. The pedagogue forms the final grade as an average of the grades given by the methodologists.

SB16586 Children's Literature

ECTS credits: 5
Weekly classes: 2lec+1sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail pabrasheva@uni-ruse.bg
Abstract: The course aims at introducing students to the classical literary works for children by Bulgarian and foreign authors. The course in Literary Theory is a prerequisite for Children Literature. The subject assists the acquisition of knowledge and skills, necessary for the literature classes (reading) in the primary school.
Course content: The World of the Child in the Children Literature and the Children Literature in the World of the Child; Arabian Nights; Charles Perrault, The Grimm Brothers, Wilhelm Hauff, Hans Christian Andersen, Pushkin, Mark Twain, Lewis Carroll, Astrid Lindgren, Jannie Roddary, Petko R. Slaveikov, Ivan Vazov, Uncle Stoyan, Grandfather Blago, Elin Pelin, Ran Bosilek, Angel Karaliichev, Asen Raztsvetnikov, Kalina Malina, Dora Gabe, Elisaveta Bagryana, Emiliyan Stanev, Valery Petrov, Jordan Radichkov,etc.
Teaching and assessment:
Lectures are designed to provide students with knowledge about the richness and diversity of children literature in Bulgaria and worldwide. At lectures, students are offered different directions and possibilities of interpretation of literary texts. Seminars are designed to practice and complement the material introduces at lectures. The semester is validated only if the classes have been attended regularly. The exam is in a written form and involves answering two theoretical questions: one on foreign literature and one on Bulgarian literature for children.

SM14643 Pedagogical Psychology

ECTS credits: 4
Weekly classes: 1lec+1sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The purpose of training in the course is to build knowledge and skills regarding the application of psychological principles and knowledge in the educational process in the education system. The content of the curriculum in Educational Psychology also includes some non-traditional for pedagogical psychology problems that will expand the psychological-pedagogical culture of the students in relation to the current needs of education in our country.
Course content:
The course reflects the reasons for the emergence, essence, meaning, structure, research methods and directions of the studied discipline. The features of the main theories of learning, teaching and learning are revealed. The interrelationship between education, upbringing and mental development of students is clarified. The characteristics of the personality and activities of the teachers and the characteristics of the professional-pedagogical communication are presented.
Teaching and assessment:
The course is in the form of lectures and seminars which include discussions of the topics. Course assignments are given at the beginning of the semester on predetermined topics and literature. Students must approach the topics analytically and reflect on them in the course assignments.

SB15585 The Art of Speech and Performance

ECTS credits: 2
Weekly classes: 1l+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course aims at introducing students - future teachers, to the most effective modern means for self-study and reproducing passages from works of fiction in an expressive verbal way, as well as teaching them how to modify these means for applying them in the teaching process, in accordance with the age requirements of pupils.
Course content:
Nature, objectives and tasks of the art of speech and performance. Techniques for delivering a good speech. Articulation and organs of articulation. Orthoepy. Artistic perception. Parallels between public speech acts and acting. Means and forms of the artistic, logical and emotional expression. Methodology of teaching public speech skills. Extracurricular activities in speech performance art in the primary school.
Teaching and assessment:
The instruction is performed through lectures and practical classes. The continuous assessment grade is formed on the basis of tests combining theory and practice and artistic performance of texts from various literary genres.

SB16587 Foreign Language 6

ECTS credits: 2 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
The main goal of foreign language instruction in the sixth semester is to work on developing language skills at level B2 according to the European Language Framework. Students' knowledge of the folklore of English-speaking countries, of formalities in communication, of markers of social relations is expanded. Work on developing pragmatic and functional competence continues. The program is based on modern principles and methods of foreign language learning – from an object, students become the subject of this two-way process.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include work, family, relationships etc.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, three compositions, two written tests and a course paper, requiring students to give a presentation on a material from English children's literature. The semester is validated.

SB16609 Communication Skills in the Foreign Language

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and EducationLecturers:
Lecturer:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Department of Bulgarian Language, Literature, History and Art
tel.: 082/ 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The educational content is oriented towards the acquisition of systematized knowledge about academic life and the language of the academic sphere, as well as about basic concepts in the linguistics of the English language. The training also emphasizes the development of students' skills for functioning in the English language in an academic environment: skills for effective note-taking; understanding of written and oral speech in the foreign language with an academic orientation; retrieval of information from various sources; composing purposeful and well-argued written texts.
Course content:
Genres of academic writing. Paragraph formatting. Characteristics of narrative, description, and definition paragraphs. Linguistic means to achieve cohesion and coherence of the text. Narrative Essay. Essay description. Argumentative Essay. The retelling - essence and features. Paraphrasing. Studies - essence, structure and linguistic features. Reports and summaries – similarities and differences. Annotating a scientific text. Reading with note taking. Techniques and models for summarizing information. Plan synopsis.
Teaching and assessment:
The training takes place in the form of seminar exercises, which are conducted in the foreign language. Current control includes the successful passing of one control work during the semester. Tests include questions on topics from the lecture content and practical tasks.

SB16613 Extracurricular Work in Primary School

ECTS credits: 2 **Classes :** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education,
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The aim of the course is to supplement the theoretical preparation of students with regard to the nature, purpose, specifics and the educational potential of extracurricular teaching of pupils, organized based on their interests and abilities. Emphasis is placed on the main subject areas where extracurricular teaching is practiced.
Course content:Main topics: Rational utilization of the free time of pupils; Theoretical problems with interests-based work with primary school pupils; Main areas of extracurricular work; Symbols, rituals and holidays in Bulgarian schools; Planning extracurricular activities.
Teaching and assessment: Seminars cover problems in the field and have practical value and application. They use example models of extracurricular educational work. Outside of class, students have to write a paper on one of several suggested topics. The final grade is based on the results from the test and the developed example models of extracurricular work.

SB16588 Integrated Art Techniques for Children

ECTS credits: 2 **Weekly classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Yordan Doychinov, PhD, Dept. of Industrial Design
E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: +359 82 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract: The course *Integrated Art Techniques for Children* aims to develop students' knowledge about the non-traditional and alternative art techniques and their links with the other school subjects, especially with those school subjects that belong to the aesthetic cycle of disciplines. The course seeks to deepen the practical skills of the students, as well as increase their competences for applying such innovative techniques in the classroom that are specific within the system of artistic and aesthetic education and for the development of children's creativity. Special attention is given to the significant role of those competences in the development of learners' personality, active participation in the classroom, creativity and value system.
Course content: The course of the seminars covers topics such as: theoretical foundations of the integration of knowledge in the teaching and learning process; the integration of knowledge as a problem in present-day pedagogical system; the school curricula as a basis for the implementation of the integrative component in the school subjects of the aesthetic cycles and their specific features; methodological approaches in the actual teaching of an integrated arts lesson. Methodological, practical and technological requirements in the organization of integrated lessons; the application of the integrative approach in the planning of lesson topics and the suitable choice of art techniques; folklore as a source for establishing cross-curricular links in the process of education; the integration between the different types of art in a global aspect – styles, symbols and specific features.
Teaching and assessment: During the course students get familiar with the relevant artistic techniques and approaches that are serve as a link with other school subjects. The cross-curricula links and terminology used are updated during the course which facilitates students' awareness of the process of integrated art education at primary school level.
The course attempts to provoke the active participation of students who have to present their own interpretations of the problems discussed. After the completion of each group or individual task students are given a mark. The final mark is formed as the average of all marks received on the tasks.

SB17106 Development of Pre-school and Primary School Learners' Creativity

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
This course's goal is to acquaint the students with the basics of creative education in pre – school and in primary school age on the basis of actual scientific research and methodological works. The theoretical accents in this course of education are extracted on the basis of practical application with an eye on acquisition of skills for competent managing the creative processes and stimulating the creative abilities of growing up children.
Course content:
The topics included are directed towards revealing the techniques for stimulating creative abilities in a variety of creative activities during the different moments of life in kindergarten and forms of work in school.
Main topics: Subject, Goal and Assignments of creative pedagogy; Essence of creativity and different creative activities; Creative potential of the child, specifics of childrens's art; Approaches, orientations and technologies for stimulating the creative abilities; Diagnostics of creative abilities.
Teaching and assessment:
Presentation of theoretical knowledge is accomplished in informational – explanatory, problem-oriented and illustrative form, while at the same time opportunities for studying through discovering, constructing, proving hypotheses, problematic aspects of certain questions are given. The final grade is formed on the basis of a test.

SB16589 History of Music

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr. of Arts Kristina Petrova Yapova, MA, Bulgarian Academy of Sciences, Sofia, Institute of Art Studies, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, PhD, MA, Dept. of Bulgarian Language, Literature, History and Art, tel.: + 359 82/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course aims to introduce students to the development of music in Europe, with major periods in music culture and their specific characteristics. Knowledge of music is an important part of the overall humanitarian and training are essential for the students - future teachers and educators. This knowledge can be successfully constructed after hearing mastering music samples because music is an art focused on the perception of hearing. Therefore, in parallel with cognitive course provides information and listening to music, which are representative for its author, and the trends of the era.
Course content:
The course traces the emergence of historical consciousness and historical approach in musicology and periodization in music. Advanced regarded music in antiquity, medieval genres of music, liturgical music in Western Europe, the music in the age of Baroque, Classicism and its representatives, Romanticism - representatives and genres. Particular attention is paid to musical genres from different periods in music history: Development of operatic genre, music genres from the Renaissance, the development of the symphony and chamber genre in Romanticism. Different national music schools and their representatives. Particularly important is the creation of the Bulgarian music style.
Teaching and assessment:
The course follows the topics given in the syllabus. The course ends with a continuous assessment will be based on a prepared text written on a topic.

SB17124 Fun and Tourism Games for 1st to 4th Grade Learners

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract:
The course's purpose is to enhance and systematize students' knowledge of common pedagogical, psychological and methodological courses, with knowledge how to increase the physical stamina of children's organism and their physical abilities in natural surroundings by means of interesting tourist games.
Course content:
Contemporary tendency for complex formation of children's personality. Development of the concept for healthy children by means of games in nature. Common characteristic of interesting tourist games, special features, content and method of conducting. Basic forms of work in physical culture and sport with opportunities to play games.
Teaching and assessment:
The education is acquired through a conventional lecture course in accordance to the requirements for effective training. The final grade is formed as an average grade. The essay gives an opportunity to include all the problematic areas of physical education and search for effective games.

SB15576 Educational Work of the Class Teacher

ECTS credits:2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Abstract:
The topics include organisation of activities, realisation of the aims and tasks of today's school work. There is particular stress on the technology of planning and diagnostics of the activities so that educational content of the course is carried out.
Course content:
Technology of the educative work of class teachers. Basic principles of carrying out educative work in the elementary school. Educative work as a kind of pedagogical technology. Theoretical and legislative foundations. Content of the work with the school class. Major tendencies. Educative work of the class teacher carried out through different types of activities. Essence, specific character and educative functions. Specificity, tendencies and organisation of extracurricular activities.
Teaching and assessment:
During the lecture course students get acquainted with the theoretical and also practical foundations for organisation of the educative work of class teachers. Interactive methods are used for analysing pedagogical situations in the work of class teachers.

SB16610 British Studies

ECTS credits: 2 **Weekly classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language Literature, History and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract: The course aims at developing and enriching the knowledge of students about the foreign culture, the culture of communication in English and their general linguistic competence through the use of topics about the historic and cultural development of the United Kingdom, as well as about the socio-cultural aspects of life in the country.
The acquisition of the course content involves the application of modern methods of interpretation of the historical and cultural aspects of development of the UK in comparison with the Bulgarian history, culture, customs and traditions, which increases the awareness of students about otherness and which contributes to the development of their national identity.
Course content: Cultural Studies and the Teaching and Learning of a Foreign Language. State and Political Structure. Contemporary Political System of the British Isles. Regional Division. Geographical Map of the British Isles. Brief Historical Overview of the British Isles. Structure of British Society. The Educational System. British National Character. Everyday Life. Customs and Traditions. The Art – Music, Fashion, Film.
Teaching and assessment: The course is delivered in the form of seminars in the target language. The seminars are interactive and rely on the active participation of students. The final mark is an arithmetic mean of the grade on the two tests.

SB15615 Organisation of the Whole-day Educational Process in Primary School

ECTS credits: 2 **Weekly classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract: The training in the discipline aims to outline the main aspects of the all-day organization of the educational process in primary school. To analyze the normative base and the changes in the Law for preschool and school education. To consider options for planning the educational process, conducting a variety of activities in full-time education in primary school.
Course content: Pedagogical and didactic projections of the teacher-educator-child / pupil relationship during the whole-day organization of the educational process. Normative basis for the whole-day organization of the educational process. Implementation of the framework program for the whole-day organization of the educational process. Good practices and guidelines for activities of organized recreation and physical activity. Didactic requirements in carrying out self-preparation activities. Planning, preparation, and implementation of interest activities. Forms for the realization of active learning during the whole day organization of the learning process. Methodical solutions for the use of ICT-based activities in the pedagogical process in the all-day organization of training. Realization of the ideas of civic and intercultural education in the all-day organization of the educational process. Pedagogical interaction is aimed at socializing students in semi-boarding groups, through the application of interactive methods - group discussion and brainstorming. Application of interactive visualization methods with a poster and a "mind map" in all-day training. The interactive puzzle and "expert group" methods and their application in the all-day organization of the learning process. Vocational guidance as part of the activities of interest in the all-day organization of the educational process. Game activities in the all-day organization of the learning process. Art and sports in the all-day organization of the learning process.
Teaching assessment: The methodology of conducting the seminar exercises is organized on the basis of a logical and substantive connection of the problems on the main topics included in the curriculum. Interactive methods are used to test certain views of students on decision-making, formulating conclusions, and forming organizational skills: discussions, brainstorming, case studies, etc.

SB14582 Methodology of Teaching Technology and Entrepreneurship in Primary School

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD, Department of Health Care
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Department of Bulgarian Language, Literature and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
This course aims to give students specialised methodological knowledge and practical technical skills necessary for the teaching of Technology and Entrepreneurship subject at the primary school level. The topics covered in the course complies with the state educational requirements included in the national Technology and Entrepreneurship curriculum for the primary school level, as well as with the other subjects comprising the Technology and Entrepreneurship Sphere in the approved state curriculum.
Course content: Technology and Entrepreneurship as a subject (primary school level from 1st to 4th grade), didactic technologies in the system of technology training, content of lessons, didactic principles, methods of teaching, forms of organization, natural materials, paper and cardboard, materials from metal, machine elements, mechanisms, plastic materials, textile, leather, electricity, domestic labour and service labour, technical modelling and constructing, work in the open.
Teaching and assessment: The course tutor uses the whole-class interaction pattern during the lectures and visualizes a variety of accessible didactic materials. Students work individually or in groups during the seminars. Their individual or group work is preceded by a revision of the theoretical knowledge on the problem. The final grade is formed on the basis of a positive result on the exam but it also reflects the overall performance of the students during the seminars and the level of overall successful completion of the course work.

SB15586 Pedagogical Diagnostics

ECTS credits: 4 **Weekly classes**: 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Deptartment of Pedagogy
tel.: 082 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is providing specialized knowledge in the field of ;diagnostic pedagogical research in theoretical and empirical aspect.
Course content:
Emphasis is put on the history and development of pedagogical diagnostics; processing and presentation of the results; observation; quest; experiment; projective methods; assessment scales; tests.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB15587 Speech Culture

ECTS credits: 2 **Weekly classes:** 1lec+1sem + 0labs+1ps+0,5se
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082/888 664, e-mail: ndoneva@uni-ruse.bg
Abstract:
The aim of the subject is to support students in expanding their knowledge in contemporary Bulgarian language and applying their knowledge efficiently in the written and oral speech.
Course content:
The main topics are: Spelling and pronunciation of vowels. Mutation of 'ya' and 'e' vowels. Spelling and pronunciation of consonants. Use of full and contracted countable form. Agreement in polite forms. Punctuation of simple sentences. Punctuation of complex sentences.
Teaching and assessment:
The teaching is conducted in the mode lectures and seminars. In the lectures, the students acquire theoretical knowledge on spelling and speaking rules, which is consolidated further in the seminars. Various forms and methods of work are used (lecture, presentation, basic and additional exercises, different types of written exercises). During the seminars, tests for checking the quality of acquisition of knowledge. The syllabus includes individual work on research papers, covering topics assigned in advance.

S03952 Fondations of Special Education

ECTS credits:4 **Weekly classes:** 2lec+0sem+0labs+0ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course is intended for the undergraduate students in Primary School Education with a Foreign Language. It aims at familiarizing them with the pedagogical minimum of knowledge and skills necessary for successful work with children with mental, hearing, eyesight and speech disabilities. The instruction is done by means of lectures.
Course content:
The program includes lectures and seminars - basics of the Special Pedagogy; features of children with anomalies in development; characteristics of children with intellectual, sensory, communicative, locomotory, complex disorders; problems of autistic and hyperactive children; peculiarities of deviant behavior in adolescents; basic ideas for training and education of children with special educational needs; childhood attachment disorders; methods for investigation and diagnosis of abnormal children; functional assessment of the needs of children and pupils; solving practical cases.
Teaching and Assessment:
The course - lectures and seminars.
Requirement - 50% lecture attendance.
Appraisement - 3 tests performed during the semester/exam test in the semester`s end and the course assignment.

SB 11048 Teaching Practice in English Language

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course aims at acquainting students with the specifics of the teaching of English as L2 of Bulgarian young learners at primary school level. It allows students to put to practice the acquired theoretical knowledge and skills for teaching English to young learner and to familiarize themselves with the teaching and learning process in the L2 primary school classroom.
Course content:
Presenting grammar. Presenting new vocabulary. Grammar practice. Grammar revision. Vocabulary practice. Vocabulary revision. Integrated skills lesson: focus on listening. Integrated skills lesson: focus on speaking. Integrated skills lesson: focus on reading. Integrated skills lesson: focus on writing.
Teaching and assessment:
The schedule for the teaching practice in English is prepared by the university methodologist well in advance. After it is agreed on with the school headmaster/headmistress it is sent to the students, who are responsible for selecting the classes in which they are going to deliver the English language lessons. Students prepare independently their lesson plans in advance and then consult with the English language teacher at the school and the university methodologist about the consistency of the lesson steps, the chosen didactic materials and the overall classroom management. Upon approval students deliver the planned English language lesson. All other students observe their peers and take notes. After the observation of the delivered lessons the lessons are discussed. The students, the teacher in English and the university methodologist take part in the discussion which is based on preliminary delivered criteria (students familiarize themselves with these criteria during the lesson observation in the fourth term of their study). Students have to take an active part in the discussion.

SB15588 Working with Educational Documents

ECTS credits: 1
Weekly classes: 0lec+1sem+0labs+0ps
Assessment: colloquium
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education,
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy
tel.: +359 82 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course “Working with educational documentation” is to expand the professional competencies of students-teachers, acquainting them with the mandatory educational documentation in primary school, ways of keeping and storage periods.
Course content:
School curriculum; annual plan for the activities of the school; school rules of procedure and internal order. Curricula approved by the principal; weekly schedule. Sample list. Class gradebook - for a student class, for a group with all-day organization. Certificates. Books - for those subject to compulsory education, annals, sanitation, complaints. Personal educational work for a student. The portfolio in the education system.
Teaching and assessment:
In the course of the exercises, active teaching methods are used, combining individual and group forms of work.

SB16590 Linguistic Aspects of Acquisition of Foreign Language by Young Learners

ECTS credits: 4 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education **Lecturers:**
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language Literature, History and Art,tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The main aim of the course is to broaden and deepen students' theoretical knowledge on the main psycholinguistic theories explaining the development of first and second language learners' oral and written communication skills, the essence and specific features of the neurophysiological and psychological processes at the heart of the two main language skills – production and perception of utterances, the biological foundations of language, as well as the processes and stages of the physical, emotional, psychological, social and cognitive development of children and children's speech while acquiring the phonetic system, the vocabulary and the grammatical structures of a first and a foreign language at primary school level.
Course content:
Applied Linguistics – Definition, Scope and Tasks. Fundamental Language Abilities. Psychological Evidence of the Language System. Biological Foundations of Language. Word Detector Models. Theories Explaining First and Second Language Acquisition. Physical, Psychological, Emotional and Social Development of Children. Development of Perceptual Comprehension of Speech. Orthographic Competence. Lexical Competence. Specific Aspects of Acquisition of L2 Grammar by Children.
Teaching and assessment:
The course comprises of lectures and seminars that are conducted in English. At the end of the semester students sit a written exam on the course subject matter.

SB16607 Foreign Language 7

ECTS credits:3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
The aim of the course is to improve students' mastery of the foreign language to B2 level according to the European Language Framework. Students are introduced to the formats of internationally recognized certification exams. Their lexical and semantic repertoire is enriched with idiomatic and colloquial expressions for more natural oral communication. In the orthographic part of linguistic competence, students must be able to compose voluminous, logically constructed written works. Special preparation for the final and state exams is also iincluded.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include celebrities, the world, important life moments. FCE tests and preparation.
Teaching and assessment:
Classes are conducted as practical seminars - students participate individually, in pairs and in groups in the implementation of set language tasks on the educational content. Dictations are given. Students present their individual assignments - written (structural exercises, essays) and oral (giving a presentation on a given topic). The final grade is based on the results of the continuous assessment.

SB 16608 Foreign Language Children's Literature

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps+0,5se
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language Literature, History and Art tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract: The main aim of the course is to acquaint students with the origin, development and current trends in British children's literature. During the course students enrich their knowledge about the changes concerning the concept of children and perceptions of childhood through the different periods of British history, as well as about the ways in which the concept and the relevant ideas find expression in the books for children. The literary works and genres that mark the tendencies in the development of British children's literature are presented and analyzed – fairy tales and fantasy stories, moral and instructive children's literature, the first books for children, children's literature during the Romanticism, the appearance of the nonsense genre, the books for children during the two World Wars, modern children's literature in the United Kingdom.
Course content: Origin of children's literature as a genre. Concepts of children and perceptions of childhood in Europe from the Middle Ages to the present day. Emergence of the modern idea of the child as an object of care. Characteristics of primary school pupils as readers. The beginning of children's literature in Great Britain: moral and instructive children's literature. The Victorian era and the novels of Charles Dickens. Poetry for children (18th - 19th century): W. Blake and D. Wordsworth. Genres and authors during the 19th century – the adventure novel (D. Defoe, R. Kipling), the doctrine of "muscular Christianity." (Thomas Hughes), fantasy and nonsense (Charles Kingsley, George MacDonald, James Barry, Louis Carroll, Oscar Wilde, R. Kipling). Children's literature in Britain in the first half of the 20th century (A. A. Milne). Children's literature after the Second World War. Development of the fantasy genre in the 1950s (J.R. Tolkien and K.S. Lewis) and after the 1950s (Roald Dahl). Rediscovery of the fantasy genre in the 1990s and the beginning of 20th century (J. K. Rowling).
Teaching and assessment: The course comprises of lectures and seminars that are conducted in English. Each student prepares a seminal essay on a topic from the studies literary works. The final mark is calculated as an arithmetic mean of the grade on the test and the grade on the seminal essay.

S03914 Comparative Education

ECTS credits: 3 **Weekly classes**: 3lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The course aims at familiarizing students with the history of Comparative education as a scientific direction with a great practical significance; it also explores issues about the European dimensions of education.
Course content:
History of comparative education in Bulgaria; Theory and methodology of comparative education; Structure and contents of comparative education; Educational systems in Bulgaria, the USA, Canada, France, Germany and others; Comparison of the aims, finance, management, structural patterns of the educational systems and the teacher training programs in different countries;
Teaching and assessment:
The course is taught through lectures designed to reveal the comparative patterns in the structures of the different educational systems. One of the learning outcomes of the course is to develop in students an ability to put theory into practice; therefore, students are given individual course assignments for a comparative study of the general educational systems of at least two countries. The assignments are assessed and a written test is administered at the end of the semester. The final grade is an average of the grade from the written test and the result from the assignment.

SB15595 Hygiene and Health Education

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstract: The aim of the training is for the students to get the necessary knowledge for the health education of the teenagers. Certain thematic areas in the lecture course are focused on getting acquainted with the hygiene requirements in kindergarten and school, the pedagogical conditions for forming a dynamic stereotype regarding the personal hygiene of the child and the student, as well as for building preventive orientations related to the more common in childhood infectious and non-communicable diseases and opportunities for their prevention.
Course content: Nature, tasks and importance of hygiene science; Physical development of students and morpho-physiological characteristics of school age; Hygiene of students' mental work; Hygiene of students' nutrition; Hygiene of physical education and sports of students; Hygienic importance of the air, permanent components of the air and their health significance; Hygienic requirements for the learning environment; Personal hygiene of students; Medical care and health care for students; Microbiological causes and vectors of diseases in children and school age.
Teaching and assessment: The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of school hygiene and health education.

S01429 Pre-Diploma Teaching Practice

ECTS credits: 11
Weekly classes: 0lec+0sem+0labs+12ps
Assessment: continuous assessment
Type of exam: practical
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Assist. Prof. Kamen Vaskov Simeonov, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 225, E-mail: ksimeonov@uni-ruse.bg
Abstract: The aim of the course is to give students the opportunity to improve their practical skills and professional qualities in a real work environment and to familiarize themselves with how schools operate as institutions.
Course contents: The intern teachers take part in the educational process individually following plans co-developed with their mentors. They observe, record, analyze and carry out pedagogical situations and lessons and other organizational forms. They are introduced to the documentation and branches of the institution, the functions of form teachers and group teachers. They record the data from their observations and the individual participation in the educational process.
Teaching and Assessment: Interns carry out their practical preparation under the direct observation and guidance of their mentor teacher from the kindergarten or primary school and an educator from their university. The final grade is formed by the pedagogue at the end of the semester, whereby the following are accounted for: the attained professional skills in a real environment on the basis of a report by the mentor teacher of his work with the student, the grades of the methodologists on the undertaken pedagogical situations and lessons and the contents of the portfolio (student record of the practice, lesson plans, scripts, didactic materials).

S01430 Self-preparation for Graduation

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers: All lecturers who are supervisors of Bachelor theses, as well as those whose courses are included in the syllabus for the state exams.
Abstract: Familiarizing students with conspectus for state examinations included as completing the procedures for the specialty; familiarizing students with the technology of the State examinations and technology elaboration and presentation of of a thesis.
Course content: Selection of thesis and scientific advisor. Stages of development. Literature. Shaping. Presentation.

S00534 State Written Exam in a Foreign Language

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Department of Bulgarian Language Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Tsvetana Atanasova Shenkova, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
The state examination is completed the procedures for Bachelor in Primary School Education and Foreign Language. It is a written exam and its components assess the knowledge, skills and competences of students in the following areas: listening comprehension, reading comprehension, writing, as well as use of English.
Course content:
State written exam in a foreign language inlcudes the fwing components: listening comprehension, reading comprehension, writing, as well as use of English.
Teaching and assessment:
The Department of Foreign Languages is responsible for the organisation and the conduct of the State exam.

S03919 State Written Exam in Pedagogy, Psychology and Methods of Instruction at Primary School

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 88 225, E-mail: isilieva@uni-ruse.bg
Abstract: The state examination is complete the procedures for the training of students in the undergraduate programme in *Primary School Education and a Foreign Language*. It allows students who graduate to present their knowledge in the subjects of pedagogical, psychological and methodological spectrum included in the curriculum during the semester learning. It developed two questions for the state exam.
Course content: The state exam includes: a syllabus comprising of 40 questions in the fields of Pedagogy, Psychology and Methodology summarizing courses from the undergraduate study programme.
Teaching and assessment:
Students sit a state exam at the appointed State Board of Examiners.

S01486 Bachelor Thesis Defence on a Topic in Pedagogy, Psychology and Methodology of Teaching at Primary School Level

ECTS credits: 4
Weekly classes:
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Pedagogy
Abstract:
The Bachelor Thesis is developed indpendently by the students under the supervision of a university lecturer. The aim of the Bachelor Thesis is to give students an opportunity to demonstrate the knowledge and competences acquired during the study. Students are also given the opprtunity to demonstrate their creativity in the development of the Bachelor Thesis and to present this thesis successfully at the State Examination Board.
Course contents:
The Bachelor Thesis explores a specific topic or an area of the compulsory courses studied during the undergraduate training.
Teaching and Assessment:
The Department of Pedagogy, Psychology and History provides:

- the overall organization of the collection, confirmation and the announcement of the Bachelor Thesis topics;
- the allocation of the Bachelor Thesis topics to individual students and the appointment of their supervisors;
- the supervision, the preparation of the evaluation review and the presentation of the Bachelor Thesis

The supervisors give consultations of the students every week. Then they monitor the performance of the students on the given tasks. Students present their Bachelor Thesis to a State Examination Board at the end of their final year at the university.

SB15596 State Board Practical Exam

ECTS credits: 2 **Weekly classes**:
Assessment: **Type of exam**:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Prof. Todorka Zhekova Stefanova, MSc, PhD, Department of Health Care
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasielva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract: The students in the Pre-school and Primary School Education undergraduate programme are provided with a 120 hours of teaching practice which are equally distributed (respectively 60 hours in the kindergarten and 60 hours in the primary school).
Course contents: Students form pairs which work with the pupils of a specific class or they form a group and conduct lessons in the specific subjects.
Teaching and Assessment: Each student is expected to deliver between 5 to 7 lessons in different subjects and get a mark for each of the delivered lessons by a university methodologist.

UNDERGRADUATE STUDIES IN PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

PROFESSIONAL STANDARDS

OF A BACHELOR IN PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

Degree Programme: **Pre-school and Primary School Education**
Educational Degree: **Bachelor**
Professional Qualification: **Primary School Teacher, Kindergarten Teacher**
Term of education: **4 years (8 terms)**

The main goal of the **Pre-school and Primary School Education** Bachelor degree is to train highly qualified specialists who will acquire the competence to educate children of 3 to 6 years of age and those of the next age group – 6 to 10.

The quality of training of students doing the Pre-school and Primary School Education Bachelor degree is assured through:

- The use of modern laboratories and computer facilities;
- The availability of highly qualified academic staff;
- The courses included in the curriculum which fall into the following categories:
  - ***fundamental courses*:** History of Pedagogy and Bulgarian Education, Philosophy, Literary Theory, Phonetics and Lexicology, Age Pedagogy, Morphology and Syntax, Mathematics, Bulgarian History and some others.
  - ***core courses:*** Pedagogy of Early Childhood Education, Research Seminar on Pedagogical Communication, Theory of Education, Didactics, General Psychology, Basic Theory of Music, Introduction to Primary School Education, Basics of Natural Sciences and some others.
  - ***highly specialised courses*:** Pedagogy and Technology of the Game, Methodology of Teaching Mathematics to Young Children, Pedagogy of Physical Activities and Sport, Pedagogy of the Interaction: Child – Environment, Organising the work in Preparatory groups and in Preparatory classes, Basic Aspects of Visual Literacy, Musical Instrument, Methodology of Teaching Music, Theory and Methodology of Teaching Fine Arts, Teaching and Learning Mathematics and some others.

The Bachelor that has graduated in Pre-school and Primary School Education has to be able to**:** implement educational and scientific methods at pre-schools and primary schools; implement diagnostic-prognostic and consulting activities with children from pre-school and primary school age; interact and cooperate with family, public and state institutions, non-governmental organisations, media, etc.; master and use special methods, techniques, ways and means for conducting educational and work, in-class and extracurricular activities of children at Primary school; form and develop civil behaviour of children and students; encourage and stimulate the development of retarded children or children in unequal status; work in an intercultural environment and accomplish an intercultural dialogue.

A Bachelor in Pre-school and Primary School Education **can work as**:

- Primary Teacher;
- Pre-school Teacher;
- Pedagogic Advisor;
- Home Teacher;
- Headmaster of different types of schools;
- Expert in other activities connected with a university degree.

CURRICULUM
OF THE DEGREE COURSE IN
PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

First year

Code	First term	ECTS	Code	Second term	ECTS
SB15565	Mathematics	4	S02022	Pedagogical Communication	1
S00430	Theory of Education	4	S02405	Phonetics and Lexicology of Bulgarian Language	4
S00840	Didactics	4	SB16614	Theory and Methodology of Teaching Music in Kindergarten	6
SB13793	General Linguistics	3	SB16615	Foreign Language 1	2
SB16559	General and Age Psychology	4	SB14553	Methods of Teaching Elementary Mathematical Concepts	6
SM13114	Introduction to Primary School Education	4	SB15598	Information and Communication Technologies in Education and Work in Digital Environment	5
SM13111	Pre-school Pedagogy	5	***Elective courses (students elect a course)***		
SB14538	Inclusive Education	2	SB16561	Family Interaction	3
			SB16562	Inclusive Education of Children and Pupils with Special Needs	3
			SB16563	Civic Education	3
			Elective courses (students elect a course)		
			SB16564	Health and Ecological Education	3
			SB16565	Leadership in Education	3
			SB16566	Managing Relationships in Learning Environments	3
			SB16567	Digital Competence and Digital Creativity	3
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	1

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
SB16616	Foreign Language 2	2	SB14558	Methodology of Teaching Physical Culture at Kindergarten Level	5
S03868	Morphology and Syntax of Bulgarian Langugage	4	SB15601	Methodology of Teaching Art in Primary School	5
SB16568	Methodology of Teaching Music in Primary School	5	S03880	Methodology of Teaching Mathematics in Primary School	9
SB15600	Methodology of Teaching Art at Kindergarten Level	5	SB15667	Methodology of Teaching Bulgarian Language and Literature at Kindergarten Level	3
SB14558	Methodology of Teaching Physical Culture at Kindergarten Level	2	S03882	Lesson Observation in Kindergarten	2
SB14559	Methodology of Teaching Nature Studies at Kindergaten Level	3	SB15603	Foundations of Natural Sciences	1

SB15619	Statsitical Methods in Pedagogical Research	4	SB15668 SB16617	Early Childhood Pedagogy Foreign Language 3	1 2
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
SB15567	Children's Rights	3	SB15569	Professional and Career Development	2
SB16570	History of Pedagogy and Bulgarian Education	3	SB15568	Pedagogical Ethics	2
S02404	Literary Studies	3	SB16612	Children's Folklore	2
Elective courses (students elect a course)			SB16577	Project-based Education	2
SB16573	Development of Children's Creative Ability with the Instruments of Music	2			
SB16572	Group Training	2			
SB15606	Rhetorical Pedagogy	2			
	Total for the term:	**30**		***Total for the term:***	**30**
SB13965	Sports	1	SB13965	Sports	1

Third year

Code	***Fifth term***	***ECTS***	***Code***	***Sixth term***	***ECTS***
S03886	Methodology of Teaching Bulgarian Language and Literature in Primary School	9	SB16585	Methodology of Primary School Physical Education	7
			SB16586	Children's Literature	5
SB16578	Methodology of Teaching National Studies, Man, Society and Nature	6	SB14577	Pedagogical Psychology	4
S03889	Lesson Observation in Primary School	2	SB13719	The Art of Speech and Performance	2
SB15604	Methodology of Teaching Bulgarian Language and Literature in Kindergarten	5	S03900	Teaching Practice in Kindergarten	2
			S03901	Pedagogy and Technology of Games	6
SB15605	Methodology of Teaching Design, Technologies and Creative Art Activities	5	***Elective courses (students elect a course)***		
SB15578	Academic Writing	1	SB15609	Measuring the Physical Development of Primary School Learners	2
Elective courses (students elect a course)			SB15573	Extracurricular Work in the Primary School	2
SB16583	Management of Educational Institutions	2	SB15610	Techniques for Art Integration in the Primary School	2
SB16581	Communication Skills in an Educational Environment	2	SB15579	Development of Pre-school and Primary School Learners' Creativity	2
SB16582	Pedagogical Interaction in a Multicultural Environment	2	SB16589	History of Music	2
SB16584	E-learning Lesson Design	2	***Elective courses (students elect a course)***		
			SB15669	Fun and Tourism Games for 1st to 4th Grade Learners	2
			SB15614	Educational Work of the Class Teacher	2
			SB15615	Organisation of the Wholeday Educational Process in the Primary School	2
	Total for the term:	**30**		***Total for the term:***	**30**

Fourth year

Code	*Seventh term*	*ECTS*	*Code*	*Eighth term*	*ECTS*
SB14582	Methodology of Teaching Technologies and Entrepreneurship in Primary School	8	S03859	Comparative Education	3
			SB15616	Hygene and Health Education	3
SB15586	Pedagogical Diagnostics	4	S01429	Pre-Diploma Teaching Practice	10
SB15587	Speech Culture	3	S01430	Self-preparation for Graduation	4
S03952	Foundations of Special Education	4	***Graduation Procedure (Option 1)***		
SB10936	Teaching Practice in Primary School	4	SB10944	State Written Exam in Pedagogy and Psychology	4
SB10937	Puppet Theatre Performing Art	3	S03918	State Written Exam in Methodology in Teaching at Pre-School and Primary School Level	4
SB15612	Preparation and Readiness for School	3	SB15596	State Board Practical Exam	2
SB15588	Working with Educational Documents	1	***Graduation Procedure (Option 2)***		
			SB10946	Bachelor Thesis Defence on a Topic in Pedagoy, Psychology or the Methodologies of Teaching at Pre-school or Primary School Level	8
			SB15596	State Board Practical Exam	2
	Total for the term:	**30**		**Total for the term:**	**30**

Total for the course of study: 240 ECTS credits

SB15565 Mathematics

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Angelova Velikova, MMath, PhD, Dept. of Mathematics
tel.: 082 / 888 848, E-mail: evelikova@uni-ruse.bg
Pr. Assist. Prof. Ralitsa Krasimirova Vasileva-Ivanova, MMath, PhD, Dept. of Mathematics
tel.: 082/ 888 848, E-mail: rivanova@uni-ruse.bg
Abstract:
The course aims to extend the basic knowledge and skills on arithmetic and geometric concepts and the application of mathematical relationships in mathematics education in grades 1-4; to form and develop key and professional competences for mathematics education in grades 1-4.
Course content:
Sets. Mathematical logic. Numerical systems. Natural, Integer, Rational and Real numbers - operations, properties, recording, geometric interpretation, transitions, specific problems. Geometric figures in the plane and in the space - elements, properties, algebraic representations. Measurement – types of units, transitions. Algebraic expressions, equations, inequalities and systems of linear equations - specific problems. World problems - modelling of real situations by mathematical symbols. Application of mathematics in everyday life. Problem-solving for the national external assessment.
Teaching and assessment:
The lectures include the integration of interactive learning methods such as creative problem solving, discussion, brainstorming, multimedia presentations, videos, internet links, and during the practical exercises, learning and practical problems are solved, the possibilities of mathematical software and mobile applications for tablet / mobile phone are applied. The final grade is formed as an arithmetic average of two control works on the studied topics.

S00430 Theory of Education

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail:dnedelcheva@uni-ruse.bg
Abstract:
The objective of the course is to present, in a systematic way, the problems of the theory of education as part of General Pedagogy. A starting point of teaching is to consider upbringing as a kind of social reality and a kind of intercourse relation as well as an object of the theory of education. The course accentuates on the models of up-bringing, on the specific conceptual apparatus of the subject and the up-bringing as a pedagogical activity and an active process with its complicated relations, contradictions and technologies.
Course content:
Character of upbringing as a socio-pedagogical phenomenon, its functions and structural components; Approaches, principles, methods, means, forms and factors for successful education; Relations between content and aim of the educational process, between preventive and re-educative activities,, prognosis and leading of educational precess.
Teaching and assessment:
The lecture course comprises traditional and euristic ways of presenting new information. The seminar classes involve case studies and teacher-led discussions. Students should do reading before each seminar. The exam involves answering two questions with a different level of difficulty.The course task is been given through the third studing week from the term. They aer given at the end of the semester.They and their participation in work during the term are determining the receiving of counter sign.Their work in contentive meaning and their presentation at the exam are basing the final assessment.

S00840 Didactics

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps+0,5se
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD Dept. of Pedagogy
tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
Didactics has a fundamental role for the professional development of students. The course aims at introducing students to the subject matter in a systematic way; revealing the most topical problems in the development of Didactics; analysing the procedural and functional character of education.
Course content:
Scientific status of Didactics; Character of the teaching process; Principles of teaching; Methods of Teaching; Systems of organizing the teaching process; Common teaching problems; Personalisation and differentiation of education; Tutoring; Work with poor and talented pupils.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At seminars the dialogue is widely used; relevant articles on the topics included in the syllabus are discussed. Active participation is encouraged by awarding students additional points

SB13793 General Linguistics

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps+0,5se
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Arts, tel.:082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course aims at acquainting students with the main problems related to the nature of language, its form and functions, while at the same time it also highlights the theoretical platforms and methodological frameworks used by the different linguistic schools when defining and describing the different aspects of the language system and structure. The course covers topics related to the origin and the main stages of language development; the sign character of language, the link between language and speech, the relationship between language and thought and language and society; the system of language and the functions of each language element; classifications of languages; the link between language and the other non-linguistic systems.
Course content:
History of Linguistics; Nature and functions of language; Language and society; Language and thought and their correlation; Aspects and levels of study of language and speech; Processes and laws guiding language changes and development; Classification of languages: genealogical, morphological, etc; Languages on the Balkan Peninsula; International natural and artificial languages; Intralinguistics: Phonetics, Lexicology, Morphology, Syntax, Text linguistics, Stylistics; Extra Linguistics: Sociolinguistics, Psycholinguistics, etc.
Teaching and assessment:
The course content is delivered in the form of lectures. Students prepare and submit a seminal essay on a topic given by the course tutor at the start of the semester. The seminal essay has to be up to 10 pages. The final grade is an arithmetic mean of the grades on the two tests during the semester.

SB 16559 General and Age Psychology

ECTS credits: 4
Weekly classes: 2lec+1sem+labs+0ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The aim of the course of General and Age Psychology is to present to students the contemporary trends in the science of human mentality and behavior and their development in different age periods.
Course content:
Subject and object, methods of psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc. The stress point is put onto personality and activity theory in psychology, structure of personality, self-regulative mechanisms, reflexion and interpersonal interactions. It reviews characteristics of the psychic processes, abilities and conditions; development of intellectual, emotional and will, motivational spheres on personality in different age periods.
Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues.

SM13114 Foundaments of Primary School Pedagogy

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department. of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department. of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The aim of the course is to build on the fundamental knowledge pedagogy students have acquired and specify and adapt it to the field of primary school education.
Course content:
Scientific status of primary school pedagogy. Historical roots of primary school pedagogy. Bulgarian system of education. The pedagogical process in primary school. Development in the context of primary school discipline. The disciplinary and educational processes in primary school. Primary school lessons. School adaptation. Socializing functions of a school class. The teacher as a factor. Issues and challenges facing Bulgarian primary education. Modernization of primary school.
Teaching and assessment:
The course is carried out mainly in lectures and seminars and includes trainings, groupwork, a research project, practical assignments, discussions and observation. The final grade is determined by a written exam at the end of the course.

SM13111 Preschool Pedagogy

ECTS credits: 5
Weekly classes: 2lec+1sem+0labs+0ps+2cw
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department. of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the specifics of preschool pedagogy as age-oriented pedagogy and as a science of education and training of preschool children in kindergarten and family.
Course content:
Early childhood education. Goals and main groups of tasks of preschool education. Play activities in the kindergarten. Training in the conditions of pedagogical interaction in preschool age. Interaction child - kindergarten - family. Continuity between kindergarten and school.
Teaching and assessment:
The following forms and methods are used for the realization of the educational content: lecture, conversations-discussions, practical task. Modern information technologies are used for illustration and interactions. During the training, practical tasks are assigned, aiming to help students regarding their realization as pedagogical specialists.

SB14538 Inclusive education

ECTS credits: 2
Weekly workload: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department Involved:
Department of Pedagogy
Faculty of Natural sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.

S02022 Pedagogical Communication

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department. of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the Pedagogical Communication is to acquaint students with the necessary knowledge, skills and competences necessary for the democratization and humanization of the pedagogical process in the kindergarten, elementary school and the socio-pedagogical institutions. Communication is a complex and multifaceted process of identifying and developing people-to-people interaction, depending on their needs in collaborative work. Communication involves not only the exchange of information but also the elaboration of a unified strategy for interaction, perception and understanding. as equal partners in this process.
Course content:
The concept of "communication" and its essence. Structure of communication. Objectives and functions of pedagogical communication. Content of pedagogical communication. Essence of verbal communication. The specificity of nonverbal communication. Communication and activity. Essence of interpersonal interaction. The concept of "style of communication" and its essence. Types of communication. The communicative task as the basic unit of the communicative process.
Teaching and assessment:
The course is taught through lectures, which are a continuation of the theoretical disciplines of the pedagogical and psychological cycle. Lectures are read in a stream. The course has a certain application and research direction. This approach is noticed both in the lectures and in the examination procedure in the form of a continuous assessment. The focus is on pedagogical communication at pre-school and primary school age, as well as on the impact of the teacher's communication style on students' emotional experiences. There are various examples and facts from the work of the pedagogues. Students are acquainted with theoretical and empirical studies conducted on this issue by well-known Bulgarian and foreign authors. Testing the teacher's communication skills, introducing initial knowledge to solve communicative tasks.

S02405 Phonetics and Lexicology of Bulgarian Language

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Abstract: The course aims at introducing students to:
1) the science of speech, which integrates knowledge about the physiological processes of the production and perception of speech, the acoustic and articulation features of verbal sounds and the super-segmental organisation of speech.
2) the science of the lexical system of the Bulgarian language - gnoseologic, semiological and semantic features of the lexical units, their use in the different styles of speech;
3) methods and means of phonetic and lexical analysis.
Course content: Acoustic, articulation and functional aspects of sounds; Segment and super-segment system of the modern Bulgarian literary language; The word as a unit of the lexical system; Nature and particularities of the word as a language sign; Nature and structure of lexical meaning; Systematic relations; Structure, classification and stylistic features of set phrases.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. The final exam is in a written form.

SB16614 Theory and Methodology of Teaching Music in Kindergarten

ECTS credits: 6 **Weekly classes:** 2lec+0sem+0labs+2ps+1cw
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Science and Education
Lecturers:
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract: The first part of the course aims at developing the main musical abilities in the students through different musical activities. It builds up a system of musical and theoretical knowledge, skills and habits of perception, comprehending and reproducing the musical means of expression. It also forms an aesthetic criteria and taste, musical and emotional response, knowledge and skills for creative and educational work with children.
The course presents the theoretical and methodological foundations of musical education, the pedagogical and psychological specificity of musical activities, the development of artistic habits and creativity in all musical activities included in the pre-primary school music classes. The course also includes the methodological foundations of the aesthetic and musical education in kindergarten and the specificity, methods, forms and means of musical education.
Course content: The course content provides knowledge about the psychological foundations of music education, the theoretical basis and the characteristics of musical abilities and musical skills. The specific characteristics, meaning, basic tasks and methods of each music activity are presented and analyzed.
The discipline introduces students to the specifics of musical art; Musical expressive means; Major and minor keys; Tempo and dynamics in music; Chords, transposition, Elements of musical form.
Teaching and assessment:
The course content is delivered in the form of lectures and practical exercises. The lectures present the theoretical knowledge on the basic topics covered in the course. The practical exercises are attended by all students. Students need to come prepared for the practical exercises.

SB16615 Foreign language 1

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:**
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract: At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content: The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment: Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two essays and two written tests.

SB14553 Methods of Teaching Elementary Mathematical Concepts

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps+1cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about methods of teaching math in kindergarten.
Course content:
Emphasis is put on the teaching concept about numbers, space, time, shapes, , text tasks. diagnostics.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.\

SB15598 Information and Communication Technologies in Education and Work in a Digital Environment

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The aim of the discipline is to familiarize the students with the tools used for audiovisual presentations in school. Particular attention is paid to school extracurricular electronic media, computer methods and programmed education. In order to achieve good results at the time of attending this discipline, the students should have studied General Pedagogy and Didactics prior to the course.
Course content:
Educational technologies. Basic concepts and definitions. The media in the educational process. Models of training. Planning an active and interactive learning process using media in learning. Visual tools for advanced training. Methodological guidelines for the integration of information and communication technologies in the educational process. Methodical guidelines for using multimedia projectors. Technical devices of sound (audio) type. Interactive Whiteboard. Basic principles when using an interactive whiteboard.
Teaching and assessment:
For the workshop session students study in advance pre-set specific problems. Each student makes a presentation at the assigned time of the workshop and gets relevant evaluation in compliance with the pre-set criteria. Students know the criteria requirements in advance. The final grade is formed on the basis of student's results during the semester, the presentation mark.

SB16561 Family Interaction

ECTS credits: 3 **Weekly workload:** 2l+0sem+0lab+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The content of the lecture course of the curriculum is oriented to acquaint students with the basic theoretical issues of education and socialization of adolescents within the family. The included topics help to expand their knowledge about the specific role of the family as a primary socializing environment and educational factor in modern conditions. Emphasis is placed on current issues of family interaction with educational institutions.
Course content:
The lecture course focuses on issues concerning the fundamental theoretical and applied aspects of the systematics and technology of family education. The content of the lecture course is focused on clarifying the current approaches, concepts and practical models for family interaction with educational institutions.
Course content:
Characteristics of the family as a cultural-historical phenomenon. Theoretical approaches to determining the nature and functions of the family unit. Categorical characteristics of the family. Historical and pedagogical approach to the study of the family, childhood and upbringing. Definitive markers of family education in the context of the pedagogical approach (essence, purpose, tasks, features, meaning). Coordination of the family and other agents of socialization / kindergarten, school /. Pedagogy of parents. Pedagogical models of interaction with the family.
Teaching and assessment: Basic method of teaching - information-explanatory, illustrative (method of oral presentation). Additional methods (non-traditional): problem statement; stimulating heuristic method (partial research). The lectures use interactive methods and tools, multimedia presentations, schemes, tables, models, electronic educational platforms, aimed at synchronizing traditional and innovative approaches to the study of the discipline, as well as to present options for technological implementation of practical aspects of its subject. - interaction and work with families.

SB16562 Inclusive Education for Children And Pupils With Special Needs

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department Involved:
Department of Pedagogy
Faculty of Natural Science and Education;
Lecturers
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract: The goal of the course is broadening the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: international principles and legislative framework of education of children with special needs, with organizations and structures through which realize. The preparation is directed to acquire knowledge about innovative processes in theory and practice of special education, knowledge about integration and examine them in different aspects; forming skills to choose of strategies and technologies for supporting interactions, education rehabilitation children with particular needs according to radical changes in general and special pedagogy; mastering methodic of integrative education and etc.
Course content: The following themes are included: special education – international principles, referent to education of children with special needs; legislative framework of education of children with special educational needs; organization of special education – kindergarten and special schools; diagnostics of special educational need and orientation to special schools; competent organ to realizing education of special needs; structures without system of national enlightment; comparative study of order special education in European countries and USA.
Teaching and Assessment: Lectures are carried out mostly frontally, with illustrations and descriptions of the different psychophysical disorders and behaviour deviations, using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The current mark is based on the results of three tests and the course assignment.

SB16563 Civic Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continiuos assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course familiarizes the students with the organisational forms and methodological tools for conducting the educational process involving acquiring knowledge about the Civil Education in primary and secondary school. Provides future teachers with methodical preparation for adequate from a psychological and educational point of view conducting the interactions ‚pupil – environment' in primary and secondary school.
Course content:
Basic accents of the contents are: Introduction to the methods; Structure; Principles for natural selection and arranging the program contents; The lesson and excursion, form of pedagogical interaction; Methods for educational work; Analysis of the contents for children's knowledge about the areas of social and natural environment.
Teaching and assessment:
The following means for teaching the subject are used:

1. Lectures;
2. Action, connected with the topics in the lectures;
3. Analysis of moves that illustrate the educational processes in kindergartens;
4. Doing course assignments - description, exploration creativity;
5. Testing procedure-exam in a written form on a theoretical questions (written test) and presenting the course assignment.

SB16564 Health and Ecological Education

ECTS credits: 3
Weekly classes:2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219; E-mail: bilieva@uni-ruse.bg
Abstract:
The aim of the training is for students to acquire the necessary knowledge for the health education of adolescents. Certain thematic areas in the lecture course are focused on getting acquainted with the health and environmental components of the environment: natural air, water, soil, food and nutrition; and school: school yard and school building, school furniture and furnishings, microclimate, heating, lighting and harmful factors. Getting acquainted with the institutions involved in the implementation of health and environmental education and upbringing, etc.
Course content:
Nature, tasks and importance of health and environmental science; Physical development of students and morpho-physiological characteristics of school age; Personal hygiene of students; Medical care and health care for students; Microbiological causes and carriers of diseases in children and school age; Environmental problems and impact on natural resources, flora and fauna, etc.
Teaching and assessment:
The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of environmental education and health education.

SB16565 Leadership in Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department. of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the course Leadership in Education is to provide students with a comprehensive understanding and knowledge of aspects and approaches to leadership and management in the education sector, to expand their critical understanding in the field of leadership in education, based on analytical commitment to current educational theory, research, policy and practice. The module in the discipline is conducive to the acquisition of the full range of theoretical and practical knowledge, skills and competencies corresponding to the subject area.
Course content:
Contains topics dealing with innovative educational technologies, business communication skills, negotiation and conflict resolution; organizational culture and management of educational resources; philosophy of leadership in education, theories of leadership styles.
Teaching and assessment:
The main methods of teaching are information-explanatory, illustrative and problematic exposition, bringing to the fore the scientific logic of knowledge. Interactive methods are used to test certain views of students for decision making, formulation of conclusions, formation of communication and organizational skills: discussions, brainstorming, business games and more. A 60-minute test is conducted on the course. It includes questions from the proposed synopsis. The student, at his request, is given the publicity of the assessment.

SB16566 Managing Relationships in Learning Environments

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to provide knowledge about the elements of the educational environment and the various forms of relationships within it. The main factors and current forms of interaction between subjects in the educational environment are analyzed.
Course content: The concept of educational environment. Organizational culture and teacher leadership. Social interaction in the educational environment. The teacher's role in successful relationship management. Discipline through cooperation. Relationship management in the inclusive educational environment. Managing relationships in a digital environment. Aspects of interaction between participants in education - teachers, parents, institutions.
Teaching and assessment:
The course includes only lectures. Active forms and methods are also used. The final grade is formed on the basis of the results of a written test and the participation in the discussions.

SB16567 Digital Competence and Digital Creativity

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0lab+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the dimensions of digital competence and digital creativity. Expected results: will know and be able to apply the concepts of digital competence and digital creativity.
Course content:
Competence. Basic concepts. Competences and competence approach for teaching and learning. Framework for defining digital competences. Professional development and digital competence of teachers. The qualification and professional development of teachers as a key element of the quality of Bulgarian school education. Creativity in learning - basic concepts and concepts. Scientific and theoretical foundations of creativity. The essence of creative activity. Models for analysing creativity. Creativity in the context of learning. Digital creativity. Digital creative skills. Components of digital creative pedagogical practices.
Teaching and assessment:
The learning process is realized based on lectures. During the course students learn about the competencies and competence approach to teaching and learning, creativity with its basic concepts and concepts, digital creativity, and digital creative skills. Students receive a certificate in the discipline if they have attended lectures and practical exercises according to the Rules for the organization of educational work at the University of Ruse. The training in the discipline ends with an ongoing assessment.

SB16616 Foreign Language 2

ECTS credits: 2 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract: The basic aim of the course is to improve the level of students from A2 towards A2+ according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking, grammar skills and listening.
Course content: The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes. Students are encouraged to bring their own materials. An important topic – children and their world – is added to the above.
Teaching and assessment: Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, three essays and two written tests.

S03868 Morphology and Syntax of Bulgarian language

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 467, E-mail: enedkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
Grammar, with its two branches - Morphology and Syntax, is the science about language. Morphology studies the structure and grammatical meaning of words. Syntax is the science about the structure of coherent speech. There is a special emphasis on the significance of syntax for the mastering of punctuation. Its connection with intonation helps students develop correct, accurate and expressive speech.
Course content:
Definition of the term “word” as the subject of morphology; Parts of speech. Subject matter of Syntax; Combination of words, Classification of simple sentences; Main parts of the simple sentence; Subject; Predicate; Secondary parts of two-compounded sentences; Object; Adverbial modifiers; Definition; Apposition; The attribute; Syntactic realisations of the parts of speech; Parenthetical syntax units; Complex sentences; Complex composed sentence - types; Complex compound sentences - types; Multicomponent complex sentences.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At the end of the semester there is a written exam, which includes also a practical part.

SB16568 Methodology of Teaching Music in Primary School

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+1ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course aims to build students' theoretical knowledge, teachers in methodology of teaching music in elementary school. The practical exercises allow approbation of the acquired theoretical knowledge and perspective of a creative and professional appearance when dealing with children
Course content:
The course follows modern methods and systems for music education, and build on the Bulgarian research and achievements of European music educators in the field. Provided a more detailed introduction to the musical material of perception and reproduction in primary school. Attention is drawn to innovative methods and forms of work in music in formal and informal settings.
Teaching and assessment:
Lectures and practical exercises are designed to build on the theoretical knowledge and practical training of student teachers in the discipline of music Methodology in elementary school, which ends with a written exam.

SB15600 Methodology of Teaching Art at Kindergarten Level

ECTS credits: 5 **Weekly classes**: 1lec+0sem+0labs+2ps+1cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Ivanov Doychinov, MA, PhD, Department of Industrial Design
tel.: 082 / 888 426, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
The aim of the course is to provide students with a rich spectrum of knowledge on the goals and main tasks of introducing children to fine arts in the pre-primary stage of the Bulgarian educational system. Students are also introduced to the expected results of the training at each age group, as well as to the importance of the development of artistic abilities of children at the pre-primary period. Students are acquainted with the approaches of pedagogical interaction and teaching methodology in the kindergarten, with the specifics of the forms of pictorial activity and other essential aspects of the teaching of art in the pre-primary stage.
Course content:
The course of lectures focuses on: the objectives, the main tasks, the specifics and the new trends of art education in the kindergarten; the specificity of the methods and techniques; the forms of pictorial activity in the kindergarten, etc. The seminars allow the students to develop skills in implementing the rich scope of fine arts materials, techniques, art types and genres suitable for the kindergarten.
Teaching and assessment:
In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. During the seminars the students are mainly assigned fine art tasks which involve individual work rather than creative group work projects.

SB14558 Methodology of Teaching Physical Culture at Kindergarten Level

ECTS credits: 2 **Weekly classes**: 1lec+0sem+0labs+1ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Physical Education and Sport
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Stefanova Ilieva, , MA, PhD, Dept. of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract:
Students should gain understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.
Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary school physical education; Diagnosis of the physical activity of children at a pre-school physical education.
Teaching and assessment:
During the lectures and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education. They are held according to the contemporary requirements for effective training. They aim at helping students receive a sound theoretical and practical preparation. The course finishes with a written exam. The final mark is formed taking into account the assessment of the practical activities.

SB14559 Methodology of Teaching Nature Studies at Kindergaten Level

ECTS credits: 3 **Weekly classes**: 1lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course familiarizes the students with the organisational forms and methodological tools for conducting the educational process involving acquiring knowledge about the natural and social environment in kindergartens. The subject forms creative abilities and skills for determining the contents of knowledge and using the routines and social life in kindergartens.
Course content:
Basic accents of the contents are: Introduction to the methods; Structure; Principles for natural selection and arranging the program contents; The excursion, activities by interests, knowledge as a form of pedagogical interaction; Methods for educational work; Analysis of the contents for children's knowledge about the areas of social and natural environment.
Teaching and assessment:
The following means for teaching the subject are used:
1. Lectures;
2. Seminars, connected with the topics in the lectures;
3. Analysis of moves that illustrate the educational processes in kindergartens;
4. Doing course assignments - description, exploration creativity;
5.Testing procedure – exam in a written form on a theoretical questions (written test) and presenting the course assignment.

SB15619 Statistical Methods in Pedagogical Research

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MMath, PhD, Dept. of Applied Mathematics and Statistics
tel.: 082/ 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assist. Prof. Elitsa Ilieva Raeva, MMath, PhD, Dept. of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: eraeva@uni-ruse.bg
Annotation:
The course aims to acquaint students with the use of basic statistical methods for data processing and analysis in pedagogical research. Basic concepts of applied statistics are introduced and classical applied statistical methods for data collection, processing and analysis are considered. The course includes lectures and practical exercises in a computer room. During the exercises students get acquainted and study the software product for statistical analysis SPSS (Statistical Package for Social Sciences). The acquired knowledge is especially important and useful for the development of theses, scientific reports and creative performances of students.
Course syllabus:
Basic concepts in statistics. One-dimensional and two-dimensional statistical distributions. Graphic images. Variation analysis. Development of normative tables in pedagogical research. Sampling statistical surveys. Statistical evaluation. Interval estimates. Sample volume planning. Statistical testing of hypotheses. Regression and correlation analysis. Opportunities for forecasts and analyzes. Applications in pedagogical research. Empirical pedagogical research. Common feature. Sampling methodology. Questionnaire. Construction technology. Organization of field work.
Teaching and learning methods:
During the lectures the teaching material is presented theoretically. The goal of the practice classes is theoretical knowledge to find their practical application. Students get acquainted during these classes (held at computer laboratories) with the opportunities of the software product SPSS.

SB15567 Children's Rights

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstract:
The purpose of the training results in acquaintance with the rights of the child and a more general presentation of the fundamental rights enshrined in the UN Convention on the Rights of the Child; with the types of the rights of the child and the protection against discrimination as a basis for the development of the child in a group, community and state;
Course content:
The included topics contribute to the enrichment of the social horizon of students, as well as will provoke in the discussion plan the content, scope and evolution of children's rights. From the very first hours the students get acquainted with the essence and significance of the UN Convention on the Rights of the Child; the types of rights; methods used in carrying out a verification of the child's rights and a procedure for verifying the observance of the rights.
Teaching and assessment:
In the course of the training, current control is carried out through discussions on the topics covered in the curriculum. The current assessment is performed by a written presentation on a specific issue (individual or group task), as a representative of the group presents the finished product on the specific topic to the group. The final grade is formed according to the individual test results on questions from the provided material and the developed presentations prepared during the semester.

SB16570 History of Pedagogy and Bulgarian Education

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the course is to build on the fundamental knowledge pedagogy students have acquired and specify and adapt it to the field of primary school education.
Course content:
The course covers topics related to the history and development of the most significant pedagogical ideas, theories, forms and means of teaching; systems of up-bringing and teaching from the pre-class society to the present. There are topics dedicated to the life and work of eminent thinkers and pedagogues as Ian Amos Comenski, John Lock, Jean Jack Rousso, J.H.Pestalozzi, A.S.Macarenco. The development of education and pedagogical thought in Bulgaria is also examined.
Teaching and assessment:
During the lectures active methods of teaching are used. For homework assignment every student works on a task of his/her choice or on another topic. The final assessment is based on the results from the test and evaluation of the course assignment.

S02404 Literary Studies

ECTS credits: 3 **Weekly classes:** 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,, tel.: 082/ 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course acquaints students with the methodological problems of literary theory. It presents the theoretical bases of the different literary schools and approaches and motivates students to develop an active and positive attitude towards literature as a narrative art and specific social system.
Course content:
Literature as narrative art. Character, subject of study, branches and tasks of literary theory. Classification of style patterns. Poetical phonetics. Poetic imagery. Myth – folklore – literature. Literary forms and styles. Features of the lyrical work. Strategies for analysis and approaches to interpretation.
Teaching and assessment:
The course is delivered in the form of lectures.
The course includes three control tests on the material taught. At the end there is a written exam and coursework.

SB16571 Pedagogical Conflictology

ECTS credits: 3 **Weekly classes:** 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The purpose of the course is to provide students with the basic knowledge and skills and competences in the field of conflictology necessary for the organization of an effective pedagogical process. Discipline plays an important role in the general system for psychological and pedagogical preparation of social pedagogues. enables students to be guided in the specifics of work in different conflict situations; to master the nature of the conflicts, contradictions and crises experienced by the human being; they are one of the sources of personality development, they determine their constructive or destructive scenario.
Course content:
Basic knowledge related to the historical conditions for the emergence of conflictology is provided. Object and tasks of conflictology. Emphasis is placed on the structural model and elements of the conflict; signals for the emergence of conflict. The characteristics of the structural elements of the conflict are examined; conflict as a social phenomenon; functions and typology of conflict. Particular attention is paid to the causes of the conflict; participants and dynamics of the conflict. The types of conflict personalities and strategies of behavior in the conflict are discussed. Basic knowledge of interpersonal conflict, interpersonal and group conflicts, organizational conflict, etc. is mastered. Cases for conflict prediction, prevention and resolution are being addressed.
Teaching and assessment:
The training in the discipline "Pedagogical Conflictology" is done through lectures and seminar exercises. The lectures are conducted frontally with the whole group. Lectures use videos and active learning methods. Combining individual and group modes of work makes it possible to master the intended material.

SB16573 Development of Children's Artistic Abilities with the Instruments of Music

ECTS credits: 2 **Weekly classes**: 0lec+2sem+labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr. of Arts Kristina Petrova Yapova, MA, Bulgarian Academy of Sciences, Sofia, Institute of Art Studies, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova,PhD, MA, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course aims at developing and enriching the creativity of students with the help of the means of music through the use of contemporary works and research papers on similar topics. It covers a wide range of topics that focus on the main theoretical issues and enrich the context of the problems discussed in areas such as musical psychology, psychophysiology, perception and influence of music, sound and musical expressions, communicative potential of the sound and music and a syncretic approach in the musical and creative thinking.
Course content:
Music as Universal Language for Communication. Methodological System of Music Education. Analysis and Discussion of Different Types of Music in Relation to their Educational Effect. Music and the Art of Speaking. Multi-aspectual Influence of Music. The Relation between Sound, Colour and Speech. Musical and Artistic Approaches for Working with a Literary Text. Social and Esthetic Functions of Dance. The Folklore Dances. Musical Instruments as Non-verbal Means of Communication. Child Musical Genres as a Stimulus for Developing Children's Creative Potential.
Teaching and assessment:
The course is delivered in the form of lectures which cover nine topics that aim at presenting theoretical knowledge to students and increasing their practical training for developing children's potential for creativity through the means of music.
The course is based on continuous assessment and the final mark is formed on the basis of two tests.

SB16572 Group Training

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
This course aims at acquainting the students with the basic models and strategies of pedagogical interaction and setting up an ability for communication at certain levels of pedagogical work.
Course content:
Information-psychological aspects of communication in pedagogical process. Characteristics. Pedagogical content of communicative instruments. Speech and communicative behaviour. Dimensions of teacher's profession. Characteristics and interactive education. Techniques for organization of the interaction in class. Approaches of setting up personal and social skills in students. Basic social skills.
Teaching and assessment:
Students get acquainted with the theoretical and practical foundations for developing social and personal skills characteristic of the teacher's profession. Students work in groups. Interactive methods are used to set up ideas and skills for productive pedagogical interaction.

SB16611 Rhetorical Pedagogy

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. Bulgarian Language, Literature, History and Art
tel: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The curriculum of the coursec is designed for students of Bachelor program "Pimary school pedagogy with foreign language" studied in University of Ruse. It contains a seminar exercises.
Course content:
More important topics: Historical and theoretical foundations of rhetoric; Oratory style; Rhetorical figures and tropes; Verbal and non-verbal communication in pedagogical communication; Methods and techniques of communication; Speech culture and techniques.
Teaching and assessment:
Rhetoric education is organized in seminar exercises. The most actively used forms and methods of learning are talk, analysis and interpretation, exercise, mental attack, speaking and listening, rhetorical persuasion.

SB14558 Methodology of Teaching Physical Culture at Kindergarten Level

ECTS credits: 5
Weekly classes: 1lec+0sem+0labs+1ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Stefanova Ilieva, PhD, MA, Dept. of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract:
The course Teaching Sport and Physical Activity is intended for undergraduate students of Pre-school and Primary school education. Students should gain understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.
Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary school physical education; Diagnosis of the physical activity of children at a pre-school physical education
Teaching and assessment:
During the lecture and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education. They are held according to the contemporary requirements for effective training. They aim at helping students receive a sound theoretical and practical preparation. The course finishes with a written exam. The final mark is formed taking into account the assessment of the practical activities.

SB15601 Methodology of Teaching Art in the Primary School

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+1ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Ivanov Doychinov, MA, PhD, Department of Industrial Design
tel.: 082 / 888 426, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
The aim of the course is to provide students with a rich spectrum of knowledge on the goals and main tasks of introducing children to fine arts in the primary stage of the Bulgarian educational system. Students are also introduced to the expected results of the training at each age group, as well as to the importance of the development of artistic abilities of children at the primary school period. Students are acquainted with the approaches of pedagogical interaction and teaching methodology in the kindergarten, with the specifics of the forms of pictorial activity and other essential aspects of the teaching of art in the primary stage.
Course content:
The course of lectures focuses on: the objectives, the main tasks, the specifics and the new trends of art education in the kindergarten; the specificity of the methods and techniques; the forms of pictorial activity in the kindergarten, etc. The practice focus on the specifics of colour combinations, painting, graphics and sculpture creation and their implementation in the arts education in the primary school. Special emphasis is placed on the specific of the decorative applied arts as well as on the problems of drawing shapes, the specifics of the teamwork, group work and the project activities.
Teaching and assessment:
In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. During the seminars the students demonstrate their skills for presenting their artistic ideas through the means of fine art and they also demonstrate the level to which they have acquired the relative fine art material and technique. The final grade is formed on the basis of a positive result on the exam and it also takes into account the overall results on the seminars and the level of mastery on the individually prepared course work.

S03880 Methodology of Teaching Mathematics in Primary School

ECTS credits: 9 **Weekly classes**: 2lec+2sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: skstefanov@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Abstract:
The objective of the course is to introduce students to the principles of mathematical education at the start of primary school and to form abilities for presenting, practising and systematizing mathematical information and knowledge. Students master basic planning skills for mathematics lessons.
Course content:
Subject, goals and tasks. Didactic foundations. Principles and methods. Methods for teaching notions about one-digit, two-digit, three- digit and poly-digit numbers and operations with them. Mathematical problems with text conditions. Ways for fast verbal arithmetic. Geometrical knowledge. Units of measurement and operations with them.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. Seminars are designed to complement and reinforce the notions introduced at lectures; class work involves discussions, doing tests, devising lesson plans, analysing and discussing lessons, analysis of school documentation, creating didactic and other materials for curricular and extracurricular work in mathematics.

SB15667 Methodology of Teaching Bulgarian Language and Literature at Kindergarten Level

ECTS credits: 3 **Weekly classes**: 1lec+1sem+0labs+0ps+1ca
Assessment: - **Type of exam**: -
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel. 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Abstract:
The work on speech development in kindergarten is a daily activity with a great importance. By developing children' speech abilities, the teac:her develops their their mental abilities. The course examines the main means and methods by which the complex linguistical matter becomes easy and interesting for the children to acquire and the work with literature provokes children's involvement and emotional response to the studied texts . The main objectivel of the subject is to stimulate the communicative abilities of the children at nursery school age.
Course content:
The main themes are: sound culture, gramatically correct speech, semantization, work with literature texts, sorts of coloqued speech, work with the process of of teaching of read and write and diagnostics of children's speech. Every one of them is build by subthemes, representing different sides of the corresponding speech activity.
Teaching and Assessment:
The lectures have the following structure: short historical review, basic terms, specifics of children's speech and children's verbal behaviour, basical themes in traditional and innovational plan, gramatical and speech skills- methods, principles and means for their structuralization. The seminars follow the lecture contents, transforming the theoretical knowledge into practical skills. The students work on plans for different type of intentional situations- playful, practical, and educating, make an investigation with diagnosticaim with children from different age groups and the results and conclusions from them.

S03882 Lesson Observation in Kindergarten

ECTS credits: 2 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: gggeorgieva@uni-ruse.bg
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: vtradeva@uni-ruse.bg
Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Assist. Prof. Iliyan Yordanov Ilchev, MA, PhD, Department of Physical Education and Sports
tel.: 082/ 888 225, E-mail: iilchev@uni-ruse.bg
Abstract: Observation aims at introducing students to the immediate learning environment of pre-school education through direct observation of lessons conducted by leading teachers.
Course content: There are various activities, pedagogical situations and children's games from the daily regimen of children in kindergarten - Bulgarian language and literature, Mathematics, Social and natural world, Art, Construction and technologies, Physical education, Music; game culture, different moments, as well as holidays and entertainment.
Teaching and assessment: The observation is conducted by a pedagogue and methodologists who pre-assign students tasks after monitoring takes place conferring with mentors, led by the methodologist, allowing for questions, analysis and discussion on the methodological analysis of observed situations.

SB15603 Foundations of Natural Sciences

ECTS credits: 1 **Weekly classes**: 1lec+0sem+0labs+0ps+se
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course's aim is to provide studets with a system of knowledge about Natural Sciences which is necessary for the future primary teachers who will teach "Man and Nature" and "Household Maintenance Skills and Techniques".
The lectures in this course are structured on the basic Natural Sciences concepts – forces, movement, energy, substances and materials.The content of every concept is presented integrally – as knowledge about life sciences and about inanimate nature. Thus the lectures correspond to the integral character of the subject "Man and Nature" which the students are preparing to teach at school.
Course content:
History and Methodology of Natural Sciences; Time and space in Natural Sciences; Material structures in the Universe and their hierarchy – from the atom to the Universe; Movement and Energy; Substances and Materials; Cellular structure of the organisms, water, air and soil; The problem Space-Time and Matter and General Natural Pattern of the World.
Teaching and assessment:
The course is taught through lectures and seminars. There is a certain number of points that should be accumulated in order to obtain semester continuous assessment for this course. There are exact criteria concerning the seminal essay. The way of forming the final grade includes the results from the continuous assesment and the quality of the seminal essay.

SB15668 Early Childhood Pedagogy

ECTS credits: 1 **Weekly classes**: 1lec+0sem+0labs+0ps+se
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof Asya Simeonova Veleva, MA, PhD, Department. of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The main goal of the course is to prepare students to organize and conduct pedagogic interaction in institutions for children at the age of 0 to 3 wears.
Course content:
Scientific status of Early childhood pedagogy. Essence and meaning of education in early childhood. Development and learning standards. Principles and methods of education. Specifics of play, learning and education. Daily regime. Organization of children's activities.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge. The assessment is based on didactic tests.

SB16617 Foreign Language 3

ECTS credits: 2 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
The basic aim of the course is to improve the level of students from A2+ to B1 according to the European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and listening.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes, the children's world, Primary School in Britain and Bulgaria.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, three compositions, two written tests and a course paper, requiring students to give a presentation on a material from English children's literature. The semester is validated.

SB15569 Professional and Career Development

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel: 082 / 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract: The purpose of training in the discipline is, on the one hand, to acquaint students with the essence, planning, development and management of careers; to clarify the essence of the competitive personality and introduce them to technologies for its development - workshops, professional counseling, psychological diagnostics, technologies forming a positive self-attitude, readiness for changes and the ability to see alternatives, taking responsibility, free choice and with the possibilities of professional and career development of pedagogical specialists in the field of education. On the other hand, with a view to their future professional realization in the education system, the purpose of the lecture course is to form knowledge, skills and competencies in the future pedagogical specialists, related to the implementation of professional guidance and counseling of children and students.
Course content: Professional Development. Professional orientation. Nature and development of the career. Stages in career development. Organizational systems for career management. Development of career plans. Status and career development of pedagogical specialists. Introductory and continuing qualification of pedagogical specialists. Certification of pedagogical specialists. Professional profile of the pedagogical specialist. Professional pedagogical portfolio. Development of an individual career plan. Competitiveness. Competitive personality. Self-development of the culture for business communication. Self-development of the culture of conflict resolution and controversy management Professional guidance in general education. Career guidance program. Vocational guidance of primary school students. Professional guidance in class time and in interest activities.
Teaching and assessment: The following forms and methods are used to implement the learning content: lecture, conversations-discussions, solving cases. Modern information technologies are used for visualization and interactions.During the training, practical tasks are assigned, aimed at helping the students regarding their realization as pedagogical specialists. Topics are offered in the field of career guidance - developing an interview, developing career plans, preparing and presenting an interview, and self-development tests for communication and conflict resolution.

SB15568 Pedagogical Ethics

ECTS credits:2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The aim of the course is to introduce students to the fundamental principles of pedagogy – helping formulate the ethical and temperamental standards of behaviour when executing their professional tasks, when communicating with different subjects under various conditions and affirm positivity and an assertive disposition.
Course content:
Ethics as the science of morality. Applied and professional ethics. Pedagogical ethics – subject, tasks, origins and evolution, categorization. Nature and functions of professional morality. Professional and personal codes of ethics. Ethics and education – the moral actions of teachers. The moral aspects of the relationship between teachers and the parents of students.
Teaching and assessment:
The fundamentals are covered throughout the duration of the course and are complemented with self-preparation. The course is comprised of topics and activities which are intended to allow student to reach a deeper understanding of the nature of ethical moral norms and their importance regarding ethical conflict avoidance or resolution. Activities and methods include lectures, discussions, work with various sources, working individually or in a group, tests, cases, etc. The final grade is based on test results during the semester, participation in discussions and the creation of a portfolio on the discipline.

SB16612 Childrens Folklore

ECTS credits:2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 888 437, E-mail: doneva_v@uni-ruse.bg
Course content:
The course aims at providing the future teachers with the necessary knowledge about the specific features of Bulgarian folklore. The course introduces students to the foundations of Bulgarian culture and its spiritual aspects. The course focuses on the problems, aims and tasks of Folklore studies, the prominent figures in the field and its relations to other sciences – e.g. Literature, Social and Cultural Anthropology, Didactics, Sociology, etc. It examines all branches of Bulgarian children folklore, the resources and their interpretation. The course also traces back the development of Children's Folklore in the process of national self-awareness and tackles its present-day implications. It explores children's folklore genres and provides an opportunity for their field research.
Course content: Bulgarian Mythology. Myth and History. Myth, Legend, Saga. Myth and Folklore. Contemporary Problems of Bulgarian Children Folklore. Raising Children's Awareness of the Folklore Traditions. Origin and Development of the Folklore Studies. Folklore Schools from the 19th century. Historic Sources of Bulgarian Folklore. General Characteristics and Poetic Features of Folklore. Classification Systems. The Bulgarian Folklore Studies in the Period of the Revival – the Contribution of Venelin, Rakovski, Bratia Miladinovi. The Bulgarian Folklore after the Liberation. Folklore Calendar. Folklore Traditions and Celebrations. Family Traditions – Beliefs, Child Birth and Upbringing Rituals. Children Folklore – Genres, Origin, Development and Classification. Christmas Rituals. Participation of Children in the Rituals. Spring Festivities – Rituals, Songs. Omens, Proverbs and Riddles and Anecdotes. Stories. Characteristic Features of the Genre. Games for Children. Field Research Methods. Family Tree.
Teaching and assessment: The lectures includes discussions or talks. The final mark is formed on the basis of students' active participation in the classroom during the discussions, the quality of the produced assignments.

SB16577 Project-Based Learning

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0p
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The purpose of the course training is to acquaint students with the theoretical and applied aspects of project-based learning. Emphasis is placed on the possibilities for integrating the project method in the educational process. Students are introduced to the technological model of planning and implementation of project work in elementary school age, as well as the criteria for evaluating the project presentation and project product.
Course content:
The course covers: theoretical foundations of project-based training; reformist pedagogy and the ideas of John Dewey, Ellen Parkhurst, Roger Cousinet and others; group activity as a major component of project-based training; project-based training in a multi-age classroom organization; learning through collaboration; prospects for realization of project-based training as an educational technology in modern conditions; "Project Method" and project-based training; technological model of planning and realization of the project work; classification of project types; managing project activities and the role of the teacher. Criteria for evaluating project work.
Teaching and assessment:
The learning process is conducted through lectures. Interactive methods and tools, multimedia presentations, diagrams, tables, models are used.

S03886 Methodology of Teaching Bulgarian Language and Literature in Primary School

ECTS credits: 9
Weekly classes: 3lec+1sem+0labs+2ps+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082/ 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course aims at giving students theoretical and practical knowledge about the nature and specific features of teaching and acquiring the native language in the primary school age. It focuses on the problems of native-language and literary education in the primary school with regard to new concepts and recent developments in the field.
Course content:
Specifics of the subject Bulgarian Language and Literature in the primary school. A system of teaching elementary literacy. Language acquisition; Development of coherent speech and written speech abilities in the elementary school class; The connection of the work for developing speech abilities with the literary and language education.
Teaching and assessment:
The module is taught through a combination of lectures and seminars classes. The lectures and seminars consider a selection of theoretical problems and perspectives on teaching and learning languages and literature, and relate these to different practical solutions and examples.

SB 16578 Methodology of Teaching National Studies, Man, Society and Nature

ECTS credits:6
Assessment: exam
Weekly classes: 2lec+2sem+0labs+0ps+1ca
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course takes into consideration the unique conditions in the personal development of children with their specific experience and stage of accepting and processing the information about objective reality, as well as their orientation in natural and social events. Through his/her pedagogical interactions with the subject, the teacher is obliged to take out the experience of the children from their condition of pre-school and pre – theoretical disunion and lack of a system to the cognitive and intellectual ability for absorbing the social sciences in upper grades.
Course content:
Goals and Assignments of the educational work in the subjects Man and Society and Man and Nature; Program contents in primary school; The Lesson; The Excursion; Contents and Characteristics of the subjects Man and Society and Man and Nature; Social areas.
Teaching and assessment:
The educational process goes through lectures and seminars. The students have to achieve a certain number of skills for unaided solving of creative tasks in the area of programming and conducting the forms of educational work in Man and Society and in Man and Nature.

S03889 Lesson Observation in Primary School

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+0sem+0labs+2ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: vtradeva@uni-ruse.bg
Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Assist. Prof. Kamen Vaskov Simeonov, MA, PhD, Department of Physical Education and Sports
tel.: 082/ 888 225, E-mail: ksimeonov@uni-ruse.bg
Abstract:
Observation aims to introduc students to the immediate learning environment of the first stage of primary school education, through direct observation of lessons conducted by leading teachers.
Course content:
There are lessons in Bulgarian language and literature, Mathematics, Man and society, Man and nature, Music, Art, Technologies and entrepreneurship, Physical education and sport. A portfolio is created for the course.
Teaching and assessment:
The observation is conducted by a pedagogue and methodologists who pre-assign students tasks after monitoring takes place conferring with mentors, led by the methodologist, allowing for questions, analysis and discussion on the methodological analysis of observed lessons. The contents of the portfolio are evaluated.

SB15604 Methodology of Teaching Bulgarian Language and Literature in Kindergarten

ECTS credits: 5 **Weekly classes**: 1lec+1sem+0labs+1ps+1ka
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel. 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Course description:
The work on speech development in kindergarten is a daily activity with a great importance. By developing children' speech abilities, the teacher develops their their mental abilities. The course examines the main means and methods by which the complex linguistical matter becomes easy and interesting for the children to acquire and the work with literature provokes children's involvement and emotional response to the studied texts . The main objectivel of the subject is to stimulate the communicative abilities of the children at nursery school age.
Course contents;
The main themes are: sound culture, gramatically correct speech, semantization, work with literature texts, sorts of coloqued speech, work with the process of of teaching of read and write and diagnostics of children's speech. Every one of them is build by subthemes, representing different sides of the corresponding speech activity.
Teaching and Assessment:
The lectures have the following structure: short historical review, basic terms, specifics of children's speech and children's verbal behaviour, basical themes in traditional and innovational plan, gramatical and speech skills- methods, principles and means for their structuralization.
The exercises follow the lecture contents, transforming the theoretical knowledge into practical skills. The students work on plans for different type of intentional situations- playful, practical, and educating, make an investigation with diagnosticaim with children from different age groups and the results and conclusions from them.

SB15605 Methodology of Teaching Design, Technologies and Creative Art Activities

ECTS credits: 5 **Weekly classes**: 1lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
This course is intended to give students specialised methodological knowledge and practical technical skills necessary for teaching *Design and Technology in the Kindergarten*.
Course content:
Legal documents governing the education and training process in the field "Design and technologies", methodological system of "Design and Technologies"; didactic principles; training methods; working in the open, household service work, technical design and modelling; forms of organization of the educational and process; natural materials, paper, cardboard.
Teaching and assessment:
In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. The final grade is formed mainly on the basis of the results of the exam which includes topics from the syllabus. When forming the final grade the course tutor takes into consideration also the participation of students in the seminars.

SB15578 Academic writing

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The purpose of training in the discipline is preparation for the successful application of the various genres of academic writing by future educators in the presentation and shaping of the results of their research work both during their studies and in their professional careers.
Course content:
Scientific research is the basis of scientific creativity. Stylistic markers of scientific style; bibliography in scientific texts. Scientific integrity and author ethics. Manuscript formatting and editing. Student scientific creativity - essay, term paper, academic essay, thesis. Mini-genres in academic writing - abstract and summary, annotation, keywords, the introduction of the author, poster. Traditional genres of participation in scientific forums – scientific announcement, scientific report, and scientific article. Formats for participation in scientific forums - scientific conferences, scientific congresses and scientific symposiums, seminars, round tables, poster sessions. Presentation and scientific public speaking. Quality of information sources; periodical scientific publications in the field of pedagogy.
Teaching and assessment:
The main teaching methods are informative, illustrative, and problem presentation, with the scientific logic of knowledge being brought to the fore. During the training, tasks are set to discuss, analyze, edit, and present scientific texts.

SB16583 Management of Educational Institutions

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva MA, PhD, Department of Pedagogy
tel.:082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract: The purpose of the course is for students to gain additional knowledge about the school as an educational organization - a professional field, management in nature, pedagogical in nature; requiring knowledge and competencies in economics, law, political science, healthcare and other social fields. Emphasis is placed on the latest current trends for expanding school autonomy and decentralization in terms of administrative management and delegated powers; on the favorable opportunities for stimulating the creativity and initiative of both teachers and students themselves.
Course content: School legislation in Bulgaria. Periods. Current school laws determining the functioning of the Bulgarian educational system. Law on Preschool and School Education. Methodological basis of the management of education and school. Basic approaches to school management. The school as an organization. Modern organizational models. Effective and innovative schools. Human resource Management. Administrative bodies and services in the Bulgarian school. Main functions of the director and deputy director. The director as a manager and leader. Diagnosis and evaluation of teachers' classroom activities. Basic state documents for the functioning of educational institutions. Modern prerequisites for expanding the autonomy of the school. More important parameters for the realization of school autonomy in Bulgaria. School funding. Financial autonomy in terms of delegated budgets. The activity of the pedagogical councils - technological variants.
Teaching and assessment: The training is in the form of seminars. Students get acquainted with the peculiarities of educational management, and in the course of training are introduced examples from practice.

SB16581 Communication Skills in an Educational Environment

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0ps
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva,MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, e-mail: vvasileva@uni-ruse.bg;
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, e-mail: eivanova@uni-ruse.bg;
Abstract:
The training in the discipline aims to acquaint students, and future teachers, with basic models, strategies, and techniques in pedagogical interaction, to form their ability to communicate at certain levels of the educational process. Attention is paid to the practical options for developing and applying interactive techniques to realize the main goals and objectives in the work of the primary school teacher. Through the seminars included in the curriculum, attitudes and readiness of future pedagogues for the practical application of the forms and the means of communication in the work with pupils, parents and other pedagogical specialists are created.
Course content:
Communication - essence and characteristics, stages and elements; Interpersonal communication. Barriers to communication; Techniques and skills for acquaintance and acquaintance; Speech communication; Models of communication. Formation of skills for transmission and reception of information; Hearing and contact; Planning, organizing and conducting speech communication with communication partners; Conversation skills. Research and ask questions; Dialogue: etymology, meaning, types. Conducting dialogue; The art of presenting - one of the important communication skills of our time; The social-communicative competence of the teacher; Formation of skills for non-verbal communication; Approaches and methods for the formation of personal and social skills in pupils; Formation of skills for adequate and non-aggressive behavior in school; Communication of the partnership between teachers and parents, teachers and other pedagogical professionals, teachers and pupils.
Teaching and assessment:
The basic preparation is realized by acquainting the students with the theoretical and practical bases for the formation of social and personal skills, characteristic for the profession of primary school teacher in accordance with the age of the pupils. The specified topics envisage reaching the students to a deeper awareness of the essence and formation of attitudes and skills for productive pedagogical interaction. The planned activities and methods are visuals, didactic materials, technical and information tools, discussion, work with different sources, group and individual work, solving tests, cases and more.

SB16582 Pedagogical Interaction in a Multicultural Enviroment

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about educational process in multicultural environment.
Course content:
Globalization and intercultural education; goals, content and methods of intercultural education.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB16584 E-learning Lesson Design

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the peculiarities of the electronic environment and the possibilities for developing lessons, so as to build effective relationships for quality education.
Course contents:
Features of teaching and learning in modern digital environment. Electronic resources in education. Types of e-learning. Structuring a lesson in an electronic environment - strategies for planning, preparation. Materials, methods and models of distance learning. Development and presentation of lessons for synchronous learning in a virtual classroom.
Teaching and assessment:
The course is conducted using interactive forms and methods and the active involvement of students. Sample developments are discussed, students work individually and in groups on projects to create lessons in an electronic environment.

SB16585 Methodology of Primary School Physical Education

ECTS credits: 7
Assessment: exam
Weekly classes: 2lec+1sem+0labs+2ps+1ca
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Kamen Vaskov Simeonov, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252 E-mail: ksimeonov@uni-ruse.bg
Assoc. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract:
The course is intended for undergraduate students of Primary Education. Students should gain an understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.
Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary and primary school physical education; Diagnosis of the physical activity of children at a primary school age.
Teaching and assessment:
During the lectures and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education.

SB16586 Children's Literature

ECTS credits: 5 **Weekly classes:** 2l+1sem+0labs+0ps+1cw
Assessment: exam **Type of exam:** written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082 /888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course aims at introducing students to the classical literary works for children by Bulgarian and foreign authors. The course in Literary Theory is a prerequisite for Children Literature. The subject assists the acquisition of knowledge and skills, necessary for the literature classes (reading) in the primary school.
Course content:
The World of the Child in the Children Literature and the Children Literature in the World of the Child; Arabian Nights; Charles Perrault, The Grimm Brothers, Wilhelm Hauff, Hans Christian Andersen, Pushkin, Mark Twain, Lewis Carroll, Astrid Lindgren, Jannie Roddary, Petko R. Slaveikov, Ivan Vazov , Uncle Stoyan, Grandfather Blago, Elin Pelin, Ran Bosilek, Angel Karaliichev, Asen Raztsvetnikov, Kalina Malina, Dora Gabe, Elisaveta Bagryana, Emiliyan Stanev, Valery Petrov, Jordan Radichkov,etc.
Teaching and assessment:
Lectures are designed to provide students with knowledge about the richness and diversity of children literature in Bulgaria and worldwide. At lectures, students are offered different directions and possibilities of interpretation of literary texts. Seminars are designed to practice and complement the material introduces at lectures. The semester is validated only if the classes have been attended regularly. The exam is in a written form and involves answering two theoretical questions: one on foreign literature and one on Bulgarian literature for children.

SB14577 Pedagogical Psychology

ECTS credits: 4 **Weekly classes:** 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The course is oriented students to get a knowledge of advanced tendencies in the psycho-pedagogical theory and practice and their incorporation in the professional activities at kindergarden, schools and social institutions.
Course content:
Subject and object, methods of pedagogical psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc.; issiues of psyhodidactics, psychology of education, psychology of the teachers and their labour, managing of the equips in the education. The curriculum is advanced with theories for students with special educational needs, professional pedagogical communication and consultations in the education.
Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues. The students must elaborate paper work on themes, that are in the conspect with literature.

SB13719 The Art of Speech and Performance

ECTS credits: 2 **Weekly classes:** 1l+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written and oral
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082/ 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course aims at introducing students - future teachers, to the most effective modern means for self-study and reproducing passages from works of fiction in an expressive verbal way, as well as teaching them how to modify these means for applying them in the teaching process, in accordance with the age requirements of pupils.
Course content:
Nature, objectives and tasks of the art of speech and performance. Techniques for delivering a good speech. Articulation and organs of articulation. Orthoepy. Artistic perception. Parallels between public speech acts and acting. Means and forms of the artistic, logical and emotional expression. Methodology of teaching public speech skills. Extracurricular activities in speech performance art in the primary school.
Teaching and assessment:
The instruction is performed through lectures and practical classes. The continuous assessment grade is formed on the basis of tests combining theory and practice and artistic performance of texts from various literary genres.

S03900 Teaching Practice in Kindergarten

ECTS credits: 2 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: practical
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Velislava Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082/ 888 437, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Ivanova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E-mail: eivanova@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.:082/ 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iliyan Yordanov Ilchev, MA, PhD, Department of Physical Education and Sports
tel.:082 / 888 225, E-mail: iilchev@uni-ruse.bg
Abstract: The teaching practice in kindergarten is a stage of the practical education of Pre-school and Primary School Pedagogy students. The aim of the course is for every student to acquire practical skills, develop professional qualities for individual organisation and carrying out pedagogical situations and regime moments in kindergarten.
Course content: Students plan and carry out pedagogical situations on the following subjects: Bulgarian language and literature, Mathematics, Social and natural world, Art, Design and technologies, Physical education, Music; game culture, additional forms of pedagogical interaction. They are divided into different age groups and according to the thematic division of leading teachers.
Teaching and assessment: The teaching practice is supervised by a teacher and a methodologist. Students prepare pedagogical situations and deliver lessons to pre-school children. The supervising teacher and the methodologist from the University of Ruse consult the students on the organization, methodology, content and resources for achieving the educational goals of the designed lessons and ensure students are ready to deliver the lessons. Students are then observed during their teaching by the methodologist, teacher and the other students after which the situation undergoes discussion and methodological analysis.

S03901 Pedagogy and Technology of Games

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is scientific clarification of psychological and pedagogical bases of technology of play interaction, discovering the place and role of the game in perspective to enrich children's game culture.
Course content:
Emphasis is put on the essence of the game as a leading activity in pre – school age, its development and pedagogical functions, discovering of the quality of originality and purpose of the different kinds of games, centered usage of contemporary technologies of developing the game activity of the children and introducing of game-like forms in the pedagogical processes in kindergarten; on the methodological ability for diagnosis, planning and realisation of games. To ensure the practical competence of the students, the seminars are directed to analysing and mastering of specific games, as well as the algorithms for developing, modification and adoption of game models.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB15609 Measuring the Physical Development of Primary School Learners

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082/ 888 225, E-mail: isilieva@uni-ruse.bg
Abstract:
Special attention is paid not only to basic tests, but to the contemporary tests which report anthropometric indexes, physical qualities, coordinative abilities of youngsters; and partially tests which report children's psychometrics. Realising the aim of this course will contribute for better accomplishment of today's educational strategies, standards and tasks during the process of physical education.
Course content:
Purposeful study, control and assessment of 7–11 year olds, anthropometric indexes. Purposeful study, control and assessment of physical efficiency of 7–11 year olds. Assessment of static and dynamic strength; Assessment of rhythmic structure of movement; Motor coordination.
Teaching and assessment:
Basic problems of physical education are discussed in the seminars. Continuous assessment is carried out through discussions on topics studied and written work on certain tests. This is a condition for continuous assessment of the semester. There is no continuous assessment if there is not a 100% attendance in the seminars. The paper's purpose is students to acquire better theoretical preparation which they are going to apply in practice later.

SB15573 Extracurricular Work in Primary School

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education,
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Abstract:
The aim of the course is to supplement the theoretical preparation of students with regard to the nature, purpose, specifics and the educational potential of extracurricular teaching of pupils, organized based on their interests and abilities. Emphasis is placed on the main subject areas where extracurricular teaching is practiced.
Course content:
Main topics: Rational utilization of the free time of pupils; Theoretical problems with interests-based work with primary school pupils; Main areas of extracurricular work; Symbols, rituals and holidays in Bulgarian schools; Planning extracurricular activities.
Teaching and assessment:
Seminars cover problems in the field and have practical value and application. They use example models of extracurricular educational work. Outside of class, students have to write a paper on one of several suggested topics. The final grade is based on the results from the test and the developed example models of extracurricular work.

SB15610 Techniques for Art Integration in the Primary School

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Yordan Ivanov Doychinov, MA, PhD, Department of Industrial Design
tel.: 082 / 888 426, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
The course aims to develop students' knowledge about the non-traditional and alternative art techniques and their links with the other school subjects, especially with those school subjects that belong to the aesthetic cycle of disciplines. The course seeks to deepen the practical skills of the students, as well as increase their competences for applying such innovative techniques in the classroom that are specific within the system of artistic and aesthetic education and for the development of children's creativity. Special attention is given to the significant role of those competences in the development of learners' personality, active participation in the classroom, creativity and value system.
Course content:
The course of the seminars covers topics such as: theoretical foundations of the integration of knowledge in the teaching and learning process; the integration of knowledge as a problem in present-day pedagogical system; the school curricula as a basis for the implementation of the integrative component in the school subjects of the aesthetic cycles and their specific features; methodological approaches in the actual teaching of an integrated arts lesson. Methodological, practical and technological requirements in the organization of integrated lessons; the application of the integrative approach in the planning of lesson topics and the suitable choice of art techniques; folklore as a source for establishing cross-curricular links in the process of education; the integration between the different types of art in a global aspect – styles, symbols and specific features.
Teaching and assessment:
During the course students get familiar with the relevant artistic techniques and approaches that are serve as a link with other school subjects. The cross-curricula links and terminology used are updated during the course which facilitates students' awareness of the process of integrated art education at primary school level.
The course attempts to provoke the active participation of students who have to present their own interpretations of the problems discussed. After the completion of each group or individual task students are given a mark. The final mark is formed as the average of all marks received on the tasks.

SB15579 Development of Pre-school and Primary School Learners‘ Creativity

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
This course’s goal is to acquaint the students with the basics of creative education in pre – school and in primary school age on the basis of actual scientific research and methodological works. The theoretical accents in this course of education are extracted on the basis of practical application with an eye on acquisition of skills for competent managing the creative processes and stimulating the creative abilities of growing up children.
Course content:
The topics included are directed towards revealing the techniques for stimulating creative abilities in a variety of creative activities during the different moments of life in kindergarten and forms of work in school.
Main topics: Subject, Goal and Assignments of creative pedagogy; Essence of creativity and different creative activities; Creative potential of the child, specifics of children `s art; Approaches, orientations and technologies for stimulating the creative abilities; Diagnostics of creative abilities.
Teaching and assessment:
Presentation of theoretical knowledge is accomplished in informational – explanatory, problem-oriented and illustrative form, while at the same time opportunities for studying through discovering, constructing, proving hypotheses, problematic aspects of certain questions are given. The final grade is formed on the basis of a test.

SB16589 History of Music

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Kristina Petrova Yapova, MA, PhD, D.Arts, Institute of Art Studies, Bulgarian Academy of Science
tel.: 02 / 944 24 14, E-mail: yapovak@abv.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course aims to introduce students to the development of music in Europe, with major periods in music culture and their specific characteristics. Knowledge of music is an important part of the overall humanitarian and training are essential for the students - future teachers and educators. This knowledge can be successfully constructed after hearing mastering music samples because music is an art focused on the perception of hearing. Therefore, in parallel with cognitive course provides information and listening to music, which are representative for its author, and the trends of the era.
Course content:
The course traces the emergence of historical consciousness and historical approach in musicology and periodization in music. Advanced regarded music in antiquity, medieval genres of music, liturgical music in Western Europe, the music in the age of Baroque, Classicism and its representatives, Romanticism - representatives and genres. Particular attention is paid to musical genres from different periods in music history: Development of operatic genre, music genres from the Renaissance, the development of the symphony and chamber genre in Romanticism. Different national music schools and their representatives. Particularly important is the creation of the Bulgarian music style.
Teaching and assessment:
The course follows the topics given in the syllabus. The course ends with a continuous assessment will be based on a prepared text written on a topic.

SB15669 Fun and Tourism Games for 1st to 4th Grade Learners

ECTS credits: 2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Physical Education and Sports
Faculty of Transport
Lecturers:
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, MA, Department of Physical Education and Sports
tel.: 082 / 888 225, E-mail: isilieva@uni-ruse.bg
Abstract:
The course's purpose is to enhance and systematize students' knowledge of common pedagogical, psychological and methodological courses, with knowledge how to increase the physical stamina of children's organism and their physical abilities in natural surroundings by means of interesting tourist games.
Course content:
Contemporary tendency for complex formation of children's personality. Development of the concept for healthy children by means of games in nature. Common characteristic of interesting tourist games, special features, content and method of conducting. Basic forms of work in physical culture and sport with opportunities to play games.
Teaching and assessment:
The education is acquired through a conventional lecture course in accordance to the requirements for effective training. The final grade is formed as an average grade. The paper provides an opportunity to cover all problem areas for effective games in view of the quality training of the child pedagogue.

SB15614 Educational Work of the Class Teacher

ECTS credits:2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Abstract:
The topics include organisation of activities, realisation of the aims and tasks of today's school work. There is particular stress on the technology of planning and diagnostics of the activities so that educational content of the course is carried out.
Course content:
Technology of the educative work of class teachers. Basic principles of carrying out educative work in the elementary school. Educative work as a kind of pedagogical technology. Theoretical and legislative foundations. Content of the work with the school class. Major tendencies. Educative work of the class teacher carried out through different types of activities. Essence, specific character and educative functions. Specificity, tendencies and organisation of extracurricular activities.
Teaching and assessment:
During the lecture course students get acquainted with the theoretical and also practical foundations for organisation of the educative work of class teachers. Interactive methods are used for analysing pedagogical situations in the work of class teachers

SB15615 Wholeday Organisation of the Educational Process in Primary School

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Dept. of Pedagogy,
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract: The purpose of the discipline is to outline the main aspects of the all-day organization of the educational process in kindergarten and primary school. To analyze the normative base and the changes in the Law for preschool and school education. To consider options for planning the educational process, conducting a variety of activities in full-time education in kindergarten and primary school.
Course content: Pedagogical and didactic projections of the teacher-educator-child/pupils relationship in the all-day organization of the educational process in kindergarten and primary school. Normative base, determining the all-day organization of the educational process in the primary school. Implementation of the framework program for the whole-day organization of the learning process. Good practices and guidelines for activities of organized recreation and physical activity. Didactic requirements for the implementation of self-preparation activities. Planning, preparation, and implementation of activities of interest in primary school. Forms for the realization of active learning in a whole-day organization of the learning process. Methodical solutions for the use of ICT-based activities in the pedagogical process in the all-day organization of training. Realization of the ideas of civic and intercultural education in the all-day organization of the educational process. Pedagogical interaction is aimed at socializing students in semi-boarding groups, through the application of interactive methods - group discussion and brainstorming. Application of interactive visualization methods with a poster and a "mind map" in all-day training. Vocational guidance as part of the activities of interest in the all-day organization of the educational process. Game activities in the all-day organization of the learning process. Art and sports in the all-day organization of the learning process.
Teaching and assessment: The methodology of conducting the seminar exercises is organized on the basis of a logical and substantive connection of the problems on the main topics included in the curriculum. Interactive methods are used to test certain views of students on decision-making, formulating conclusions, and forming organizational skills: discussions, brainstorming, case studies, etc.

SB14582 Methodology of Teaching Technologies and Entrepreneurship in Primary School

ECTS credits: 8 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
This course aims to give students specialised methodological knowledge and practical technical skills necessary for the teaching of Technology and Entrepreneurship subject at the primary school level. The topics covered in the course complies with the state educational requirements included in the national Technology and Entrepreneurship curriculum for the primary school level, as well as with the other subjects comprising the Technology and Entrepreneurship Sphere in the approved state curriculum.
Course content: Technology and Entrepreneurship as a subject (primary school level from 1st to 4th grade), didactic technologies in the system of technology training, content of lessons, didactic principles, methods of teaching, forms of organization, natural materials, paper and cardboard, materials from metal, machine elements, mechanisms, plastic materials, textile, leather, electricity, domestic labour and service labour, technical modelling and constructing, work in the open.
Teaching and assessment: The course tutor uses the whole-class interaction pattern during the lectures and visualizes a variety of accessible didactic materials. Students work individually or in groups during the seminars. Their individual or group work is preceded by a revision of the theoretical knowledge on the problem. The final grade is formed on the basis of a positive result on the exam but it also reflects the overall performance of the students during the seminars and the level of overall successful completion of the course work.

SB15586 Pedagogical Diagnostics

ECTS credits: 4 **Weekly classes**: 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is providing specialized knowledge in the field of ;diagnostic pedagogical research in theoretical and empirical aspect.
Course content:
Emphasis is put on the history and development of pedagogical diagnostics; processing and presentation of the results; observation; quest; experiment; projective methods; assessment scales; tests.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB15587 Speech Culture

ECTS credits: 3 **Weekly classes:** 1lec+1sem + 0labs+0,5se
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082/888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082/888 664, e-mail: ndoneva@uni-ruse.bg
Abstract:
The aim of the course is to support students in expanding their knowledge in contemporary Bulgarian language and applying their knowledge efficiently in the written and oral speech.
Course content:
The main topics are: Spelling and pronunciation of vowels. Mutation of ’ya’ and ‘e’ vowels. Spelling and pronunciation of consonants. Use of full and contracted countable form. Agreement in polite forms. Punctuation of simple sentences. Punctuation of complex sentences.
Teaching and assessment:
The teaching is conducted in the mode lectures and seminars. In the lectures, the students acquire theoretical knowledge on spelling and speaking rules, which is consolidated further in the seminars. Various forms and methods of work are used (lecture, presentation, basic and additional exercises, different types of written exercises). During the seminars, tests for checking the quality of acquisition of knowledge. The syllabus includes individual work on research papers, covering topics assigned in advance.

S03952 Fondations of Special Education

ECTS credits:4
Assessment: exam
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course is intended for the undergraduate students in Pre-school and Primary School Education. It aims at familiarizing them with the pedagogical minimum of knowledge and skills necessary for successful work with children with mental, hearing, eyesight and speech disabilities. The instruction is done by means of lectures.
Course content:
The program includes lectures- basics of the Special Pedagogy; features of children with anomalies in development; characteristics of children with intellectual, sensory, communicative, locomotory, complex disorders; problems of autistic and hyperactive children; peculiarities of deviant behavior in adolescents; basic ideas for training and education of children with special educational needs; childhood attachment disorders; methods for investigation and diagnosis of abnormal children; functional assessment of the needs of children and pupils; solving practical cases.
Teaching and Assessment:
The course – lectures.
Requirement - 50% lecture attendance.
Appraisement - 3 tests performed during the semester/exam test in the semester`s end and the course work.

SB10936 Teaching Practice in Primary School

ECTS credits: 4
Assessment: continuous assessment
Weekly classes: 0lec+0sem+0labs+3ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: zhilieva@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Assist. Prof. Kamen Vaskov Simeonov, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 225, E-mail: ksimeonov@uni-ruse.bg
Abstract: The aim of the course is for every student to acquire practical skills, develop professional qualities for individual organisation and carrying out lessons.
Course content: Students plan and carry out lessons on curriculum subjects. They are divided into different classes of the primary stage and according to the thematic division of leading teachers.
Teaching and assessment: The teaching practice in primary school is taught by a pedagogue and methodologist teachers. Students are assigned to a lead teacher and prepare lessons on curriculum subjects in grades one through four. The leading teacher and a methodologist from the University of Ruse consult on the organization, methodology, content and resources for achieving the educational goals and ensuring students are ready to carry out the lesson. Students are then observed during the lesson by a methodologist, a leading teacher and the other students after which the lesson undergoes discussion and methodological analysis. The pedagogue forms the final grade as an average of the grades given by the methodologists.

SB10937 Puppet Theatre Performing Art

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof., Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 08 2/ 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The aim of this course is to provide students in education with knowledge and skills for performing art, tailored to the specific nature of childhood age.
The practical training allows the students to learn the methods of applying puppetry while working with children in pre-school and primary school. The course assists the solution of speech technique problems and the development of students' artistic skills as an important pre-requisite of success in their future work as teachers.
Course content:
Speech organs. Articulation. Breathing; Nature of puppetry as public art; Types of puppets; Table theatre; Stage and space. Settings and props; Types of etudes. Stanislavski's theatre; Dramatisation. Transforming the epic text into dramatic; Staging a puppet theatre performance; Perception of puppet theatre performance. Educating children for theatre perception.
Teaching and assessment:
The course is taught through practical classes. All learners perform on stage.

SB15612 Preparation and Readiness for School

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assesment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural sciences and education
Lecturers:
Assoc. Prof Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of the course is to respond adequately of the necessity of preparation for school. Students learn about the system of education In preparatory group or class.
Course content: Aspects of school readiness and preparation for school, specifics of education of bilingual children, diagnostic of school readiness.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SB15588 Working with Educational Documents

ECTS credits: 1
Weekly classes: 0lec+1sem+0labs+0ps
Assessment: colloquium
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural sciences and education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course “Working with educational documentation” is to expand the professional competencies of students-teachers, acquainting them with the mandatory educational documentation in primary school, ways of keeping and storage periods.
Course content:
School curriculum; annual plan for the activities of the school; school rules of procedure and internal order. Curricula approved by the principal; weekly schedule. Sample list. Class gradebook - for a student class, for a group with all-day organization. Certificates. Books - for those subject to compulsory education, annals, sanitation, complaints. Personal educational work for a student. The portfolio in the education system.
Teaching and assessment:
In the course of the exercises, active teaching methods are used, combining individual and group forms of work.

S03859 Comparative Education

ECTS credits: 3
Weekly classes: 3lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The course aims at familiarizing students with the history of Comparative education as a scientific direction with a great practical significance; it also explores issues about the European dimensions of education.
Course content:
History of comparative education in Bulgaria; Theory and methodology of comparative education; Structure and contents of comparative education; Educational systems in Bulgaria, the USA, Canada, France, Germany and others; Comparison of the aims, finance, management, structural patterns of the educational systems and the teacher training programs in different countries;
Teaching and assessment:
The course is taught through lectures designed to reveal the comparative patterns in the structures of the different educational systems. One of the learning outcomes of the course is to develop in students an ability to put theory into practice; therefore, students are given individual course assignments for a comparative study of the general educational systems of at least two countries. The assignments are assessed and a written test is administered at the end of the semester. The final grade is an average of the grade from the written test and the result from the assignment.

SB15616 Hygiene and Health Education

ECTS credits: 3 **Weekly classes:** 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstract: The aim of the training is for the students to get the necessary knowledge for the health education of the teenagers. Certain thematic areas in the lecture course are focused on getting acquainted with the hygiene requirements in kindergarten and school, the pedagogical conditions for forming a dynamic stereotype regarding the personal hygiene of the child and the student, as well as for building preventive orientations related to the more common in childhood infectious and non-communicable diseases and opportunities for their prevention.
Course content: Nature, tasks and importance of hygiene science; Physical development of students and morpho-physiological characteristics of school age; Hygiene of students' mental work; Hygiene of students' nutrition; Hygiene of physical education and sports of students; Hygienic importance of the air, permanent components of the air and their health significance; Hygienic requirements for the learning environment; Personal hygiene of students; Medical care and health care for students; Microbiological causes and vectors of diseases in children and school age.
Teaching and assessment: The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of school hygiene and health education.

S01429 Pre-Diploma Teaching Practice

ECTS credits: 10 **Weekly classes:** 0lec+0sem+0labs+12ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: zhilieva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Kamen VAskov Simeonov, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: ksimeonov@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract: The Pre-Diploma Teaching Practice is the final stage of the practical education of students to acquire a teaching qualification. The aim of the course is to give students the opportunity to improve their practical skills and professional qualities in a real work environment and to familiarize themselves with how schools and kindergartens operate as institutions.
Course contents: Intern teachers individually take part in the educational process following plans co-developed with teacher mentors. They observe, record, analyze and carry out pedagogical situations and lessons and other organizational forms. They record the data from their observations and the individual participation in the educational process.
Teaching and assessment: Interns carry out their practical preparation under the direct observation and guidance of their mentor teacher from the primary school and an educator from their university. The final grade is formed by the pedagogue at the end of the semester, whereby the following are accounted for: the attained professional skills in a real environment on the basis of a report by the mentor teacher of his work with the student, the grades of the methodologists on the undertaken pedagogical situations and lessons and the contents of the portfolio (student record of the practice, lesson plans, scripts, didactic materials).

S01430 Self-preparation for Graduation

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers: All lecturers who are supervisors of Bachelor theses, as well as those whose courses are included in the syllabus for the state exams.
Abstract: Familiarizing students with conspectus for state examinations included as completing the procedures for the specialty; familiarizing students with the technology of the State examinations and technology elaboration and presentation of of a thesis.
Course content: Selection of thesis and scientific advisor. Stages of development. Literature. Shaping. Presentation.

SB10944 State Written Exam in Pedagogy and Psychology

ECTS credits: 4
Weekly classes:
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasielva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Assoc. Prof. Silvia Alexandrova Krushkova, MA, PhD, Department of Social Health
tel.: 082/ 821 993, E-mail: kroushkova@uni-ruse.bg
Abstract:
The State Written Exam is the final procedure of the education and training of the students in the Pre-school and Primary School Education undergraduate programme. It allows students who graduate the bachelor level to demonstrate their knowledge in the pedagogical and psychological courses included in the undergraduate study programme. The aim of the State Written Exam it to allow students to demonstrate the acquired knowledge, to present their opinion on the the ways of improving the education and training of kindergarten children or of primary school pupils.
Course contents: The State Written Exam comprises of a syllabus which contains 40 questions in the areas of Pedagogy and Psychology which are a summary of the courses included in the undergraduate study programme.
Teaching and Assessment:
Students sit for a State Written Exam at an appointed State Board of Examiners.

S03918 State Written Exam in Methodology in Teaching at Pre-School and Primary School Level

ECTS credits: 4 **Weekly classes**:
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy,
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasielva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract: The state examination is complete the procedures for the training of students in Pre-school and Primary School Education. It allows students who graduate, present knowledge of different methods included in the curriculum during the semester learning. It developed two questions for the state exam. The aim is to give students what they have acquired during training and to express their opinion to optimize performance in kindergarten and primary school.
Course contents: The state exam includes: a compendium of 40 matters different methods, summarizing displinite bachelor degree course.
Teaching and Assessment: Students sit for an state exam at the appointed State Board of Examiners.

SB15596 State Board Practical Exam

ECTS credits: 2 **Weekly classes**:
Assessment: **Type of exam**:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Prof. Todorka Zhekova Stefanova, MSc, PhD, Department of Health Care
tel.: 082 / 821 993, E-mail: dora@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasielva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 832, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova-Ilieva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 832, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iskra Stefanova Ilieva, MA, PhD, Department of Physical Education and Sports
tel.: 082 / 888 252, E-mail: isilieva@uni-ruse.bg
Abstract: The students in the Pre-school and Primary School Education undergraduate programme are provided with a 120 hours of teaching practice which are equally distributed (respectively 60 hours in the kindergarten and 60 hours in the primary school).
Course contents: Students form pairs which work with the pupils of a specific class or they form a group and conduct lessons in the specific subjects.
Teaching and Assessment: Each student is expected to deliver between 5 to 7 lessons in different subjects and get a mark for each of the delivered lessons by a university methodologist.

SB10946 Bachelor Thesis Defence in Pedagogy, Psychology and Methods of Instruction

ECTS credits: 8
Weekly classes:
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Pedagogy
Abstract:
The Bachelor Thesis is developed indpendently by the students under the supervision of a university lecturer. The aim of the Bachelor Thesis is to give students an opportunity to demonstrate the knowledge and competences acquired during the study. Students are also given the opprtunity to demonstrate their creativity in the development of the Bachelor Thesis and to present this thesis successfully at the State Examination Board.
Course contents:
The Bachelor Thesis explores a specific topic or an area of the compulsory courses studied during the undergraduate training.
Teaching and Assessment:
The Department of Pedagogy provides:

- the overall organization of the collection, confirmation and the announcement of the Bachelor Thesis topics;
- the allocation of the Bachelor Thesis topics to individual students and the appointment of their supervisors;
- the supervision, the preparation of the evaluation review and the presentation of the Bachelor Thesis

The supervisors give consultations of the students every week. Then they monitor the performance of the students on the given tasks. Students present their Bachelor Thesis to a State Examination Board at the end of their final year at the university.

UNDERGRADUATE STUDIES IN SOCIAL PEDAGOGY

PROFESSIONAL STANDARDS
OF A BACHELOR IN SOCIAL PEDAGOGY

Degree Programme: **Social Pedagogy**
Educational Degree: **Bachelor**
Professional Qualification: **Social Pedagogue**
Term of education: **4 years (8 terms)**

1. General skills

The education of future professionals gives opportunity for acquisition of knowledge in pedagogy, psychology, sociology, law, medicine, information technologies and professional-practical preparation. They are basis for deployment of specific and broad professional skills for pedagogical work with children, adolescents and adults. In the end of education:

- The students acquire knowledge and skills for social work with the needy children, pupils and adults, independently on their ethnicity, socio-economical status, differences in their physical and mental potential;
- They form erudition and abilities for cooperation between institutions for socio-pedagogical work;
- Gain erudition and skills for using of contemporary information and communicative technologies in social sphere;
- Build skills for scientific research and diagnostic activity in an area of social pedagogy.

2. Specific skills:

After completing of the bachelor's degree the students will have the following specific skills:

- Research and analysis the social status on groups of population in national and regional context;
- Screening, registration and support for individuals and families that according to the current legacy are social disadvantaged or/and disabled;
- Targeting for inclusion in home respite or for accommodation in specialized social care establishments;
- Preparation of documentation on social case;
- Control of observance of normative documents and spending for social insurance;
- Conducting and analysis of research information for different social cases;
- Defining the categories of work and basic income in case of a retirement;
- Management of the educational process in specialized social establishments;
- Methodological organization and control of activities in social institutions; socio-pedagogical work with neglected persons and children with special educational needs;
- Advising clients on issues of social adaptation, re-socialization and rehabilitation;
- Coordination of activities between particular establishments, as well as inter-institutional links.

In the process of education the students have opportunity to choose different specializations for work with persons in third age, children, adolescents, young people and families in risk.

3. Additional skills:

These skills will be acquired throughout the education and include capabilities such as:

- Skills in team work;
- Following of appropriate practices within professional, legal and ethical frameworks;

- Discovery of mechanisms for permanent professional development and lifelong learning;
- Setting and solving of creative tasks within the individual capabilities.

Certified in the specialty may work **as social educators** in boarding, social establishments (orphanages, homes for children with psycho-physical disturbances, home for elderly people), in "Social care" to municipalities, Respite, labours, Children Pedagogical Room to the Police (after additional qualification), Social Pedagogical Centers, as social pedagogue in structure of management bodies (Ministry of Labour and Social Policy, Ministry of Health and Ministry of Interior) and NGOs.

After successful completion they receive the academic degree Bachelor and professional qualification social pedagogue. Under certain conditions they may continue their education to obtain the Master pedagogue's degree.

CURRICULUM

OF THE DEGREE COURSE IN SOCIAL PEDAGOGY

First year

Code	First term	ECTS	Code	Second term	ECTS
S00516	Introduction to Social Pedagogy as an Academic Discipline	1	S01073	Fundamentals of Social Pedagogy and Social Work	6
SB14589	Theory of Education	4	SB14591	Pedagogical Communication	1
S00740	Didactics	4	S02405	Phonetics and Lexicology of Bulgarian Language	4
SB16559	General and Age Psychology	4	SB16615	Foreign Language I	2
SB14538	Inclusive Education	2	S01095	Legal Protection of the Child and the Family	5
S01208	Social Psychology	6	SB15598	Information and CommunicationTechnologies in Education and Work in a Digital Environment	5
SB16315	Economics of Social and Institutional Infra-structures	5			
SB15046	Anatomy and Physiology	4	S01226	**Practicum: Development of Communicative Skills**	3
			Elective courses (students elect a course)		
			SB16679	Socio-Pedagogical Aspects of Family Interaction	2
			SB16562	Inclusive Education of Children and Pupilss with Special Educational Needs	2
			SB16563	Civic Education	2
			Elective courses (students elect a course)		
			SB16564	Health and Ecological Education	2
			SB16565	Leadership in Education	2
			SB16566	Managing Relationships in an Educational Environment	2
			SB16567	Digital Competence and Digital Creativity	2
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	1

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
SB16616	Foreign Language II	2	SB14596	Social-Pedagogical Diagnostics	6
S01205	Methods of Social Work	6	S01222	Social Policy and Legislation	5
S01207	Family Pedagogy	6	SB14597	Special Pedagogy and Special Psychology	5
SB15619	Statistical Methods in Pedagogical Research	4	SB14598	Social-Pedagogical Work in School	5
S03868	Morphology and Syntax of Bulgarian Language	4	SB16617	Foreign Language III	2
SB15632	Sociology	3	S01227	Observation Practices in Socio-pedagogical Institutions	3
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
SB14594	Foster Care and Adoption	3	SB14600	Management and Marketing in the Education and Social Sector	2
SB16571	Pedagogical Conflictology	3	SB14601	Integration of Individuals with Special Educational Needs	2

SB15567	Children's Rights	3	SB14604	Social Work with Disadvantaged Children	2
SB15568	Pedagogical Ethics	3	***Elective courses (students elect a course)***		
Elective courses (students elect a course)			SB14603	Methodology of the Work of the Resource Teacher	2
S01276	Family Therapy	2	SB14602	Methodology of the Work of the School Counsellor	2
SB17107	Social Work with Groups. Group Therapy	2	SB15664	Educational Work with Children and Youth Communities	2
SB15623	Art Therapy	2			
SB15622	Play Therapy and Occupational Therapy	2			
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	1

Third year

Code	***Fifth term***	***ECTS***	***Code***	***Sixth term***	***ECTS***
SB15621	Andragogy	6	SB15627	Geragogy	4
S01235	Social-Pedagogical Work with Children and Adolescents in Risk	3	S01298	Management of Social-Pedagogical Institutions	5
SB15665	Social Work with Elderly and Disabled	7	S01204	Social Medicine	3
S01254	Professional and Career Development	4	SB14609	Pedagogical Psychology	3
SB16316	Human Resource Managament	2	S01308	Summer Pedagogical Practice	6
S01259	Training Practice in a Socio-Educational Institution	3	S01209	Child-Adolescent Psychopathology	3
SB15578	Academic Writing	1			
SB16680	Foundations of Supervision	2			
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
SB16682	Crisis Intervention in Social Work	2	SB15628	Social-Pedagogical Support for Personal Development	3
SB16681	Social Work with Marginalized Communities	2	S01288	Prevention of Crime, Drug Addiction and Violence	3
SB14593	Correctional Pedagogy	2	S01311	Forms of Working with Children with Deviant Behaviour	3
			Elective courses (students elect a course)		
			SB16678	History of Social Pedagogy	3
			SB16683	Social Entrepreneurship	3
			SB15630	Inter-institutional Interactions	3
	Total for the term:	***30***		***Total for the term:***	***30***

Fourth year

Code	***Seventh term***	***ECTS***	***Code***	***Eighth term***	***ECTS***
SB14610	Social and Pedagogical Counselling and Advising	7	SB15616	Hygiene and Health Education	3
SB11067	Permanent Education	4	S01428	Comparative Education	3
SB14611	Occupational and Social Rehabilitation	4	SB11072	Pre-Diploma Practice	10
S01343	Socio-Psychological Training	3	S01430	Self Preparation for Graduation	4

SB14612	Management of Socio-Pedagogical Projects	3	***Graduation Procedure (Option 1)***		
SB15587	Speech Culture	3	SB14148	State Written Exam	9
SB11071	Pedagogical Practice	6	SB15596	State Board Practical Exam	1
			Graduation Procedure (Option 2)		
			SB14148	State Written Exam	9
			SB15596	Bachelor Thesis Defence	1
	Total for the term:	***30***		***Total for the term:***	***30***

Total for the course of study: 240 ECTS credits

S00516 Introduction to Social Pedagogy as an Academic Discipline

ECTS credits: 1
Weekly classes:0lec+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam:
Departments involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Raskova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082/ 888 219, E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Lora Mihajlova Radoslavova, MA, PhD, Department of Pedagogy, tel.: 082/ 888 219, E mail: lradoslavova@uni-ruse.bg
Abstract:
The course " Introduction to Specialty" aims to acquaint students with the subject" Social pedagogy „ and its application. The students will be informed with the types of social services that are provided in the community and specialized institutions, including the city of Rousse, where the course practice will take place. Will present the state policy in providing social services for children and persons in the country.
Course content
Acquainting students with state policy on social issues in the provision of social services for children and persons. In Bulgaria, the change in direction detection services to assist families to cope alone with their problems within the community. To this end, students will be informed of the discovered social services for children and persons / Rules for Implementing the Law on Social Assistance / within the country and in the municipality of Ruse. Main topics: Basic competence in the practice of social pedagogy. Social services for children and persons. Visit of social services discovered in the city of Rousse.
Teaching
Under the guidance of the teacher are held three visits of social services on the territory of Rousse Municipality. The certification is formed on the basis of a paper transmitted and depending on the activity and visits by students.

SB14589 Theory of Education

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail:eivanova@uni-ruse.bg
Abstract:
The objective of the course is to present, in a systematic way, the problems of the theory of education as part of General Pedagogy. A starting point of teaching is to consider upbringing as a kind of social reality and a kind of intercourse relation as well as an object of the theory of education. The course accentuates on the models of up-bringing, on the specific conceptual apparatus of the subject and the up-bringing as a pedagogical activity and an active process with its complicated relations, contradictions and technologies.
Course content:
Character of upbringing as a socio-pedagogical phenomenon, its functions and structural components; Approaches, principles, methods, means, forms and factors for successful education; Relations between content and aim of the educational process, between preventive and re-educative activities,, prognosis and leading of educational precess.
Teaching and assessment:
The lecture course comprises traditional and euristic ways of presenting new information. The seminar classes involve case studies and teacher-led discussions. Students should do reading before each seminar. The exam involves answering two questions with a different level of difficulty.The course task is been given through the third studing week from the term. They aer given at the end of the semester.They and their participation in work during the term are determining the receiving of counter sign.Their work in contentive meaning and their presentation at the exam are basing the final assessment.

S00740 Didactics

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps+0,5se
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg

Abstract:
Didactics has a fundamental role for the professional development of students. The course aims at introducing students to the subject matter in a systematic way; revealing the most topical problems in the development of Didactics; analysing the procedural and functional character of education.

Course content:
Scientific status of Didactics; Character of the teaching process; Principles of teaching; Methods of Teaching; Systems of organizing the teaching process; Common teaching problems; Personalisation and differentiation of education; Tutoring; Work with poor and talented pupils.

Teaching and assessment:
The course is taught through a combination of lectures and seminars. At seminars the dialogue is widely used; relevant articles on the topics included in the syllabus are discussed. Active participation is encouraged by awarding students additional points

SB16559 General and Age Psychology

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+labs+0ps
Type of exam: written

Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education

Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg

Abstract:
The aim of the course of General and Age Psychology is to present to students the contemporary trends in the science of human mentality and behavior and their development in different age periods.

Course content:
Subject and object, methods of psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc. The stress point is put onto personality and activity theory in psychology, structure of personality, self-regulative mechanisms, reflexion and interpersonal interactions. It reviews characteristics of the psychic processes, abilities and conditions; development of intellectual, emotional and will, motivational spheres on personality in different age periods.

Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues.

SB14538 Inclusive Education

ECTS credits: 2
Weekly workload: 2lec+0sem+0labs+0sp
Assessment: continuous assessment
Type of exam: written
Department Involved:
Department of Pedagogy
Faculty of Natural sciences and Education
Lectur:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.

S01208 Social Psychology

ECTS credits: 6
Weekly workload: 2lec+2sem+0labs+0ps+0,5se
Assessment: exam
Type of exam: written
Department Involved:
Department of Pedagogy
Faculty of Natural sciences and Education
Lectur:
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The academic discipline has a theoretical and practical-applied character. The main goals and objectives of the course are related to students' understanding of the various problems of social psychology. Through the active use of interactive forms in the training of the discipline, the aim is to form students' opportunities and competencies for communication, research and assessment of their contingent and for carrying out preventive and social rehabilitation activities with them.
Course content:
Social nature of communication. The social group. Interpersonal relationships in the social group. Leadership. The large social group. Mass Psychic Phenomena and Mass Behavior in Disasters. Rumors as a form of mass behavior. Social movements. Methods, tools and procedures of social psychological research.
Teaching and assessment:
The special course has a specific research and applied focus. Various examples and facts from the work of teachers are given. Research conducted on this problem by well-known domestic and foreign authors is indicated. Tests and questionnaires are introduced for diagnosis and self-diagnosis of personality traits with a socio-psychological context. The seminar exercises are a continuation of the lecture course.

SB16315 Economics of Social And Institutional Infrastructures

ECTS credits: 5 **Weekly classes**: 2lec+1sem+0labs+0p+1cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Business Development and Innovations
Faculty of Business and Management
Lecturer:
Prof. Krasimir Ivanov Enimanev, MEcon, PhD, Business Development and Innovations
tel.: 082 / 888 704, E-mail: kenimanev@uni-ruse.bg
Assist. Prof. Svetoslava Krasimirova Enimaneva, Mecon, Business Development and Innovations
tel.: 082 / 888 704, E-mail: senimaneva@uni-ruse.bg
Abstract:
The goal of this subject is to ensures eruditions in two directions - institutional and social infrastructures.
Course content:
The Nature, Object and Subject of the Discipline; Content; Goals and Tasks; Structure and Infrastructure of National Economics; Functional Types Infrastructures; Organization aAs Function of Management. The Principles of Organizational Structuring; Technology and Methods of Prognostic; Police, Advantages and Strategies, etc.
Teaching and assessment:
The teaching includes multimedia presentations, illustrations of the teaching material through the use of posters, etc. The active involvement of students on the different topics is achieved through the provision of case studies included in the course syllabus.

SB15046 Anatomy and Physiology

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Public Health
Faculty of Public Health and Health Care
Lecturers:
Prof. Nikola Emilov Sabev, DMed, PhD, Department of Medical and Clinical Diagnostic Activities
tel.: 082 / 888 410, E-mail: nasbev@uni-ruse.bg
Abstract:
The course is designed for students from the undergraduate study programme in Social Pedagogy in the first year of their education. The aim is to acquaint the students with the structure and functioning of human organs and the systems of the human body.
Course content:
The course places an emphasis on the age modifications in the morphological and functional condition of the human body systems. The knowledge of the morphology and functioning of the human body in the different age periods is of great importance for the correct organization of the interaction with children, for the design of their daily activities and daily schedule and for the organization of their work and rest. The incorrect organization of these activities could lead to different pathological disorders in the functioning of the nervous system, the locomotory system, the cardiovascular system, etc. A special emphasis is placed on the morphology and functioning of the nervous system which is considered fundamental for the understanding of the psychological processes and the formation of pedagogical knowledge and skills.
Teaching and assessment:
The course is made as an ex-cathedra method of teaching with many illustrations and use of interactive methods. The seminars give opportunity for reinforcement and understanding of the course topics by stimulating the cognitive activities of the students.

S01073 Principles of Social Pedagogy and Social Work

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel. 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Assist.Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel.: 082 / 888 752, E-mail: dspasova@uni-ruse.bg
Abstract:
The curriculum contributes for fundamental preparation and erudition of students from specialty Social pedagogy. The course includes two main blocks: I – topics in the field of Social pedagogy; II – contemporary trends in social work. Themes from both sections have cognitive and practical orientation. The content of the social work includes diagnostic, organizational, educational, preventive, corrective activities in specialized social establishments for children and adults. Students are represented to the methodological basis of social work, social support of individuals, groups and communities.
Course content:
Arising and development of social pedagogy. Methods, approaches and principles of social pedagogy. Socialization and upbringing. Personality development. Personal profile of social pedagogue. Theoretical fundament and descriptive models in social work. Arising and development of work. Social work as theory, methodology and practice, etc.
Teaching and Assessment:
The method of teaching is based on an ex cathedra method of lections. The assessment is the average sum of the paper work and written exam.

SB14591 Pedagogical Communication

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the Pedagogical Communication is to acquaint students with the necessary knowledge, skills and competences necessary for the democratization and humanization of the pedagogical process in the kindergarten, elementary school and the socio-pedagogical institutions. Communication is a complex and multifaceted process of identifying and developing people-to-people interaction, depending on their needs in collaborative work. Communication involves not only the exchange of information but also the elaboration of a unified strategy for interaction, perception and understanding. as equal partners in this process.
Course content:
The concept of "communication" and its essence. Structure of communication. Objectives and functions of pedagogical communication. Content of pedagogical communication. Essence of verbal communication. The specificity of nonverbal communication. Communication and activity. Essence of interpersonal interaction. The concept of "style of communication" and its essence. Types of communication. The communicative task as the basic unit of the communicative process.
Teaching and assessment:
The course is taught through lectures, which are a continuation of the theoretical disciplines of the pedagogical and psychological cycle. Lectures are read in a stream. The course has a certain application and research direction. This approach is noticed both in the lectures and in the examination procedure in the form of a continuous assessment. The focus is on pedagogical communication at pre-school and primary school age, as well as on the impact of the teacher's communication style on students' emotional experiences. There are various examples and facts from the work of the pedagogues. Students are acquainted with theoretical and empirical studies conducted on this issue by well-known Bulgarian and foreign authors. Testing the teacher's communication skills, introducing initial knowledge to solve communicative tasks.

S02405 Phonetics and Lexicology of Bulgarian Language

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Abstract:
The course aims at introducing students to:
1) the science of speech, which integrates knowledge about the physiological processes of the production and perception of speech, the acoustic and articulation features of verbal sounds and the super-segmental organisation of speech.
2) the science of the lexical system of the Bulgarian language - gnoseologic, semiological and semantic features of the lexical units, their use in the different styles of speech;
3) methods and means of phonetic and lexical analysis.
Course content:
Acoustic, articulation and functional aspects of sounds; Segment and super-segment system of the modern Bulgarian literary language; The word as a unit of the lexical system; Nature and particularities of the word as a language sign; Nature and structure of lexical meaning; Systematic relations; Structure, classification and stylistic features of set phrases.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. The final exam is in a written form.

SB16615 Foreign language 1

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:**
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

S01095 Legal Protection of the Child and the Family

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Public Law
Faculty of Law
Lecturer:
Assoc. Prof. Elitsa Kumanova Valcheva, ML, PhD, Department of Public Law
tel.: 082 / 888 434, E-mail: ekumanova@uni-ruse.bg
Abstract:
The course's aim is to acquaint students with major internal regulations in the area of the legal protection of children and the family, to interpret and analyze their values and their implementation in society. These norms for protecting human rights and fundamental freedoms are of interest to both different specialists from various fields and to each citizen of Bulgaria.
Course content:
The course includes 11 topics and corresponds to a maximum level with the objectives of the course, i.e. to introduce students to the interdisciplinary issues of human rights. The goal is to raise awareness and students' ability to individually implement the mechanisms to children and family protection of rights. These protection mechanisms and fundamental freedoms are of interest to both different specialists from various fields and to each citizen of Bulgaria.
Main topics: Flashback on the Child Care and Welfare Reform for Children's Well-Being In Bulgaria. Legislation in the Republic of Bulgaria in the System of Child and Family Protection - Law on the Child Protection and the Regulations to It. The Strategy for Children for the 2008 – 2018 Period. Family Code. Ordinance on the Conditions and Procedures for Application, Selection and Approval of Foster Families and Placing Children to their Care, etc.
Teaching and assessment:
The course is in the form of lectures which include analysis and discussion of the topics. During the lectures problem issues related to the situation, attitudes and current problems on children's rights are discussed.

SB15598 Informational and Communicative Technologies in Education and Working in Digital Environment

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies, tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Assoc. Prof, Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies, tel.: 082 / 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The aim of the discipline is to familiarize the students with the tools used for audiovisual presentations in school. Particular attention is paid to school extracurricular electronic media, computer methods and programmed education. In order to achieve good results at the time of attending this discipline, the students should have studied General Pedagogy and Didactics prior to the course.
Course content:
Educational technologies. Basic concepts and definitions. The media in the educational process. Models of training. Planning an active and interactive learning process using media in learning. Visual tools for advanced training. Methodological guidelines for the integration of information and communication technologies in the educational process. Methodical guidelines for using multimedia projectors. Technical devices of sound (audio) type. Interactive Whiteboard. Basic principles when using an interactive whiteboard.
Teaching and assessment:
For the workshop session students study in advance pre-set specific problems. Each student makes a presentation at the assigned time of the workshop and gets relevant evaluation in compliance with the pre-set criteria. Students know the criteria requirements in advance. The final grade is formed on the basis of student's results during the semester, the presentation mark.

S01226 Practicum: Development of Communicative Skills

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva,MA, PhD, Department of Pedagogy, tel.: + 359 82/ 888 268, E-mail: vvasileva@uni-ruse.bg;
Abstract:
Practice for the formation of communication skills is designed to introduce students to basic models, strategies and techniques in teacher interaction to form in their ability to communicate with certain levels of socio-educational activities. Particular attention is paid to the practical options for development and implementation of interactive techniques to realize the main objectives and tasks of social work educator.
Course content:
Nature and dimensions of social and pedagogical skills, techniques and skills to study and conservation. Diagnosis and self-assessment of communication skills of students, developing skills for transmitting and receiving information. Listening to customers and establish contact. Speech communication, skills for leading personal discussion. Research and ask questions to the customer. Dialogue, developing skills for nonverbal communication. Skills for interviewing clients; skills observations and analysis of projective techniques; Communicating in times of risk. Developing skills to communicate with persons with aggressive behavior; conducting socio-pedagogical training.
Teaching and assessment:
Teaching is conducted in the form of practical seminars with students' differentiated groups. Students are introduced to theoretical and practical bases mainly in the formation of social and personal skills specific to the profession of social pedagogue in accordance with the age of customers. Arrangements are interactive methods for the formation of attitudes and skills for productive educational interaction.

SB16679 Socio-Pedagogical Aspects of Family Interaction

ECTS credits: 2 **Weekly workload:** 2l+0sem+0lab+0p
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, Department of Pedagogy
tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The content of the lecture course of the curriculum is oriented to acquaint students with the basic theoretical issues of education and socialization of adolescents within the family. The included topics help to expand their knowledge about the specific role of the family as a primary socializing environment and educational factor in modern conditions. Emphasis is placed on current issues of family interaction with educational institutions.
Course content:
The lecture course focuses on issues concerning the fundamental theoretical and applied aspects of the systematics and technology of family education. The content of the lecture course is focused on clarifying the current approaches, concepts and practical models for family interaction with educational institutions.
Main topics: Characteristics of the family as a cultural-historical phenomenon. Theoretical approaches to determining the nature and functions of the family unit. Categorical characteristics of the family. Historical and pedagogical approach to the study of the family, childhood and upbringing. Definitive markers of family education in the context of the pedagogical approach (essence, purpose, tasks, features, meaning). Coordination of the family and other agents of socialization / kindergarten, school /. Pedagogy of parents. Pedagogical models of interaction with the family.
Teaching and Assessment:
Basic method of teaching - information-explanatory, illustrative (method of oral presentation). Additional methods (non-traditional): problem statement; stimulating heuristic method (partial research). The lectures use interactive methods and tools, multimedia presentations, schemes, tables, models, electronic educational platforms, aimed at synchronizing traditional and innovative approaches to the study of the discipline, as well as to present options for technological implementation of practical aspects of its subject. - interaction and work with families.

SB16562 Inclusive Education of Children and Pupils With Special Educational Needs

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department Involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract: The goal of teaching the eligible subject "Inclusive education for Children with special needs" is broadening the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: international principles and legislative framework of education of children with special needs, with organizations and structures through which realize. The preparation is directed to acquire knowledge about innovative processes in theory and practice of special education, knowledge about integration and examine them in different aspects; forming skills to choose of strategies and technologies for supporting interactions, education rehabilitation children with particular needs according to radical changes in general and special pedagogy; mastering methodic of integrative education and etc.
Course contents: The following themes are included: special education – international principles, referent to education of children with special needs; legislative framework of education of children with special educational needs; organization of special education – kindergarten and special schools; diagnostics of special educational need and orientation to special schools; competent organ to realizing education of special needs; structures without system of national enlightment; comparative study of order special education in European countries and USA.
Teaching and Assessment: Lectures are carried out mostly frontally, with illustrations and descriptions of the different psychophysical disorders and behaviour deviations, using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The current mark is based on the results of three tests and the course assignment.

SB16563 Civic Education

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course familiarizes the students with the organisational forms and methodological tools for conducting the educational process involving acquiring knowledge about the Civil Education in primary and secondary school. Provides future teachers with methodical preparation for adequate from a psychological and educational point of view conducting the interactions ‚pupil – environment' in primary and secondary school.
Course content:
Basic accents of the contents are: Introduction to the methods; Structure; Principles for natural selection and arranging the program contents; The lesson and excursion, form of pedagogical interaction; Methods for educational work; Analysis of the contents for children's knowledge about the areas of social and natural environment.
Teaching and assessment:
The following means for teaching the subject are used:
1. Lectures;
2. Action, connected with the topics in the lectures;
3. Analysis of moves that illustrate the educational processes in kindergartens;
4. Doing course assignments - description, exploration creativity;
5.Testing procedure-exam in a written form on a theoretical questions (written test) and presenting the course assignment.

SB16564 Health and Ecological Education

ECTS credits: 2
Weekly classes:2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Rashkova Ilieva,Ma, PhD, Department of Pedagogy
tel. 082/ 888 219, E mail: bilieva@uni-ruse.bg
Abstract:
The aim of the training is for students to acquire the necessary knowledge for the health education of adolescents. Certain thematic areas in the lecture course are focused on getting acquainted with the health and environmental components of the environment: natural air, water, soil, food and nutrition; and school: school yard and school building, school furniture and furnishings, microclimate, heating, lighting and harmful factors. Getting acquainted with the institutions involved in the implementation of health and environmental education and upbringing, etc.
Course content:
Nature, tasks and importance of health and environmental science; Physical development of students and morpho-physiological characteristics of school age; Personal hygiene of students; Medical care and health care for students; Microbiological causes and carriers of diseases in children and school age; Environmental problems and impact on natural resources, flora and fauna, etc.
Teaching and assessment:
The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of environmental education and health education.

SB16565 Leadership in Education

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihaylova Radoslavova, MA. PhD, Department of Pedagogy
tel.:082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the course Leadership in Education is to provide students with a comprehensive understanding and knowledge of aspects and approaches to leadership and management in the education sector, to expand their critical understanding in the field of leadership in education, based on analytical commitment to current educational theory, research, policy and practice. The module in the discipline is conducive to the acquisition of the full range of theoretical and practical knowledge, skills and competencies corresponding to the subject area.
Course content:
Contains topics dealing with innovative educational technologies, business communication skills, negotiation and conflict resolution; organizational culture and management of educational resources; philosophy of leadership in education, theories of leadership styles.
Teaching and assessment:
The main methods of teaching are information-explanatory, illustrative and problematic exposition, bringing to the fore the scientific logic of knowledge. Interactive methods are used to test certain views of students for decision making, formulation of conclusions, formation of communication and organizational skills: discussions, brainstorming, business games and more. A 60-minute test is conducted on the course. It includes questions from the proposed synopsis. The student, at his request, is given the publicity of the assessment.

SB16566 Managing Relationships in an Educational Environment

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Department of Pedagogy
tel.: 082 / 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to provide knowledge about the elements of the educational environment and the various forms of relationships within it. The main factors and current forms of interaction between subjects in the educational environment are analyzed.
Course content: The concept of educational environment. Organizational culture and teacher leadership. Social interaction in the educational environment. The teacher's role in successful relationship management. Discipline through cooperation. Relationship management in the inclusive educational environment. Managing relationships in a digital environment. Aspects of interaction between participants in education - teachers, parents, institutions.
Teaching and assessment:
The course includes only lectures. Active forms and methods are also used. The final grade is formed on the basis of the results of a written test and the participation in the discussions.

SB16567 Digital Competence and Digital Creativity

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the dimensions of digital competence and digital creativity.
Expected results: will know and be able to apply the concepts of digital competence and digital creativity.
Course content:
Competence. Basic concepts. Competences and competence approach for teaching and learning. Framework for defining digital competences. Professional development and digital competence of teachers. The qualification and professional development of teachers as a key element of the quality of Bulgarian school education. Creativity in learning - basic concepts and concepts. Scientific and theoretical foundations of creativity. The essence of creative activity. Models for analysing creativity. Creativity in the context of learning. Digital creativity. Digital creative skills. Components of digital creative pedagogical practices.
Teaching and assessment:
The learning process is realized based on lectures. During the course students learn about the competencies and competence approach to teaching and learning, creativity with its basic concepts and concepts, digital creativity, and digital creative skills. Students receive a certificate in the discipline if they have attended lectures and practical exercises according to the Rules for the organization of educational work at the University of Ruse. The training in the discipline ends with a continuous assessment.

SB16616 Foreign Language 2

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team and to ensure that by the end of the semester the majority have reached level A2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.
Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.
Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

S01205 Methods of Social Work

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc, Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel. 082/ 888 219, E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: lradoslavova@uni-ruse.bg
Abstract:
The course is aimed at acquainting students with different concepts and ideas of different gerontological schools, which give rise to discussions and are necessary for the development of independent heuristic thinking of students. Contemporary problems of the theory for the elderly and people with disabilities are considered.
Course content:
The curriculum contains topics that are as consistent as possible with the objectives of the course, namely to preserve students with the basic methods and their specific features, the ways of application in solving difficulties in children and people at risk.
Main topics: basic procedural approaches, classification of methods - content and principles of assessment, needs of children and adults, etc.
Teaching and assessment:
The training of students takes place in the form of lectures and seminars, which are analyzed and discussed. In the course of the lectures, problematic issues related to the types of methods and their application in solving specific problems and difficulties in children, the elderly and people with disabilities are discussed.

S01207 Family Pedagogy

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0labs+0ps+0,5se
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, Department of Pedagogy
tel.: 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel. 082 888 752, E mail: dspasova@uni-ruse.bg
Abstract:
Acquainting students with basic demographic and sociological concepts, current state of the demographic situation in Bulgaria and worldwide dnd with the perspectives and current trends in the development of family forms of cohabitation from the perspective of sociology.
Course content:
Topics included help to expand students' knowledge about the nature, types, structure, function and historical development of the family as a social unit. Some topics are focused on knowledge about the dynamics of the content of the concepts in the context of change in social norms governing family relationships. Analyse trends and current marital status and the role of parent education and family lifestyles in the context of preparation for family life.
Main topics: Nature, evolution, functions of the family. Theories of the family- historical critical analysis. Theoretical approaches to family. Family life and its diversity. Role of family structure. Family Gender Education. Family and children in the scale of modern values. The family as an environment for socialization. Family upbringing and lifestyle. Educational styles of family educational goals of the family. The pedagogical power of the parent. Communication in the family. Errors in family education.
Teaching and Assessment:
Training of students takes place in the form of lectures and seminars, the main themes are illustrated by recent statistics from sociological and demographic studies to be analyzed and discussed. During the lectures and discuss issues related to the nature of family education, and trends and dynamics of the family as a kind of social unity.

SB15619 Statistical Methods in Pedagogical Research

ECTS credits: 4 **Weekly classes:** 2lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences abd Education
Lecturers:
Prof. Velizar Todorov Pavlov, MMath, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assist. Prof. Maya Markova Stoyanova, MEng, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: mmarkova@uni-ruse.bg
Annotation:
The course aims to acquaint students with the use of basic statistical methods for data processing and analysis in pedagogical research. Basic concepts of applied statistics are introduced and classical applied statistical methods for data collection, processing and analysis are considered. The course includes lectures and practical exercises in a computer room. During the exercises students get acquainted and study the software product for statistical analysis SPSS (Statistical Package for Social Sciences). The acquired knowledge is especially important and useful for the development of theses, scientific reports and creative performances of students.
Course syllabus:
Basic concepts in statistics. One-dimensional and two-dimensional statistical distributions. Graphic images. Variation analysis. Development of normative tables in pedagogical research. Sampling statistical surveys. Statistical evaluation. Interval estimates. Sample volume planning. Statistical testing of hypotheses. Regression and correlation analysis. Opportunities for forecasts and analyzes. Applications in pedagogical research. Empirical pedagogical research. Common feature. Sampling methodology. Questionnaire. Construction technology. Organization of field work.
Teaching and learning methods:
During the lectures the teaching material is presented theoretically. The goal of the practice classes is theoretical knowledge to find their practical application. Students get acquainted during these classes (held at computer laboratories) with the opportunities of the software product SPSS.

S03868 Morphology and Syntax of Bulgarian language

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 467, E-mail: enedkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
Grammar, with its two branches - Morphology and Syntax, is the science about language. Morphology studies the structure and grammatical meaning of words. Syntax is the science about the structure of coherent speech. There is a special emphasis on the significance of syntax for the mastering of punctuation. Its connection with intonation helps students develop correct, accurate and expressive speech.
Course content:
Definition of the term “word” as the subject of morphology; Parts of speech. Subject matter of Syntax; Combination of words, Classification of simple sentences; Main parts of the simple sentence; Subject; Predicate; Secondary parts of two-compounded sentences; Object; Adverbial modifiers; Definition; Apposition; The attribute; Syntactic realisations of the parts of speech; Parenthetical syntax units; Complex sentences; Complex composed sentence - types; Complex compound sentences - types; Multicomponent complex sentences.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At the end of the semester there is a written exam, which includes also a practical part.

SB15632 Sociology

ECTS credits: 3 **weekly classes:** 1lec+1sem+0labs+0ps+1r
Form of checking students’ knowledge: colloquium **Type of examination:**
Methodological guidance:
Department of Management and Social Work
Faculty of Business and Management
Lecturer:
Pr. Assist. Prof. Ana Popova, Department of Management and Social Work, tel.: 082/ 888 715, E-mail: apopova@uni-ruse.bg
Annotation:
The purpose of the discipline is to provide the students with basic knowledge of the paradigm system in sociology and its major concepts. Attention is drawn to the behavioristic world of the common characteristics of social behaviour and methods of sociological studies. Social structures, patterns and stratification are thoroughly discussed. Emphasis is placed on the institutional structures: family, education, science, mass media, etc. as major social institutions Study of daily routines, practice and socialization of individuals. Considerable attention is given to the problems associated with deviant behaviour, social control, small group behaviour, social organisation and conflicts.
Content of the discipline:
Introduction to sociology. Major sociological paradigms: social, subjective-humanistic and Marxist. Subject of sociology, major theoretical trends – fundamental problems. Methods of social research. Social studies. Social system. System paradigm and patterns of development. Social mobility and marginality. Institutional structure and social institution. Family, education, science, mass media as social institutions. Mass and collective behaviour. The crowd theory. Social movements. The society as a subject matter of microsociology. Characterisation of everyday activities, life and speech practice. Fiction and gesticulation. Socialisation of individuals. The person as a subject-matter of the social analysis. Needs, motivation and value orientations. Socialisation theory; stages, status-role conception of the individual. Deviant behaviour; theory, social control. Small group behavior; individuals, groups. Social organisation, living conditions, formal and informal organisation, typology. Social theory of bureaucracy. Social conflicts, conditions for arising, types, solving.
Technology of tuition:
Lecture topics enable students to master the theoretical foundations of sociology. In the final procedure - colloquium, each of them develops a written task. The final result of each student's course is formed with "Yes" or "No".

SB14594 Foster Care and Adoption

ECTS credits: 3 **Weekly classes**:2lec+0sem+0labs+0ps+1ca

Assessment: continuous assessment **Type of exam**: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel. 082/ 888 219, E-mail: bilieva@uni-ruse.bg

Abstract:
The aim of the course in foster care and adoption results in the development of in-depth knowledge of child protection through adoption and foster family adoption measures at an established risk of parental care in a family environment. Undoubtedly, the topics proposed will provide knowledge and skills to build competitive professionals and individuals with the attitude to develop an effective child care system in line with the principles of international and national legislation to develop alternative forms of care with a focus on foster care and adoption.

Course content
The reform of childcare in Bulgaria and the need for foster care. Film screening on adoption / succession and continuity - analyzes and comments;
Main stages for the implementation of foster care: selection of candidates for foster families; Assessment and training of potential candidates; The process of accommodating a child in an already approved family; Control, Consultation and Supervision by the Provider and others.Problems in Providing Foster Care and Adoption.Adoption procedure - study and follow-up observation. Compulsory documentation. Case work.

Teaching
The evaluation procedure is an on-going assessment. The final grade is based on the individual test results of the current test conducted during the semester and the submitted course assignment.

SB16571 Pedagogical Conflictology

ECTS credits: 3 **Weekly classes**:2lec+0sem+0labs+0ps+1ca

Assessment: continuous assessment **Type of exam**: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg

Abstract:
The purpose of the course is to provide students with the basic knowledge and skills and competences in the field of conflictology necessary for the organization of an effective pedagogical process. Discipline plays an important role in the general system for psychological and pedagogical preparation of social pedagogues. enables students to be guided in the specifics of work in different conflict situations; to master the nature of the conflicts, contradictions and crises experienced by the human being; they are one of the sources of personality development, they determine their constructive or destructive scenario.

Course content:
Basic knowledge related to the historical conditions for the emergence of conflictology is provided. Object and tasks of conflictology. Emphasis is placed on the structural model and elements of the conflict; signals for the emergence of conflict. The characteristics of the structural elements of the conflict are examined; conflict as a social phenomenon; functions and typology of conflict. Particular attention is paid to the causes of the conflict; participants and dynamics of the conflict. The types of conflict personalities and strategies of behavior in the conflict are discussed. Basic knowledge of interpersonal conflict, interpersonal and group conflicts, organizational conflict, etc. is mastered. Cases for conflict prediction, prevention and resolution are being addressed.

Teaching and assessment:
The training in the course is done through lectures. The lectures are conducted frontally with the whole group. Lectures use videos and active learning methods. Combining individual and group modes of work makes it possible to master the intended material.

SB15567 Children's Rights

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg

Abstract:
The purpose of the training in the discipline of the Rights of the Child results in acquaintance with the rights of the child and a more general presentation of the fundamental rights enshrined in the UN Convention on the Rights of the Child; with the types of the rights of the child and the protection against discrimination as a basis for the development of the child in a group, community and state;

Course content:
The included topics contribute to the enrichment of the social horizon of students, as well as will provoke in the discussion plan the content, scope and evolution of children's rights. From the very first hours the students get acquainted with the essence and significance of the UN Convention on the Rights of the Child; the types of rights; methods used in carrying out a verification of the child's rights and a procedure for verifying the observance of the rights.

Teaching and assessment:
In the course of the training, current control is carried out through discussions on the topics covered in the curriculum. The current assessment is performed by a written presentation on a specific issue (individual or group task), as a representative of the group presents the finished product on the specific topic to the group. The final grade is formed according to the individual test results on questions from the provided material and the developed presentations prepared during the semester.

SB15568 Pedagogical Ethics

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0p+1ca
Assessment: continuous assessment
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg

Abstract:
The aim of the course is to introduce students to the fundamental principles of pedagogy – helping formulate the ethical and temperamental standards of behaviour when executing their professional tasks, when communicating with different subjects under various conditions and affirm positivity and an assertive disposition.

Course content:
Ethics as the science of morality. Applied and professional ethics. Pedagogical ethics – subject, tasks, origins and evolution, categorization. Nature and functions of professional morality. Professional and personal codes of ethics. Ethics and education – the moral actions of teachers. The moral aspects of the relationship between teachers and the parents of students.

Teaching and assessment:
The fundamentals are covered throughout the duration of the course and are complemented with self-preparation. The course is comprised of topics and activities which are intended to allow student to reach a deeper understanding of the nature of ethical moral norms and their importance regarding ethical conflict avoidance or resolution. Activities and methods include lectures, discussions, work with various sources, working individually or in a group, tests, cases, etc. The final grade is based on test results during the semester, participation in discussions and the creation of a portfolio on the discipline.

S01276 Family Therapy

ECTS credits: 3
Weekly classes: 0lec+0sem+Olabs+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The course aims at increasing students' theoretical and practical knowledge in the field of family therapy.
Course content:
Family Systems Therapy Basics; methodological principles, common approaches and therapeutic techniques in working with families; assessment and study of family relationships with questionnaires.
Teaching and assessment:
The training - practical seminars.
Requirement - 80% attendance.
Appraisement - in accordance with student activity and personal case elaboration.

SB17107 Social Group Work. Group Therapy

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2p
Assessment: continue assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The course has cognitive and practical meaning for the adaptation of students to the profession of the social pedagogue. Its content includes specific techniques for interaction and interrelation of individuals, communicating in a group, united according to their interests, aims, necessities, personal problems.
Course content:
The topics refer to the different aspects of group work in the social field. A central place have the concrete demands towards the group work efficiency as a social help support in the specialized institutions. The tendencies in the group help of various client categories are also being analyzed. Main subjects: Social-Psychological Characteristics of the Group. Therapeutic Factors; History and Modern Conditions of Group Work; Classification of the Groups for Social and Psychological Support; Group Work – Methods and Techniques; The Group Work Process. The Group Leader Role; Family Group Conference; Group Supervision; Group Help of Children and Youngsters in Risk.
Teaching and assessment:
The course of lectures has the aim to teach the students basic knowledge of the group work as an active method for interaction and interrelation of individuals in a group. The contemporary displays of group work with separate categories of clients are considered. An emphasis is put on the instructive, remedial, preventive activity of the social pedagogues in group work situations.

SB15623 Art Therapy

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continue assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: dstoyanova@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The purpose of the course is to form knowledge and skills regarding: the essence, features, forms and phases of the creative process in the art therapy session, their application on an individual or group level, with target groups of different ages - adolescents, adolescents or adults, as well as in different institutional conditions.
Course content:
Nature and types of art therapy. Therapy through different types of art. Art therapy for children and adolescents, for couples and families, group art therapy. Creative process and self-knowledge. Art therapy techniques in different contexts.
Teaching and assessment:
The learning process takes place through practical exercises, through which the concepts and features of the lived experience in the art therapy process are confirmed with concrete developments of the students, as well as through case studies from the practice.

SB15622 Play Therapy and Occupational Therapy

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The goal of the course:
- a theoretical and practical knowledge in the use of Play Therapy and Occupational Therapy;
- a professional competence in the use of Play Therapy and Occupational Therapy.
Course content:
The program includes practical seminars on topics - the essence of the Play Therapy and the Occupational Therapy; basic models of the Play Therapy, frameworks conceptual at Play Therapy and Occupational Therapy; the Occupational Therapy in psychosocial and professional rehabilitation, applicability of the Occupational Therapy.
Teaching and assessment:
The training - practical seminars.
Requirement - 80% seminars attendance.
Appraisement **-** in accordance with student activity and test.

SB14596 Social Pedagogical Diagnostics

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0lab+0ps+1cw
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, Department of Pedagogy
tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel. 082/ 888 752, E mail: dspasova@uni-ruse.bg
Abstract:
The main aim of the course is the students should be informed on the needed degree with the fundamental sciences in the diagnostics area, as well as to form at them elementary skills for professional using the diagnostic methods in their professional activity as the social pedagogues, educators and social workers.
Course content:
In the course of the Social pedagogical diagnostics discipline are first included topics about the origination and the historical development of the social pedagogical diagnostics and the basic directions \diagnostics\. On that wide ground are introduced theoretical and methodological fundaments and the contents of the diagnostic process in the social area. The wide position is on the approach \methodology\ in the preparing, the conducting of social pedagogical research with the diagnostic character and on the forming and representing the results. There are presented the fundamental methods of the social pedagogical researches with diagnostic character scientific research and the practice applied\ .
Main topics: Origination and the historical development of the diagnostics; Theoretical and methodological bases of the Social pedagogical diagnostics; Preparing and conducting of social pedagogical research with diagnostic character; Forming and representing the results of the diagnostic social pedagogical research; Methods of the Social pedagogical diagnostics.
Teaching and Assessment:
The teaching of students allow to realize the basic preparing in the process of the lecture course. The lecture material creates the problematical background with the orientation that is full of content on the exercises after the work with the propose literature. In the process of the exercises are used the active forms of educating.

S01222 Social Policy and Legislation

ECTS credits: 5 **Weekly classes**: 2lec+2sem+0lab+0ps+1cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Raskova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: bilieva@uni-ruse.bg.
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: lradoslavova@uni-ruse.bg.
Annotation:
The course aims to introduce students to basic domestic and international regulations in the field of social policy and law, to interpret and analyze their standards and their implementation in society. The following main international instruments in the field of social policies and instruments of national legislation relating to social risks insured, health insurance and social assistance
Course content
The curriculum includes subjects and to the maximum extent consistent with the objectives of the course, namely that students are already familiar with contemporary problems of the theory of social policy and social legislation.
Main topics: be considered challenges to social policy and ways to resolve them in the 21st century, youth unemployment is familiar with the payment system, the types of services and the management of social welfare, presents the ways to overcome the economic and budgetary challenges of aging
Teaching
The teaching takes the form of lectures, which are analyzed and discussed. During the lectures and discuss issues related to the state, attitudes and current issues in social policy and legislation.

SB14597 Special Pedagogy and Special Psychology

ECTS credits: 5 **Weekly classes:** 2lec+2sem+0lab+0ps+1cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The goal of the course:
- a theoretical and practical knowledge in the use of Special Pedagogy and Special Psychology.
Course content:
The program includes lectures and seminars - basics of the Special Pedagogy and Special Psychology; features of children with anomalies in development; characteristics of children with intellectual, sensory, communicative, locomotory, complex disorders; problems of autistic and hyperactive children; peculiarities of deviant behavior in adolescents; basic ideas for training and education of children with special educational needs; childhood attachment disorders; methods for investigation and diagnosis of abnormal children; functional assessment of the needs of children and pupils; solving practical cases.
Teaching and Assessment:
The course - lectures and seminars.
Requirement - 50% lecture attendance; 100% seminars attendance.
Appraisement - 3 tests performed during the semester/exam test in the semester`s end and the course work.

SB14598 Social-Pedagogical Work at School

ECTS credits: 5 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel. 082/ 888 752, E mail: dspasova@uni-ruse.bg
Abstract:
The lecture course reacquainting the students with bases theoretical issues of the social-pedagogical work with special groups of children- with behavior problems, by specific educations needs (integrated education), with increased risk from a canceling in a school, children - victims of violence.
Course content:
The grave is installed on the parameters, the content and the models of the social-pedagogical consultation and advising. Some of the themes in the lecture course are reentrant to parameters of the Social-pedagogical work in relation with the school and professional orienting.
The practices aims to forming in the students some skills to know and use the applicability of different strategies and models of the social-pedagogical work in real situations, to organize theirs own professional activity in conformity with the modern needed education, skills to combine theoretical knowledge with the practice. Main topics: Contents, aim, specific, assignments and importance of the social-pedagogical work in a school. Principles and methods of the social-pedagogical work with children of school age.
Teaching and Assessment:
Training of students takes place in the form of lectures and practical exercises as the accent is on the contents and the specific of the social-pedagogical work with the different groups of children in the frames of the school institution.The main themes are illustrated by recent statistics from sociological researches to be analyzed and discussed. During the lectures discuss some problematic questions related to the role, functions and integrative parameters of the different agents of socialization (environment, family, school) and their connection with the effective social-pedagogical work.

SB16617 Foreign language 3

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written

Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering

Lecturers:
Senior Lecturer Elitsa Dimitrova Georgieva, PhD, Department of Foreign Languages
tel.: 082/ 888 532, E-mail: edgeorgieva@uni-ruse.bg
Senior Lecturer Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg

Abstract:
At this level students have some knowledge of the main grammatical areas of the English language but they are frequently unable to use what they know appropriately, accurately and confidently as they come from a variety of learning backgrounds. The basic aim of the course is to establish the entry level of students within a group, to consolidate the group as a team. and to ensure that by the end of the semester the majority have reached level B2 according to the Common European framework. By means of reading, listening, role-plays, debates, short presentations and problem-solving tasks the teacher aims to develop simultaneously all skills. For this course the emphasis is on speaking and grammar skills.

Course content:
The course comprises a wide range of topics, related to the course materials used and the interests and future communicative needs of students. These include people and their life in big cities, life styles, climate, seasons, shopping, clothes, shopping for food, future plans and arrangements, likes and dislikes.

Teaching and assessment:
Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques, such as group work with spokespersons and posters, listening with note-taking and follow-ups, etc. Progress is monitored regularly and includes homework on a weekly basis, two eseys and two written tests.

S01227 Observation Practices in Socio-pedagogical Institutions

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: lradoslavova@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel.: 082/ 888 752, E mail: dspasova@uni-ruse.bg

Abstract:
The course aims to introduce to students the real practical situations in the social structures.
Based on observations and comments seen, students will be able to assess the practical applicability of the study.

Course content
The curriculum contains 45 exercises and the maximum extent consistent with the objectives of the course, that is already familiar to students real practical situations in social structures.
There is practice of students takes place in specialized institutions and social services in the community where they will apply their knowledge by working with clients in the elderly and for children and their families in institutions and at home.
Special emphasis is placed on completing the log where each day were recorded daily tasks of social Head of school / institution.
Students describe all implemented activities in problem solving and case studies that are prerequisites to upgrade the knowledge and skills acquired in the above disciplines to date.
The diary ends with the opinion of the head in practice.

Teaching
The current grade is formed on the basis of the submitted written work by the student. The independent development / report prepared by the student includes information on the history of the institution; target groups; implementing activities; applied techniques and methods of work, in accordance with the individual characteristics of the users and personal opinion of the student about the conducted observation. The teacher conducts an interview with the student in order to share opinions and impressions of the visited organization (s) and institutions, and accumulated basic knowledge.

SB 14600 Management and Marketing in the Education and Social Sector

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Raskova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: bilieva@uni-ruse.bg
Abstract:
The course is focused on the adoption of knowledge which is based on the social theory, as well as on methods for economic analysis and general legislation that determines the rights and obligations of managers in education and social sector. The objective is students in Social Pedagogy to study the methods and to obtain obligatory practical skills involved in the work of social managers, to analyze particular problems in social sector management, models and directions for efficient functioning of the social systems and activities. The discipline inputs and outputs are synchronised with other disciplines involved in the syllabus of the specialty.
Contents of the discipline: Social Management Fundamentals. Principles, Objectives, Functions and Subject of Marketing. Demographic Policy. Professional development. Marketing Environment. Employment and Income. Social insurance. Marketing Information and Marketing Research. Social Assistance and Partnership. Institutions of Social Management. Strategic Marketing Planning. Appraisal and Control of Marketing Activity.
Teaching technology: The tuition in that disciplines includes lectures oriented to practical adoption of social management and marketing in dynamic environment and efficient consumption of scarce resources. At the end of each lecture the skills adopted will be practiced in interactive session. Current marks will be given to the students essays and tests during the semester. The final term for delivering the essays is the last lecture date. Countersign on the discipline shall be given to students who have attended the course regularly in minimum of 20 lecture hours and who have delivered self-elaborated essay. The final mark on the discipline will be formed on the base of essay mark and test mark.

SB14601 Integration of Individuals with Special Educational Needs

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The goal of teaching is broadening the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: international principles and legislative framework of education of children with special needs, with organizations and structures through which realize.
Course contents:
The following themes are included: special education – international principles, referent to education of children with special needs; legislative framework of education of children with special educational needs; organization of special education – kindergarten and special schools; diagnostics of special educational need and orientation to special schools; competent organ to realizing education of special needs; structures without system of national enlightment; comparative study of order special education in European countries and USA.
Teaching and Assessment:
Lectures are carried out mostly frontally, with illustrations and descriptions of the different psychophysical disorders and behaviour deviations, using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The current mark is based on the results of three tests and the course assignment.

SB14604 Social Work With Disadvantaged Children

ECTS credits: 2 **Weekly workload:** 2l+0sem+0lab+0p
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel. 082 / 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The course aims to introduce students to the pedagogical aspects of the re-socialization of children with deviant behavior, and to prepare future teachers to work with disadvantaged children in the direction of their socialization and integration. In thematic plan focusing on issues aimed at introducing students to classical and current views, ideas, concepts, strategies and programs for work of disadvantaged children.
The aim is to enrich their preparation towards guidance in mechanisms and regularities of working with children from these groups and also to form skills needed for effective psychological and pedagogical correction action to overcome the factor "inequality" in the pedagogical interaction.
Course content:
The course contains topics related to the clarification of the main determinants of behavioral deviations among disadvantaged children and related with overcoming them current strategies and approaches..
The material includes basic theory and knowledge of the structure of the various institutions of socialization and re-socialization of the respective groups of disadvantaged children and specifics in psychological and pedagogical work with them.
Main topics: Groups disadvantaged children. Characteristics and functions of the types of state and public institutions for education and socialization of disadvantaged children; Aspects of professional psychological and pedagogical training of a teacher to work with children in disadvantaged position.
Teaching and assessment:
The training of basic training allows students to realize in the course of lectures. Basic methods of teaching are information-explanatory and illustrative. To individual topics include problematic issues provoking independent thinking of students (additional teaching methods - Problem statement and heuristic).

SB14603 Methodology of the Work of the Resource Teacher

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The course is actual and contemporary by its content character. It is correspond to social requirements in special's education area, to radical changes in state politic in the area of education and social care to people with special needs. The goal of teaching the subject is broadening the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: independent or team diagnosis of deviations in intellectual and social development; orientation and reseption children in special schools; organization and conduct educational process.
Course contents:
The following themes are included: Legislative framework of education children with special needs and work of resource teachers. Competences of resource teacher: special science training; pedagogic and methodic preparation, specialize preparation and indispensable personal properties. The basic functions of resource teacher: planning, realizing education of children with special needs, evaluating and reading dynamic of development of cognitive processes and personality of children with special needs.
Teaching and Assessment:
Lectures are carried out mostly frontally, with illustrations and descriptions of the different psychophysical disorders and behaviour deviations, using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The current mark is based on the results of three tests and the course assignment.

SB 14602 Methodology of the Work of the School Counsellor

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Abstract:
The curse is methodological, it establishes basic erudition and skills for psychodiagnostical, consultative and intermediate activities of the counselor in school. In the end of this curse the students must have competency of the main activities of the counselor, of institutional and interinstitutional relationship and mediation, as well as to accomplish successfully methods for psychodiagnostic and consultation of scholars, parents and teachers.
Course content:
It is considered the main issues of the work of the counselor in the school (obligations, forms of work, mediation with scholars, parents, teachers, school administration and other institutions, ethical principles, furnishing of the office); there is brief introduction on history of school psychology; it is presented methodological principles for psychodiagnostic and the know-how and techniques for conduction of an interview with scholars and their parents; there is a curse of consultation in the school and the main psychotherapeutical movements in modern psychology.
Teaching and assessment:
Except usage of an ex cathedra method of teaching, the technology of teaching includes exercises for accomplishment of projective techniques and interview with scholar, replenishment of questionnaires, video presentations. In the end of the curse a training for consultative and social skills is conducted.

SB15664 Educational Work with Children and Youth Communities

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the training in the subject "Educational work with children and adolescent communities" is to extend and enrich the knowledge of students about the methods and forms of educational work in different children's and youth communities. Different opportunities for identifying communities (by age, ethnic, cultural, religious, interest) are explored, as well as different forms of educational work within and outside the institutions. Specify the characteristics of extra-curricular and out-of-school educational work. Modern models for educational work with children and adolescents with deviant behavior are presented.
Course content:
Essence of education as a social phenomenon. Educational interaction. Social environment and education, contradictions in the educational process. Educational work with children and young people with deviant behavior. Educational work at the Social-Pedagogical Boarding Schools and Educational Boarding Schools. Educational work with homeless and unconsidered children. Educational impact of the community on the personality. Educational impact in social work with children and youth communities. Methods, approaches and means of education. Activity of the public counselor.
Teaching and assessment:
The training in the subject "Educational work with children and adolescent communities" is realized through lectures. The lectures are conducted frontally with the whole group. Lectures use videos and active learning methods. Combining individual and group modes of work makes it possible to master the intended material.

SB 15621 Andragogy

ECTS credits:6
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps+1ca
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel.: 082/ 888 752, E-mail: dspasova@uni-ruse.bg
Abstract:
In the curriculum are elaborated scientific issues and contemporary aspects of education of adults. Students acquire skills for planning and organization of adult education. The main issues of andragogy are revealed. The challenges toward education in the global world are examined. The syllabus contains topics focused on the ontogenetic development of the person, as well as the periodization of ontogenetic development of adults and the specific characteristics of how they learn.
Course content:
Scientific status of andragogy – emergence and development, subject, object and tasks, collaboration with other sciences. Education of adults and contemporary social development. Contemporary conceptions for permanent education. Education – global problem. Permanent education in Bulgaria. System of angragogical methods and forms. Andragogical demands toward learning process of adults. Androgogical cycle. Design of teaching of adults. Distant education with adults. Communication in education of adults.
Teaching and assessment:
Interactive methods are used. They develop the skills for decision making, formulation of conclusions, development of communicative and organizational abilities (discussions, brain storming, role games, etc.). Tests are administered during the semester and the results obtained are taken into consideration when evaluating performance of students during the seminars.

S01235 Social-Pedagogical Work with Children and Adolescents in Risk

ECTS credits: 3
Assessment: exam
Weekly classes:1lec+1sem+0labs+0ps+1ca
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstract:
The aim of the course is to introduce students to the specificity in Social Work with at-risk groups. The course includes topics designed to introduce students to classical and current methods, forms, concepts, strategies and programs for work with children and youth at risk. Seminars on the subject are aimed at forming at students of social pedagogy skills to know and assess the feasibility of different strategies and models for working with children and youth at risk in the realities of educational practice in the country; to organize their activities in accordance with the current requirements of education; to highlight general trends and specific cases; to relate the acquired knowledge to practice. These are basic competencies necessary for future social educators for their quality theoretical and practical training.
Course content:
Characteristic of the species groups of children and young people at risk; Determinants of emerging risk in children; Conditions for the emergence of social educational risk; Institutions working with children and youth at risk; Methodology of social educational work with children and youth at risk; Forms, principles and methods of socio-pedagogical work with risk groups; Basic parameters of social work with children and youth at risk - socialization and re-socialization; Aspects of professional psychological and pedagogical training of the educator working with children and youth at risk.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. They are designed to introduce students to new ideas and to provide a model for further analysis.

SB15665 Social Work with Elderly and Disabled

ECTS credits: 7
Weekly classes: 2lec+0sem+0labs+2ps+1cw
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel. 082/ 888 219, E-mail: bilieva@uni-ruse.bg
Assist. Prof. Dima Spasova, Department of Pedagogy
tel. 082/ 888 752, E-mail: dspasova@uni-ruse.bg
Abstract:
The subject is aimed at acquainting students with different concepts and ideas of different gerontological schools, which give rise to discussions and are necessary for the development of self-heuristic thinking of the students. Modern problems of the theory of the elderly and the disabled are discussed.
Course content:
The curriculum contains topics that are highly relevant to the course's objectives, namely to retain students with modern problems of the elderly and disabled.
Main themes: Consider contemporary social work; health issues; quality of life, etc. Familiarize with nutrition, healthy lifestyle, and socio-psychological status of the elderly and the disabled.
Teaching and assessment:
The training of students takes the form of lectures and practical exercises, which are analyzed and discussed. In the course of the lectures, there are discussed problematic issues related to the state, attitudes and current problems in the social policy towards the elderly and the disabled.

S01254 Professional and Career Development

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+1ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: lradoslavova@uni-ruse.bg
Abstract:
Discipline aims at introducing students to the essence, planning, development and management of careers; clarification of the nature of the competitive person and the appropriate technologies for its development and improvement – practices, professional counseling, psychological diagnostics. Formation of positive self-attitude and self-reflection, readiness for change and ability to see alternatives, take responsibility, free choice and anticipate changes in a future career. The purpose of the lecture course is to form knowledge, skills and competences in future social educators related to the provision of services in the field of vocational guidance and counseling of children, young people and adults, in the education, labor and social policy system.
Course content:
Professional Development. Professional orientation. Professional and Career Guidance in School. Essence and Career Development. Stages in career development. Organizational systems for career management. Professional realization of social pedagogues. Developing career plans. Model for conducting an individual interview on vocational guidance. Professional guidance and career counseling for people with disabilities. Competitiveness. Competitive personality. Self-development of culture for business communication
Teaching and assessment:
The main teaching methods are the information explainer, the illustrative and the problematic exhibition, bringing to the fore the scientific logic of knowledge. Interactive methods are used to approbate certain views of students for decision-making, formulation of conclusions, formation of communication and organizer skills: discussions, brain attacks, business games, etc. Topics in the field of career guidance are offered – development of interviews, development of career plans, preparation and presentation of interviews and tests for self-development of culture for communication and conflict resolution. A written examination lasting 60 minutes is held on the discipline. It includes a question from the proposed discipline aspect.

SB16316 Human Resource Management

ECTS credits: 2 **Weekly classes**: 1lec+1sem+0labs+1ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Management and Social Activities
Faculty of Business and Management
Lecturers:
Assoc. Prof. Svilena Ruskova, PhD, Department of Management and Social Activities
tel: 082 / 888-815 e-mail: sruskova@uni-ruse.bg
Pr. Assist, Prof. Bozhana Stoycheva, PhD, Department of Management and Social Activities
tel: 082 888-815, e-mail: bstoycheva@uni-ruse.bg
Abstract:
Human resources management is a subject that is social in nature and is oriented towards person and people in the business organization. The objective is students to acquire certain skills to solve problems related to the provision of personnel, correct creation of technological documents of the organization, stimulation of initiative and work activity and following a comprehensive policy and strategy related to the management of human resources. As future specialists, students acquire attitudes to manage motivation and engagement, as well as acquire some competence in compiling technology documentation, recruiting staff, applying various legal norms for recruiting and releasing staff, creating training programs for employees and measuring performance systems, wage formation and ensuring safe and healthy working conditions, conclusion and contract individual and collective labor contracts.
Course content:
The main functional elements of the human resources management system - planning, job description, recruitment and selection, enrolment and dismissal, individual and collective bargaining, employee development, assessment, motivation management, worker engagement and retention, remuneration, safety and labor protection.
Teaching and assessment:
The course comprises of lectures and practical seminars. At the end of the term students sit an exam.

S01259 Training Practice in a Socio-Educational Institution

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+3ps
Assessment: цcontinuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.:082/ 888 219, E mail: lradoslavova@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel.: 082 / 888 544, E-mail: dspasova@uni-ruse.bg
Abstract:
The course aims to introduce to students the real practical situations in the social structures.
Based on observations and comments seen, students will be able to assess the practical applicability of the study.
Course content
The curriculum contains 45 exercises and the maximum extent consistent with the objectives of the course, that is already familiar to students real practical situations in social structures.
There is practice of students takes place in specialized institutions and social services in the community where they will apply their knowledge by working with clients in the elderly and for children and their families in institutions and at home.
Special emphasis is placed on completing the log where each day were recorded daily tasks of social Head of school / institution.
Students describe all implemented activities in problem solving and case studies that are prerequisites to upgrade the knowledge and skills acquired in the above disciplines to date.
The diary ends with the opinion of the head in practice.
Teaching and assessment:
After compleating the course, the students submit a completed log where each day were recorded daily tasks of the head of the social institution / organization and implemented activities. The final evaluation current estimate is formed by the outcome of the assessment set by the teacher-supervisor from the university and the opinion of the head of the practice.

SB15578 Academic Writing

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 209, E-mail: eivanova@uni-ruse.bg
Abstract:
The purpose of training in the discipline is preparation for the successful application of the various genres of academic writing by future educators in the presentation and shaping of the results of their research work both during their studies and in their professional careers.
Course content:
Scientific research is the basis of scientific creativity. Stylistic markers of scientific style; bibliography in scientific texts. Scientific integrity and author ethics. Manuscript formatting and editing. Student scientific creativity - essay, term paper, academic essay, thesis.
Mini-genres in academic writing - abstract and summary, annotation, keywords, the introduction of the author, poster. Traditional genres of participation in scientific forums – scientific announcement, scientific report, and scientific article. Formats for participation in scientific forums - scientific conferences, scientific congresses and scientific symposiums, seminars, round tables, poster sessions. Presentation and scientific public speaking. Quality of information sources; periodical scientific publications in the field of pedagogy.
Teaching and assessment:
The main teaching methods are informative, illustrative, and problem presentation, with the scientific logic of knowledge being brought to the fore. During the training, tasks are set to discuss, analyze, edit, and present scientific texts.

SB16680 Foundations of Supervision

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: bilieva@uni-ruse.bg
Abstract:
The purpose of the training in the discipline Basics of supervision results in the development of in-depth knowledge of the nature and necessity of supervision, types of supervision and what is its main purpose. Undoubtedly, the topics proposed will provide knowledge and skills to build competitive professionals and individuals with the attitude of implementing supervision in the socio-pedagogical sphere. The above-mentioned main guidelines for the application of supervision are an emphasis of the proposed program with a prerequisite for rationalizing the motivation to touch it.
Course content
Course will provide in-depth knowledge of supervising students. The emphasis is placed on the organization, types and ways of applying the support method.
The course aims to gain broader awareness of the essence of supervision and the need for it. Other interesting topics include: Types of supervision. Characteristics of group supervision-nature, goals and advantages. Supervision in social work. Main difficulties. Documents necessary for the preparation under the supervision. Request for Supervision. And others.
Teaching
The evaluation procedure is through an exam. The final grade is formed according to the individual results for current control during the semester and an exam.

SB16682 Crisis Intervention in Social Work

ECTS credits: 2
Weekly classes: 2lec+0sem+Olabs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva-Krasteva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: vdineva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel.: 082 / 888 544, E-mail: dspasova@uni-ruse.bg
Abstract:
The goal of the course is for students to increase their theoretical and practical knowledge in the use of crisis intervention in social work.
Course content:
The program includes lectures - concepts of crisis and trauma, characteristics of crisis and trauma, mechanisms and classification of crisis and trauma, stress-crisis-trauma continuum, stages and consequences of trauma, stages, positive aspects and levels of overcoming crises, nature of crisis interventions, models for interventions.
Teaching and assessment:
The training - lectures.
Requirement - 80% attendance.
Appraisement - in accordance with student activity and examination test.

SB16681 Social Work with Marginalized Communities

ECTS credits: 2
Weekly classes: 2lec+0sem+Olabs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the course " Social work with marginalized groups " is to teach students - social pedagogues the theoretical knowledge about different ethnic groups, the specificity of the multiethnic environment and the development of competencies for practical work in such environment. This is an integrative discipline. The same is optional in the preparation of social pedagogues. The course examines basic problems, notions and laws. There are also issues related to the impact of the wider social environment on the issues.
Course content:
Socio-psychological problems - general characteristics, ethnic group features and multiculturalism. Total pedagogical and methodological features of working with marginalized groups - both theoretical and practical. The meaning of work on inclusion and identification-problems and projections. Methods and principles. Forms and means. Competencies to work. Cultural traditions and pedagogical work - interactions with other organizations, people and groups. The meaning of working on the issues of multiculturalism in the process of global globalization. Work programs.
Teaching and assessment:
The training in the discipline is done through lectures according to the curriculum.
Students learn about the empirically based learning content, mainly by participating in solving specific task assignments tailored to their specialty.
For visualization and empirical work, visual models, modeled situations and business games are used.

SB14593 **Correctional Pedagogy**

ECTS credits: 2
Weekly classes: 2lec+0sem+Olabs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the course is to acquire basic knowledge and skills in penitentiary pedagogy necessary for the organization of an effective pedagogical process in prisons, penitentiary hostels, educational boarding schools and socio-pedagogical boarding schools. The discipline occupies an important place in the general system of psychological and pedagogical training of social pedagogues. Allows students to orient themselves in the specifics of work in different institutions in the penitentiary system, including re-education, training and education of children and persons living in these institutions.
Course content:
Basic knowledge related to concepts such as penitentiary pedagogy, principles, forms, methods and means of penitentiary treatment are given. Emphasis is placed on realizing the educational aims of the "imprisonment" punishment, according to the specifics of the environment for its implementation and the peculiarities of the convicts; mastering the principles, methods, forms and means of corrective education, secondary prevention and re-socialization activities - from the adaptation to the closed environment to the preparation for its leaving; organization and realization of the re-education, training, professional preparation, activities of interest and life of sentenced children or persons.
Teaching and assessment:
The training in the discipline "Penitentiary Pedagogy" is done through lectures. The lectures are conducted frontally with the whole group. Lectures use videos and active learning methods. Combining individual and group modes of work makes it possible to master the intended material.

SB15627 Geragogy

ECTS credits: 4
Weekly classes: 2lec+1sem+Olabs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The goal of the discipline is to reveal the main issues of aging, the factors and conditions that facilitate psychophysical health and longevity of old people, as well as their attitudes toward youth. The important problem for the status of aging generation in society is considered. The issues of the science gerhagogy are stretched.
Course content:
The course is based on the actual problematic for aging and old age. The gerontogolical and demographic factors of the science are pointed out. Because of its integrative character, the healthy-hygienic and gerontopsychological issues are revealed. The stress is localized in their value orientations and communication. The attention is toward aging and old age, active aging, delay of aging, etc.
Teaching and assessment:
The lections have problematic and informative character. The theories of gerontology, geriatrics and psychology of old age are used. There are presentations of sociological studies of the duration of life and aging of nation. In the seminars are contributed tests, cases, individual tasks, etc. The exam is on two themes from the synopsis.

S01259 Management of Social and Pedagogical Institutions

ECTS credits:5 **Weekly classes**: 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: bilieva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: lradoslavova@uni-ruse.bg
Annotation
The objectives of this course are to provide basic knowledge of students about contemporary problems in the theory of management of socio-pedagogical institutions. The program reflects different concepts that give rise to discussions and are necessary for the development of self-heuristic thinking of students. Major national documents in the sphere of management of the socio-pedagogical institutions - auxiliary and special schools, Homes for children from 0 to 18 years, as well as acts of the national legislation related to the management of different structures in the educational system of the WF are being considered.
Course content
The curriculum contains topics that are fully consistent with the course's objectives, namely to retain students with modern management and social issues; expanding their socio-legal culture and knowledge about important governance features,
Main themes: The emergence and development of management science; Management structures in the educational system of the SEA. Modeling, organizational design, forecasting and planning in the education system of the WFD. Forms of management of day centers, CSD and others are considered. social services.
Teaching and assessment:
The training of the students takes the form of lectures, which are analyzed and discussed. In the course of the lectures, there are discussed problematic issues related to the state, attitudes and current problems in the management of the socio-pedagogical institutions. The course ends with an examination and a referral.

S01204 Social Medicine

ECTS credits:3 **Weekly classes**: 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Medical and Clinical Diagnostic Activities
Faculty of Health and Health Care
Lecturers:
Prof. Kiril Panayotov Panayotov, MD, Department Medical and Clinical Diagnostic Activities
tel.: 082 / 888 255, E-mail: kpanaiotov@uni-ruse.bg
Annotation: Education in social medicine focuses on the basics of public health and the social-medical approach, the development of concepts of health and its determinants, as well as the most commonly used health-demographic indicators. It emphasizes the social determinants of health and illness. Examines the main regularities and trends in the development of public health. Students study the organizational principles of healthcare, types of healthcare systems, epidemiological studies and their application in the planning of health activities. The general and specific tasks in identifying the risk factors associated mostly with socially significant diseases are studied.
Course content: The study program is divided in two sections - 15 lecture hours and 15 hours of seminar exercises respectively, and in the first lecture section methods of research and assessment of public health, organization and activity of the health service, characteristics of health systems are studied. The second contains seminar exercises that logically follow the theoretical lecture material.
Teaching methods: The main forms of conducting the classes are lectures and seminar exercises, while the lectures use talks, active, interactive discussion forms and scientific paper research. Multimedia presentations and other visual materials are used. In the methodology of the exercises, the main forms are related to a demonstration of a specific problem; typical and situational cases are solved, as well as appropriately selected tasks from practice, which illustrate and specify the theoretical material. A control procedure through a written test and an interview is foreseen. 100% attendance at lectures and exercises in the discipline, successful handling of the control procedure and participation in discussions during seminar exercises are required. The final assessment is individual continuous assessment (QA), based on each student's active participation in the seminars, results of semester tests and question-based revision of the lecture material.

SB14609 Pedagogical Psychology

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The course is oriented students to get a knowledge of advanced tendencies in the psycho-pedagogical theory and practice and their incorporation in the professional activities at kindergarden, schools and social institutions.
Course content:
Subject and object, methods of pedagogical psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc.; issiues of psyhodidactics, psychology of education, psychology of the teachers and their labour, managing of the equips in the education. The curriculum is advanced with theories for students with special educational needs, professional pedagogical communication and consultations in the education.
Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues. The students must elaborate paper work on themes, that are in conspect with literature.

S01308 Summer Teaching Practice

ECTS credits: 6
Weekly classes :0lec+0sem+0labs+4ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the training in the Summer Pedagogical Practice is to introduce the students of Social Pedagogy in the concrete socio-pedagogical activity characteristic of the different institutional social and educational circles and non-governmental sector; To enhance their practical training for working with children and adults and to engage directly in the social assistance process. A special focus of the program is to include students in real practical situations and to familiarize with the main problems of the socio-pedagogical activity carried out in various social services in providing support and assistance to children and families and adults at risk. The guidelines are aimed at deepening the knowledge and skills of students in specialized institutions and social services with different types of clients in applying a diverse arsenal of socio-pedagogical methods for diagnosis and response, crisis management, case tracking and their Management.
Course content:
The training is done through practical exercises in social services and organizations from the system socio-pedagogical system/ MES, MLSP, MI, MJ, SACP and their divisions at municipal level.
The themes included contribute to the enrichment of the students' social horizons as well as to provoke the content, scope and evolution in the social sphere in a discussion.
Main themes: Basic competences in the practice of social pedagogy. Social services for children and persons (Article 36 of the Regulation on the Application of the Social Assistance Act). Understanding the legal framework and organization of the activities of the observed social services and institutions. Methodology for the conditions and the way of providing social services, determined for Summer practice.
Teaching and assessment:
In order to receive the Summer Pedagogical Practice in the social and pedagogical institutions, the student requires a 100% attendance at the practical exercises at the said institution for social services. Practice control is carried out by visiting the university lecturer in institutions or social services for children or persons located on the territory of Ruse.
The final current assessment is formed on the basis of the submitted written work and depending on the opinion of the head of the practice.

S01209 Children's and Adolescent's Psychopathology

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written/spoken
Department involved:
Department of Health Care
Faculty of Public Health and Social Activities
Lecturer:
Assoc. Prof. Nikolina Stancheva Angelova-Barbolova, MD, PhD, Department of Health Care
tel.: 082 / 888 421, E-mail: nangelova@uni-ruse.bg
Abstract:
The aim of the course is acquisition of the knowledge for specific characteristics, regularities and deviations in psychic development of the children and adolescents.
Course content:
Theoretical part of the discipline reviews the nature and origin of diseases in psychic condition. It clears up the disturbances in general psychopathology and specific disorders in school competencies, emotional and behavioral disorders.
In seminars the stress point is onto social functioning and integration of the children and adolescents with deviations. The applying of psychometric tests forms skills for observation and analysis of the data.
Teaching and assessment:
The theoretical part is based on an ex cathedra method of teaching. The seminars has empirical orientation. The assessment is with test for achievements.

SB15628 Social-Pedagogical Support for Personal Development

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps+0,5se
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciencess and Education
Lecturer:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The relevance of the problem is determined by the need of developing technological approaches to pedagogical support of students' social adaptation. The purpose of this academic discipline is to position the technological sequence of pedagogical support of children's' social adaptation in the activities of the socio-pedagogical complex.
Course content:
In the course of study, students learn the basics of inclusive education and work in a multicultural environment; methodology for working with children in school to overcome discrimination and improve acceptance and cooperation; regulation of the problem of support for personal development; principles and approaches; condition and challenges to the general and additional support for personal development of children and students.
Teaching and assessment:
The training in the discipline is organized through lectures and seminars. The lectures use interactive methods and tools, multimedia presentations, and models that aim to present innovative approaches in the study of the discipline, as well as options for technological implementation of practical aspects of its subject - inclusive education.For the seminars the research of normative regulation or literature is assigned.

S01288 Prevention of Crime, Drug Addiction and Violence

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps+0,5se
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciencess and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The goal of course is to reveal scientific status of the discipline in theory and practice.
Course content:
The course contains main knowledge, connected to concepts for prevention, types preventions, characteristics of asocial behavior, drug abuse, violence in its forms. The accent is pointed out onto acquisition of concepts and formation of skills for social help of clients in risky situations. The education in discipline forms value orientation toward profession of social pedagogue, advances creativity and practical abilities of students.
Teaching and assessment:
The training in the discipline "Prevention of crime, drug abuse and violence" is done through lectures and seminars and self-employment in the form of a paper.

S01311 Forms of Working with Children with Deviant Behaviour

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps+0,5se
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciencess and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the training in " Forms of work with children with deviant behavior" is to highlight the scientific status of the course in the theoretical knowledge and the practical field of realization. Basic knowledge of concepts such as deviant and deliquant behavior is given, the reasons for deviant behaviour are clarified-biological, psychological and social; for research methods with pedagogical focus.
Course content:
Through the training in the discipline " Forms of work with children with deviant behavior" is formed value orientation to the profession of pedagogue, stimulating creative orientation, enriching the scientific-theoretical and practical-applied students ' knowledge and skills to work with the specific vulnerable groups with deviant and delinquent behavior. Students acquire theoretical and practical knowledge, skills and competencies for complex educational-preventive and corrective activities through the use of methods of diagnosis of behavior social manifestations in society and social groups. Emphasis is placed on mastering constructs and building skills to support clients in a risky situation.
Teaching and assessment:
The training in the discipline “Forms of work with children with deviant behavior" is done through lectures and seminar exercises. The final evaluation is obtained after conducting a colloquium.

SB16678 History of Social Pedagogy

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+0,5se
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciencess and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Dept. of Pedagogy
tel.: 082/ 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD Dept. of Pedagogy
tel.: 082/ 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The goal of teaching is broadening the scientific horizon of the future specialists in social pedagogues alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: origin and development of social-pedagogic ideas from Antiquity to today.
Course contents:
The following main themes are included: Stages in Social Pedagogy's development. Appearance of education as social phenomenon. Education in Primitive society. Social education in Antiquity world. Problems of social education in Middle Ages. Influence of humanism over development of social pedagogic. Development of leading trends of social pedagogic during XVII-XX century. Contemporary stage of social pedagogic theory and practice. Development of social pedagogy in Bulgaria.
Teaching and Assessment:
Planned activities and teaching methods include lectures, discussions, working with various sources, working individually or in a group, tests, cases, etc. The final grade is based on test results during the semester and the quality of the report.

SB16683 Social Entrepreneurship

ECTS credits: 3
Weekly classes: 2lec+0sem+0labs+0ps+0,5se
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Managements and Social Activities
Faculty of Business and Management
Lecturers:
Assoc. Prof. Daniel Yordanov Pavlov, PhD, Dept. of Management and Social Activities
tel.: 082 / 888 518, E-mail: dpavlov@uni-ruse.bg
Abstract:
The course aims to provide students with some general knowledge about social entrepreneurship and to acquaint them with some specific methods and approaches of managing organizational resources. During the development of the program it has been taken into consideration that most of the students don't have sufficient knowledge, experience and skills. The here applied content and teaching approach has been developed thanks to the international project INNOVENTER. Following the approach "from general to specific", the lectures accent on specific problems of social entrepreneurship. Some of the knowledge students gain by analyzing the experience of appropriate social entrepreneurs.
Course content:
Introduction to Social Entrepreneurship; Identifying Social Entrepreneurship in Practice; Brief Overview of Social Change Theories and Dilemmas; Social exchange Theory; Social Capital Basics; Social Networks as Base of Social Capital; Determinant Personality Traits to Establish a Successful Social Enterprise; Social Enterprise Business Plan.
Teaching and assessment:
Students learn the core elements of each topic during the lectures. Discussions and cases studies are among the main didactical techniques. During the seminars students develop their own ideas for social entrepreneurship. The on-line teaching materials at e-learning.uni-ruse.bg is the fundament for successful "blended" learning. The final grade is based on: 50% course assignment and 50% e-tests.

SB15630 Interinstitutional Interactions

ECTS credits: 3 **Weekly classes:** 2lec+0sem+0labs+0ps+0,5se
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciencess and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA. PhD, Dept. of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Dept. of Pedagogy
tel.: 082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract: The course aims to introduce to the students the content and the significance of the processes of inter-institutional interactions, the integrity of the principles, functions and tasks in the interaction between institutions, supporting personal development. Forming knowledge and practical skills for work based on the principles and coordination mechanisms of interactions.
After the successful completion of the course in the discipline, students should have knowledges about the main characteristics of socio-pedagogical institutions and opportunities for direct interaction between them; to be able to contact with state institutions and NGOs; to have mastered the basic principles, forms and methods for providing personal support or emergency intervention to persons at risk; to work in a team with students from different school levels, with representatives of socio-pedagogical institutions.
Course content: Characteristics of inter-institutional interactions. Profile of expert competencies in inter-institutional interactions. Good European practices for coordinated interaction - "Everything under one roof" - the experience in Bulgaria and "Code red". Professional ethics in inter-institutional interactions. Vulnerable groups, risk categories of persons. Place and role of individual evaluation in inter-institutional interactions. Socio-pedagogical structures. The coordination and mechanisms of the work of the territorial structures. The coordination mechanism for interaction at work in cases of children, victims of violence or at risk of violence and for interaction in crisis intervention. Interaction between the institutions in the system of pre-school and school education and the directorates “Social assistance” regarding the provision of support for personal development of children and students.
Teaching and assessment: The training is carried out through lectures (discussions, group work, case study, etc.); consultations; independent work (work in libraries for the development of a report).
The course ends with a continuous assessment. The following elements participate in the formation of the assessment in the discipline: activity in the classes, test results and elaboration of the report.

SB14610 Socio-Pedagogical Counseling

ECTS credits: 7 **Weekly classes:** 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Asst. Prof. Vanya Dineva, MA, PhD, Department of Pedagogy
tel. 082/ 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The goal of the course:
- a theoretical and practical knowledge in the use of Socio-Pedagogical Counseling;
- a competence to solve socio-pedagogical problems at individuals, families and groups.
Course content:
The program includes lectures and seminars - a counseling in the helping process; a technology and techniques of the Consultative Conversation; basic theoretical concepts in counseling; peculiarities and pragmatics of working with different ages and types of clients; crisis and intervention; professional issues of the counseling; a logical structure of the helping behavior.
Teaching and assessment:
The training - lectures and seminars.
Requirement - 50% lecture attendance; 100% seminars attendance.
Appraisement - in accordance with student activity, course work and exam test.

SB11067 Permanent Education

ECTS credits: 4
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Managements and Social Activities
Faculty of Business and Management
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA. PhD, Dept. of Pedagogy
tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Dept. of Pedagogy
tel.: 082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel.: 082 / 888 544, E-mail: dspasova@uni-ruse.bg
Abstract:
The aim of the course is to scientifically clarify the theory and practice of lifelong learning as an opportunity to strengthen competitiveness, expand opportunities for employability and learn key competencies to achieve social stability. Emphasis is placed on the problems and prospects for lifelong learning nationally and globally; the relationship between the processes of education and self-education and their relationship to lifelong learning; the main areas of continuing education, expanding the possibilities for choosing strategies and technologies for increasing skills and competencies, with the aim of more effective professional realization.
Course content:
Continuing professional training. Dual vocational education. Adult education and vocational guidance. Validation of competencies in adults. Modern guidelines in the development of lifelong learning. Capacity building under the European Qualifications Framework and the National Qualifications Framework.
Teaching and assessment:
Students get acquainted with the theoretical foundations of the lecture course. The seminars cover the principles of lifelong learning, set out in regulations and strategies in the field of lifelong learning in the EU Member States. The assessment of the degree of the mastered lecture material and the depth of knowledge of the scientific field is carried out through a written exam.

SB14611 Occupational and Social Rehabilitation

ECTS credits: 4
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Pr. Asst. Prof. Vanya Dineva, MA, PhD, Department of Pedagogy
tel. 082/ 888 544, E-mail: vdineva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel .: 082/ 888 752, E-mail: dspasova@uni-ruse.bg
Annotation: The lecture course on the subject "Labor and Social Rehabilitation" is an essential component in the preparation of students majoring in "Social Pedagogy". Through it, students get acquainted with the essence of rehabilitation - labor and social in different complexes of social services with different groups and people. Some of the questions address issues related to the technology of working with clients. In this sense, the emphasis in the work is focused on the professional-practical aspect, without neglecting the scientific-applied.
Course content: The educational content is structured thematically around the following accents: Essence of rehabilitation, Methods, approaches, forms and means for labor and social rehabilitation, Legislative basis of social and labor rehabilitation and us, Programs and models for work in connection with rehabilitation - labor and social - "Educational and vocational training and guidance, preparation and implementation of individual programs for social inclusion". Problems of employment of people with disabilities, etc.Social work with groups, individuals and communities.
Course content:
Lectures and seminars are oriented introduction to the theoretical foundations of the common and private social technology relating to methods of social work. They are implemented by frontal work and involve students in discussions, role plays, case studies and other active methods of work. Part of explanatory schemes are carried out using visual models.
The theme of the course work is assigned or chosen by the middle of the semester. Students get acquainted with the requirements for it and if necessary in the process of preparation, it can consult.

S01343 Socio-Psychological Training

ECTS credits: 3
Assessment: continuous assessment
Weekly classes: 0lec+0sem+0labs+2ps
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg

Abstract:
The purpose of training on this subject is to be obtained knowledge about the nature of social-psychological training (SPT) as form of study and personal development in the academic education, in professional qualifications and as group social-pedagogical service for development of key competences at children and adults. The course is held according program for training skills for increase of communicative competence of social pedagogues – the professional reflection, professional observance, professional listening, assertiveness, empathiveness.

Course content:
In the offered course „Social Psychological Training“ are considered issues from the history of group forms of impact in the psychotherapy, psychology and pedagogy, for the group SPT as form of influence and training, for methodical and organizational aspects, for the stages of group dynamics at its implementation, for the results of its application, for the conflicts and the personal behavior strategies relevant to them.

Teaching and assessment:
In the course of seminars are used active training methods – mini-lectures, games, solving cases; discussions, analysis of results of tests, projective drawing, demonstration of models of distinguished behavior, individual consulting, psychical relief, autogenic training, mental gymnastics, brain attack, self-training, self-reporting. The combining of individual and group working methods makes possible the mastering of the provided subjects in view of adoption of knowledge and acquisition of professional competences. The current grade is formed by the active participation in seminars and written self-report.

SB14612 Management of Socio-educational Projects

ECTS credits: 3
Assessment: exam
Weekly classes: 1lec+0sem+0labs+1p
Type of exam: written

Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education

Lecturer:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel .: 082/ 888 752, E-mail: dspasova@uni-ruse.bg

Abstract:
The aim of the course is to acquaint students with the main components of project planning and project management system. Emphasis is placed on the preparation, implementation, management and reporting of projects. The course work, included in the curriculum presupposes that the students will practice the knowledge, skills and competences learned in the development of a project idea in teams.

Course content:
In the course the steps for planning, elaboration, monitoring and project completion are discussed and analyzed in details.
The main topics cover the design, the system, as well as sample project models.

Teaching and assessment:
The learning process takes place through lectures and practical exercises. The lectures use interactive methods and tools, multimedia presentations, diagrams, tables, models. Practical exercises aim to stimulate students to develop models for the purpose of understanding the lecture material. The exercises follow the content of the lecture on the topic and the theoretical and methodological problem developed there. Interactive tools and methods are used to perceive, analyze, and interpret.

SB15587 Speech Culture

ECTS credits: 3 **Weekly classes:** 1lec+1sem + 0labs+0ps+0,5se
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. prof. Mira Zhivodareva Dushkova, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082/888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Asst. Prof. Niya Atanasova Peneva, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082/888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The aim of the subject is to support students in expanding their knowledge in contemporary Bulgarian language and applying their knowledge efficiently in the written and oral speech.
Course content:
The main topics are: Spelling and pronunciation of vowels. Mutation of 'ya' and 'e' vowels. Spelling and pronunciation of consonants. Use of full and contracted countable form. Agreement in polite forms. Punctuation of simple sentences. Punctuation of complex sentences.
Teaching and assessment:
The teaching is conducted in the mode lectures and seminars. In the lectures, the students acquire theoretical knowledge on spelling and speaking rules, which is consolidated further in the seminars. Various forms and methods of work are used (lecture, presentation, basic and additional exercises, different types of written exercises). During the seminars, tests for checking the quality of acquisition of knowledge. The syllabus includes individual work on research papers, covering topics assigned in advance.

SB11071 Pedagogical Practice

ECTS credits: 6 **Weekly classes**: 0lec+0sem+0labs+4ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/ 888 219, E mail: lradoslavova@uni-ruse.bg
Ass. Prof. Dima Stefanova Spasova, Department of Pedagogy
tel.: 082/ 888 752, E mail: dspasova@uni-ruse.bg.
Abstract:
The course aims to introduce to students the real practical situations in the social structures.
Based on observations and comments seen, students will be able to assess the practical applicability of the study.
Course content:
The curriculum contains 60 exercises and the maximum extent consistent with the objectives of the course, that is already familiar to students real practical situations in social structures.
There is practice of students takes place in specialized institutions and social services in the community where they will apply their knowledge by working with clients in the elderly and for children and their families in institutions and at home.
Special emphasis is placed on completing the log where each day were recorded daily tasks of social Head of school / institution.
Students describe all implemented activities in problem solving and case studies that are prerequisites to upgrade the knowledge and skills acquired in the above disciplines to date.
The diary ends with the opinion of the head in practice.
Teaching and assessment:
After compleating the course, the students submit a completed log where each day were recorded daily tasks of the head of the social institution / organization and implemented activities.The final evaluation current estimate is formed by the outcome of the assessment set by the teacher-supervisor from the university and the opinion of the head of the practice.

S03859 Comparative Education

ECTS credits: 3
Assessment: exam
Weekly classes: 3lec+0sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy
tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The course aims at familiarizing students with the history of Comparative education as a scientific direction with a great practical significance; it also explores issues about the European dimensions of education.
Course content:
History of comparative education in Bulgaria; Theory and methodology of comparative education; Structure and contents of comparative education; Educational systems in Bulgaria, the USA, Canada, France, Germany and others; Comparison of the aims, finance, management, structural patterns of the educational systems and the teacher training programs in different countries;
Teaching and assessment:
The course is taught through lectures designed to reveal the comparative patterns in the structures of the different educational systems. One of the learning outcomes of the course is to develop in students an ability to put theory into practice; therefore, students are given individual course assignments for a comparative study of the general educational systems of at least two countries. The assignments are assessed and a written test is administered at the end of the semester. The final grade is an average of the grade from the written test and the result from the assignment.

SB15616 Hygiene and Health Education

ECTS credits: 3
Assessment: continuous assessment
Weekly classes: 2lec+0sem+0labs+0ps+1ca
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstract:
The aim of the training is for the students to get the necessary knowledge for the health education of the teenagers. Certain thematic areas in the lecture course are focused on getting acquainted with the hygiene requirements in kindergarten and school, the pedagogical conditions for forming a dynamic stereotype regarding the personal hygiene of the child and the student, as well as for building preventive orientations related to the more common in childhood infectious and non-communicable diseases and opportunities for their prevention.
Course content:
Nature, tasks and importance of hygiene science; Physical development of students and morpho-physiological characteristics of school age; Hygiene of students' mental work; Hygiene of students' nutrition; Hygiene of physical education and sports of students; Hygienic importance of the air, permanent components of the air and their health significance; Hygienic requirements for the learning environment; Personal hygiene of students; Medical care and health care for students; Microbiological causes and vectors of diseases in children and school age.
Teaching and assessment:
The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of school hygiene and health education.

SB11072 Pre-Diploma Pedagogical Practice

ECTS credits: 10
Weekly classes:0lec+0sem+0labs+9.5ps
Assessment: continuous assessment
Type of exam: written and practical
Departments involved:
Department of Pedagogy
Lecturers:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel. 082/ 888 219, E mail: bilieva@uni-ruse.bg.
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082/888 219, E mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the training in the discipline Internship is to introduce students majoring in Social Pedagogy in the specific socio-pedagogical activities, typical of the various institutional social and educational circles and the non-governmental sector; to increase their practical preparation for working with children and adults and to be directly involved in the social assistance process. A special focus of the program is the inclusion of students in real practical situations and acquaintance with the main problems of socio-pedagogical activities in various social services.
Course content:
The training is carried out through practical exercises in social services and organizations from the system of MES, MLSP, Ministry of Interior, SACP and their departments at the municipal level.
The included topics contribute to the enrichment of the social horizon of students, as well as will provoke in the discussion plan the content, scope and evolution in the social sphere.
Teaching and assessment:
Control of the practice is carried out during a visit by the lecturer in charge of the university to the institutions or social services for children or persons located in the city of Ruse.
The current assessment or verification of students' knowledge is carried out by the lecturer through a completed Student Diary and providing the basic supervisor of the practice with an opinion on the acquired knowledge, skills and experience; manifestation of responsible attitude; compliance with internal regulations and others.

S01430 Self Preparation for Graduation

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+0ps
Assessment: exam
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
All academic staff members who are supervisors of Bachelor Theses are involved in this as well as those tutors whose courses are present by means of questons included in the State Exam syllabus.
Abstract:
Students choose a Bachelor Thesis topic and a supervisor. Stages of development of the Bachelor Thesis. Finding relevant resources and materials. Layout and formatting of the thesis. Presentation in front of a State Board of Examiners.
Course content:
The Bachelor Thesis supervisors help the students during each of the stages of its development. They also help students prepare for its defence in front of the State Board of Examiners.

SB14148 State Written Exam in Social Pedagogy

ECTS credits: 9
Weekly classes: 0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Assoc.. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219; E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The State Exam is the graduating procedure for the students from the Social Pedagogy undergraduate programme. It gives students an opportunity to present their knowledge in the courses from the social pedgogy field included during the course of study. The students give answers to two questions from the State Exam Syllabus. The aim of the State Exam is to provide an opportunity for students to present the knowledge acquired during the training and to express their own opinion on the respective topics.
Course content:
The State Exam contains a syllabus comprising of 40 questions from the field of Social Pedagogy which summarise the courses from the undergraduate programme.
Teaching and assessment:
Students sit a State Written Exam at the appointed State Board of Examiners.

S01441 Bachelor Thesis Defence

ECTS credits: 9
Weekly classes: 0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
All lecturers from Department of Pedagogy, Psychology and History
Abstract:
The Bachelor Thesis is developed individually by the students upon the supervision of a tutor (scientific supervisor). The aim is to give an opportunity to students to demonstrate their knowledge and skills while preparing the Bachelor Thesis and present it successfully at a State Board of Examiners.
Course contents:
The thesis includes a topic or area studied on the Bachelor's degree compulsory courses.
Teaching and Assessment:
The Department of Pedagogy, Psychology and History provides:

- organization in collecting, validating and disclosure of proposals for topics for thesis for the award of a bachelor's degree;
- allocation of topics to the students and the choice of their tutors;
- management, preparation of reviews and presentation of the thesis;

Each week the supervisors give consultation to the students. Then they monitor the performance of the administered tasks. Students present their bachelor thesis at a State Board of Examiners.

SB15596 State Board Practical Exam in Social Pedagogy

ECTS credits: 1
Weekly classes: 0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
Assoc.. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219; E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
For the students of the Social Pedagogy specialty, a total of 315 hours of practice are planned, divided into Introduction to the specialty - 15 hours, Observation in socio-pedagogical institutions - 45 hours, Educational practice in the socio-pedagogical institutions - 45 hours, Summer pedagogical practice - 60 hours, Current pedagogical practice 60 hours and Pre-diploma Pedagogical Practice - 90 hours.
Course content:
Students are divided into groups in different socio-pedagogical institutions. After completing the practical training, they prepare an exposition on the activity performed, which they defend before the examination committee.
Teaching and assessment:
Each student is examined through additional questionning, related to the practical training and the completed information in the manual for conducting the practical training.
Each student describes a specific socio-pedagogical service.

UNDERGRADUATE STUDIES IN BULGARIAN LANGUAGE AND HISTORY

PROFESSIONAL STANDARDS

OF A BACHELOR IN BULGARIAN LANGUAGE AND HISTORY

Degree Programme: **Bulgarian Language and History**
Educational Degree: **Bachelor**
Professional Qualification: **Teacher in Bulgarian Language and Literature and Teacher in History**
Term of education: **4 years (8 terms)**

The main goal of the **Bulgarian Language and History** undergraduate degree programme is to provide students with a wide array of specific scientific and methodological preparation for their future professional career as teachers of Bulgarian language, literature and history.

Career opportunities: teachers of Bulgarian language and literature in lower secondary and secondary education, history teachers in lower secondary and secondary education, educators, museum workers, archivists, editors, heads of state and private specialized educational institutions, museums and archives and in all other activities requiring higher pedagogical education.

The professional obtaining an undergraduate degree in Bulgarian Language and History has to possess high professional training and a rich linguistic culture and knowledge in the field of linguistics, literary studies, history, pedagogy and psychology.

The preparation places an emphasis on the acquisition of:

- Fundamental historic and linguistic knowledge;
- Knowledge of the pedagogical and psychological disciplines;
- Basic and alternative theories of the teaching of history and Bulgarian language and literature;
- General knowledge and skills on archive studies and museum work;
- Specific skills for editing of texts;
- The specifics and requirements of the European dimension of education.

The quality of training of students doing the Bulgarian Language and History Bachelor degree is assured through:

- The use of modern studies and computer facilities;
- The availability of highly qualified academic staff;
- The subjects included in the curriculum which fall into the following categories:

***Main courses*:** Bulgarian Language, Bulgarian Literature, History, Pedagogy, Methodology of teaching Bulgarian language, Methodology of teaching literature, Methodology of teaching History etc.;

General specialist courses: Pedagogy, Foreign Language, Classical Language, Bulgarian constitutions, Information and communication technologies in education and work in a digital environment, etc.;

***Programme specialised courses*:** Old Bulgarian Language, Old Bulgarian Literature, Medieval Bulgarian History, Modern Bulgarian Language, Stylistics and text linguistics, New and Modern History of Bulgaria, etc.

The student who has graduated the Bulgarian Language and History undergraduate programme has to possess the following **knowledge and skills:**

- to organize and participate in educational, instructional, scientific and methodological work in Bulgarian language, literature and history in educational institutions;
- to participate in diagnostic and prognostic activities focused on measuring the academic achievement of students in Bulgarian language, literature and history;
- to organise and deliver consultancy and cultural and educational work in public organizations;

- to analyse, classify and systematize archive and museum materials; to edit literary, publicist, scientific and fictional works;
- to manage and organize the activity of educational and public institutions;
- to feel empathy towards the humanistic activities of others and to be able to participate in every-day situations in the same way;

CURRICULUM

OF THE DEGREE COURSE IN BULGARIAN LANGUAGE AND HISTORY

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
SB11841	General Linguistics	5	SB11845	Literary Theory	5
SB17337	Introduction to Historical Knowledge	1	S00801	Old Bulgarian Language	2
SB17368	Archeology	3	S00788	Classical and Western European Literature	3
SB17339	Ancient History	7	SB16554	Bulgarian Phonetics and Lexicology	6
SB17340	Medieval Bulgarian History	2	SB17343	Medieval Bulgarian History	5
SB17341	General Medieval History	2	SB17344	General Medieval History	3
S00795	Bulgarian Folklore	3	SB15200	Information and Communication Technologies and Work in a Digital Environment	3
SB17342	Thracology	1			
S00798	Old Bulgarian Literature	3			
SB17340	Medieval Bulgarian Literature	2			
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
S00804	English	3	S00804	English	3
S00807	Russian	3	S00807	Russian	3
SB15128	Classical Language	3			
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	S00072	Sports	1

Second year

Code	*Third term*	*ECTS*	*Code*	*Fourth term*	*ECTS*
S02594	Classical and Western European Literature	3	S02602	Children and Teenage Literature	3
SB17110	Bulgarian Morphology	4	S02603	Modern Bulgarian Literature	3
S02596	Bulgarian Revival Literature	5	SB16555	Bulgarian Syntax	5
SB17345	Archive and Museum Studies	4	SB16556	Stylistics of Bulgarian Language	2
SB17346	History of the Byzantine Empire	5	S02601	Pedagogical Psychology	5
SB17347	History of the Balkan People	3	SB17349	History of the Balkan People	4
SB17348	Bulgarian History (15th – 19th century)	3	SB17369	Bulgarian History (15th – 19th century)	4
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
S00804	English	3	SB17351	Ethnology	2
S00807	Russian	3	SB17352	The Cultural and Historic Heritage of Bulgaria	2
			SB17354	History of Religions	2
			Elective courses (students elect a course)		
			SB17370	History of the Ethnic and Religious Communities in Bulgaria	2
			SB17353	Regional Studies	2
			SB17355	Bulgarian Constitutions	2

	Total for the term:	***30***		***Total for the term:***	***30***
S00072	Sports	1	S00072	Sports	1

Third year

Code	***Fifth term***	***ECTS***	***Code***	***Sixth term***	***ECTS***
SB14715	Modern Bulgarian Literature	4	S02621	New Bulgarian Literature	2
SB14716	Russian Literature	4	SB17357	Modern History of Bulgaria – Part 1	5
S02611	Pedagogy	6	S02626	Lesson Observation in Bulgarian Language	1
SB14538	Inclusive Education	3	SB15310	Lesson Observation in Literature	1
SB15587	Culture of Speech	2	SB17358	Methodology of Teaching History	9
SB17371	Modern General History – Part 1	5	SB17359	Lesson Observation in History	2
	Elective courses (students elect a course)		S02625	Methodology of Teaching Bulgarian Language	5
S02617	Dialectology	3	S02627	Methodology of Teaching Literature	5
S02618	Phraseology and Lingo-Cultural Studies	3			
SB16856	Aspects of the Linguistic Personality of the Modern Bulgarian	3			
	Elective courses (students elect a course)				
S02620	Literary History	3			
SB16857	Trends in the Modernist Literature in Europe from the end of the 19th to the Middle of the 20th Century	3			
SB16858	Bulgarian Literature form the 1960s to the 2020s	3			
	Total for the term:	***30***		***Total for the term:***	***30***

Fourth year

Code	***Seventh term***	***ECTS***	***Code***	***Eighth term***	***ECTS***
S02634	New Bulgarian Literature	3	SB14725	History of Modern Bulgarian Literary Language	3
S02635	Historical Grammar	3	S02644	Pre-Diploma Teaching Practice in Bulgarian Language	3
SB17360	Modern General History – Part 2	6	S02645	Pre-Diploma Teaching Practice in Literature	3
SB17361	Modern History of Bulgaria – Part 2	6	SB17364	Pre-Diploma Teaching Practice in History	4
SB17362	Historiography	3	S03865	Self-preparation for Graduation	3
SB14722	Teaching Practice in Bulgarian Language	1		***Elective courses (students elect a course)***	
SB14723	Teaching Practice in Literature	1	SB16860	Pedagogical Interaction in Multicultural Environment	2
SB17363	Teaching Practice in History	3	SB16861	Health and Ecological Education	2
SB16859	Competency-based Approach and Innovations in Education	4	SB16862	Inclusive Education for Children and Students with Special Educational Needs	2
			SB16863	Communicative Skills in Educational Environment	2

			Elective courses (students elect a course)		
			SB16864	Rhetorical Pedagogy	2
			SB16865	Management of Educational Projects	2
			SB16866	e-Learning Lesson Planning and Design	2
			SB16867	Digital Competence and Digital Creativity	2
			Graduation		
			SB16868	State Practical Exam	2
			Graduation Procedure – Option 1 (students elect one of the suggested)		
			S02661	State Written Exam in Bulgarian Language or Bulgarian Literature	4
			S02662	Bachelor Thesis in Bulgarian Language or Bulgarian Literature	4
			Graduation Procedure – Option 2 (students elect one of the suggested)		
			SB17366	State Written Exam in History	4
			SB17367	Bachelor Thesis in History	4
	Total for the term:	***30***		***Total for the term:***	***30***

Total for the course of study: 240 ECTS credits

SB11841 General Linguistics

ECTS credits: 5 **Weekly classes**: 2lec+1labs+0ps+2ca
Assessment: continuous assessment **Type of exam**: written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg

Abstract:
The course aims at acquainting students with the main problems related to the nature of language, its form and functions, while at the same time it also highlights the theoretical platforms and methodological frameworks used by the different linguistic schools when defining and describing the different aspects of he language system and structure. The course covers topics related to the origin and the main stages of language development; the sign character of language, the link between language and speech, the relationship between language and thought and language and society; the system of language and the functions of each language element; classifications of languages; the link between language and the other non-linguistic systems.

Course content:
History of Linguistics; Nature and functions of language; Language and society; Language and thought and their correlation; Aspects and levels of study of language and speech; Processes and laws guiding language changes and development; Classification of languages: genealogical, morphological, etc; Languages on the Balkan Peninsula; International natural and artificial languages; Intralinguistics: Phonetics, Lexicology, Morphology, Syntax, Text linguistics, Stylistics; Extra Linguistics: Sociolinguistics, Psycholinguistics, etc.

Teaching and assessment:
The course content is delivered in the form of lectures and seminars. Students prepare and submit a course assignment. Two tests are done during the semester. The final mark is an arithmetic mean of the grades received on the two tests.

SB17337 Introduction to the Historical Knowledge

ECTS credits: 1 **Weekly classes:** 0lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course aims at helping students acquire practical skills for working with written sources of information like historical sources and scientific literature as well as to encouraging active participation in the historical classes included in the curriculum. The students should learn how to read and interpret original sources, how to write messages, reports.
The material is divided into several thematic groups: features of the object, subject and the result of historical study, the role of historical facts, and methods of historical study- historical way of thinking and historical explanation, auxiliary historical courses and specifics of the process of historical study, scientific pedagogical rules.

Course content:
Object, subject and result from the historical knowledge. Historical sources and historical knowledge. The problem with the facts and historical knowledge. Basic methods of scientific study: description, explanation.. Scientific pedagogical rules. Genres and specifics of the historical knowledge- objectivity and subjectivity. Basic sources of historical knowledge. Periodization and chronology.

Teaching and assessment:
The course is taught in the form of lectures and seminars. Attendance of classes is obligatory. The semester is validated if the classes have been attended regularly and if the students have participated in the educational process. Two tests are administered during the semester.

SB17368 Archaeology

ECTS credits: 3 **Weekly classes:** 1lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course aims at acquainting students with the material culture of people from the antiquity to the late medieval period. Special attention is paid to the so-called “unwritten period” of the history of humankind for which archaeology is the only source of. The course covers topics on archaeological data from Front Asia, Egypt, Greece, ancient Thrace and Rome and on Christian and Byzantine archaeology. Issues related to Bulgarian medieval archaeology are also examined.

Course content:
Introduction to archaeology. Palaeolith, Mesolithic, neolith, eneolith-archaeological characteristic. . The culture in Asia Minor, Schumer, Arcade, Babylon, Judea, Persia. Ancient Egypt-architecture, art, monuments. Aegean culture. Ancient Thracian tribes. Culture of Ancient Greece. Etruscan archaeological monuments. Roman and Byzantine culture. Slavs and proto-Bulgarians- archaeological traces. The Bulgarian state – architecture, fortifying facilities, system of settlements. Church architecture. Medieval Bulgarian culture – ceramics, art and craft , church architecture. Old Bulgarian art – sculpture, iconography, miniature painting.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course ends with a written exam.

SB17339 Ancient History

ECTS credits: 7 **Weekly classes:** 2lec+2sem+0labs+0ps+2cw
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The objective of the course is to introduce the students to the essential issues about the formation of the first human civilizations, the evolutions of the societies of the Ancient East, Ancient Greece, Ancient Rome, Ancient Thrace. The mechanisms of power typical for the different ancient states are presented. The course examines and summarizes the immense variety of forms of government, religious and philosophic doctrines and cultural achievements of ancient societies. Students are familiarized with a great number of historical hypotheses and theories. The educational content is in accomplice with the subjects taught in the secondary school.

Course content:
Introduction 1. Ancient East: Ancient Egypt- old, middle, new kingdom- progress and culture. Mesopotamia: Sumer- Acadia and the old Babylon kingdom- the laws of Hammurabi. Assyria. Syria. Phoenicia. Judea, Persia. 2. Ancient Greece: Crete-Mycenian civilization. Ancient Greece- development during the periods. Athens and Sparta. Greek- Persian wars. Peloponnesian war. Macedonian hegemony in Greece. Alexander the Great and his way to Persia. The Hellenic countries and Hellenic culture. 3. Ancient Rome: periods, sources, historiography. Establishment and rise of the Ancient Rome- royal and republic period- internal and external politics. Punic wars. Principate and dominate.

Teaching and assessment:
The course is taught by lectures and seminars where there is oral and written control. During the semester students prepare a course work individually. Students sit a written exam. The final mark is based on the grades received during the continuous control made during the semester and the coursework.

SB17340 Medieval Bulgarian History

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: **Type of exam:**

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course is designed to acquaint students with: the basic problems of periodization and historiography of the Bulgarian Medieval period: essential problems of the institutional, economic, political and cultural development of the Bulgarian Medieval State. Students completing this course will be able to interpret in an independent way the historical events covered by this course.

Course content:
Periods, sources and historiography of the medieval Bulgarian state. Slavs. Proto-Bulgarians. Establishment of the Bulgarian state on the Balkans. Chan Tervel-the constructor. Political crisis in Bulgaria during 8th century. Bulgaria during the first half of the 9th century. Conversion to Christianity. The deed of St. St. Cyril and Methodius. Spiritual and political progress of Bulgaria during the kingdom of King Simeon. Formation of the Bulgarian nationality.

Teaching and assessment:
The course is taught in the form of lectures and seminars. During the classes there is oral and written control.

SB17341 General Medieval History

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: **Type of exam:**

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course examines the formation and development of contemporary societies, their national psychology, norms of behaviour, religious principles and cultural development during the period 5th – 12th century, also known as the medieval period. It looks at the role of the Christianity on forming the outlook of medieval people, the religious conflicts between the East and the West, the birth of the middle-class societies, the Renaissance as an underlying factor for a new way of thinking and contemporary achievements of the European society.

Course content: Crisis in the slave system and the birth of elements of feudal relations in the late Roman Empire. The Great migration of peoples and first barbarian states on the territory of the Western Roman Empire. The Franc state during the Merovings and Carolings. Establishing of feudal relations. Western and Central Europe in the period 9th – 11th century- France, Italy, Germany, England. The Slav peoples during the early medieval times- southern, western and eastern Slavs. Byzantium in the period 6th – 11th century. The Arabs and the Arabic invasions. Medieval cities. The crusades. France and England in the period 11th – 15th century. The hundred - year war. Germany and Italy in the period 11th – 15th century. The Hussite revolution wars. Poland in the period of the essential medieval times. Portugal and Spain during 11th – 15th century. Catholic Church and Western Europe in the period 11th – 15th century. Heretical teachings and movements in Western Europe. Medieval culture and ideology in Western Europe. Humanism and early Italian Renaissance. The Great geographic discoveries. The reformation and the Village war in Germany. The Reformation in Western Europe. The Reformation in Germany. Religious wars. The Dutch middle-class revolution. England and France in the age of the absolutism. Russia during the 17th century. The thirty – year - war in Europe.

Teaching and assessment:
The course is taught in the form of lectures and seminars. The attendance of all lections and seminary exercises is obligatory – the semester will be validated if students have attended classes regularly.

S00795 Bulgarian Folklore

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps+1cw

Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg

Abstract:
The course is the necessary basis for Bulgarian humanitarian science. The knowledge this course gives to students is related to the problems, aims and tasks of folklore science and to the representatives of the field in Bulgaria and abroad. It also gives information about the relationship of folklore to other courses as literary studies, ethnology, social and cultural anthropology, dialectology, sociology etc.

Course content: Emergence and development of folklore studies. Bulgarian folklore studies during the Renaissance. Bulgarian folklore after the Liberation. Contemporary problems of Bulgarian folklore studies. Bulgarian calendar and family celebrations. Ritual songs. Myth and folk-lore. Plastic folklore representations. Ritual songs. Myth and folklore. Bulgarian heroic epic. Bulgarian “haiduk” epic. Historical songs during the Renaissance. Mystifications and folklore. Folk ballads. Social, labour, love and humour songs. Folklore stories. Short folklore genres. Contemporary forms of folklore culture.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students sit a written exam at the end of the semester and defend the course work at the end of the semester. In order to facilitate the acquisition of the material when students work individually outside the classroom, the course offers an opportunity for students to do controlled field work.

SB17342 Thracology

ECTS credits: 1 **Weekly classes:** 1lec+0sem+0labs+0ps

Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The objective of the course is to introduce students to the essential issues related to the formation of the first human civilizations and the development of society in Ancient Thrace. The mechanisms of power typical for the different ancient states are presented. The educational content complies with the subjects taught in the secondary school.

Course content:
Thracology: sources and periodization. Ethnic origin of the Thracians. Development of the Thracian society during the Bronze and Iron Age – village life, material culture and way of life. The Adrianople Kingdom. Thracian Orphism. Thracian art.

Teaching and assessment:
The course is taught in the form of lectures. Regular attendance and active participation of students in classes is expected. At the end of the course students sit a written exam.

S00798 Old Bulgarian Literature

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturer:
Assoc. Prof. Todorka Yordanova Georgieva, MA, DPhil., Department of Philological and Natural Sciences, Silistra Branch
tel.: 086 / 821 521, E-mail: tgeorgieva@fs.uni-ruse.bg

Abstract:
The aim of the course is to enhance and systematize the knowledge of students on old Bulgarian literature as an essential part of the literary theory of Bulgaria. It focuses on the study of some of the most outstanding figures in Bulgarian literature in the period 9th to 18th century and of their works which are representative in the character of one of the oldest written works of literature in Europe.

Course content:
Character and specifics of Old Bulgarian literature. Periods of development. The role of the deed of St. Cyril and St. Methodius for the spiritual development of the Slavs. Kliment Ohridski. Konstantin Preslavski. Joan Exarch. Bogomil and anti Bogomil literature. Presviter Kozma Old Bulgarian literature during the Second Bulgarian Kingdom. Patriarch Euthimius. Grigoiriy Tsamblak. Old Bulgarian Literature in the period 15th – 18th century.

Teaching and assessment:
The course is delivered in the form of lectures and seminars.

S00804 English Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering

Lecturers:
Sr. Assist. Prof. Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Sr. Assist. Prof. Elitsa Dimitova Georgieva, MA, PhD, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: edgeorgieva@uni-ruse.bg

Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they already have from school and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language.

Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel, people and their life in big cities, life styles, culture, vocabulary related to art and religion, summarizing texts, writing reports and articles.

Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Tasks involving comparing different historical websites are envisaged; they also aim at developing students' skills to plan and design teaching materials. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

S00807 Russian Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Sr. Lecturer Iliyana Gancheva Benina, MA, PhD, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: ibenina@uni-ruse.bg
Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they already have from school and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel, people and their life in big cities, life styles, culture, vocabulary related to art and religion, summarising texts, writing reports and articles.
Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Tasks involving comparing different historical websites are envisaged; they also aim at developing students' skills to plan and design teaching materials. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

SB151288 Classical Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assist. Prof. Maya Stefanova Stoyanova, MA, Department of Public Law
tel.: 0886 821 283, E-mail: mastoyanova@uni-ruse.bg
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Abstract:
Latin is one of the two classical languages which serve as a basis for European culture and civilization. Knowledge of Latin is a necessary prerequisite for the successful acquisition of general linguistics and for the better understanding of linguistic facts in every branch of linguistics. The course provides the basis for the study of terms and the methodological basis for the learning of linguistic and historic courses. The main aim of the course is to introduce students to the grammatical and vocabulary system of Latin and to develop students' skills for reading and translation of texts with a high degree of difficulty.
Course content:
The course includes: Phonetics and Pronunciation rules; Morphology – case system, declension of nouns and adjectives; cases and gerundive forms. Syntactical rules and peculiarities; terminology – preferred forms and constructions
Teaching and assessment:
The general methodology has been appropriated for the students in Bulgarian language and History. The final grade is based upon the result from a written testing as well as their participation during classes.

SB11845 Introduction to Literary Theory

ECTS credits: 5 **Weekly classes:** 2lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** oral
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course acquaints students with the methodological problems of literary theory. It presents the theoretical bases of the different literary schools and approaches and motivates students to develop an active and positive attitude towards literature as a narrative art and specific social system.
Course content:
Literature as narrative art. Character, subject of study, branches and tasks of literary theory. Methodological problems of modern literary theory. Features of literary communication. Literary text and literary discourse. Language and style of fiction. Classification of style patterns. Poetical phonetics. Poetic imagery. Rhetoric – Poetry – Stylistics. Poetical syntax. Myth – folklore – literature. Literary forms and styles. Features of the lyrical work. Features of fiction. Features of drama. Strategies for analysis and approaches to interpretation.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students write a course work on a topic which is distributed in advance. In the course work they demonstrate their theoretical knowledge and analytical skills as well as skills for the interpretation of literary texts.
The course includes three control tests on the material taught. At the end there is a written exam.

S00801 Old Bulgarian Language

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Todorka Yordanova Georgieva, MA, DPhil., Department of Philological and Natural Sciences, Silistra Branch
tel.: 086 / 821 521, E-mail: tgeorgieva@fs.uni-ruse.bg
Abstract:
Old Bulgarian Language is the first course included in the module Historical Linguistics. The aim of the course is to acquaint students with the phonetic system, grammatical structure and lexical content of old Bulgarian language – the earliest written Slavonic language.
Course content:
The educational material included in the course raises students' awareness of the importance of Old Bulgarian language for the development of Bulgarian and Slavonic Studies, of the origin of the old Bulgarian alphabet and old Bulgarian literary language, of the work of St. Constantine-Cyril and Methodius, of the contents and character of the Old Bulgarian alphabets, of the language of the parched books and sheets of paper which have come through the ages. The course introduces students to the phonetical, morphological and syntactical structure as well as the lexical content of Old Bulgarian Language.
Teaching and assessment:
The course is taught in the form of lectures and seminars supplemented with work on Old Bulgarian language written texts. The aim of the course is to lay the foundations of students' knowledge about Bulgarian language by introducing them to the fundamental aspects in the development of the phonetic systems and grammatical structure originating in Proto-Slavic language, with the phonetics and grammar of Old Bulgarian. The syntactical and lexical phenomena of Old Bulgarian Language are examined by means of reading comprehension and analysis of written texts.

S00788 Classical and Western European Literature

ECTS credits: 3 **Weekly classes: 1**lec+1sem+0labs+0ps+1ca
Assessment: **Type of exam:**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumyana Dimitrova Lebedova, PhD, Department of Philology and Natural Sciences, Silistra Branch, tel.: 082 / 888 815, E-mail: rlebedova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course plays an essential role in the development of the literary knowledge and skills of the students from the degree programme *Bulgarian Language and History.* It aims at introducing students to the literary aesthetics and conventions of the literary schools in Ancient Greece and Rome and in the Western European countries: Italy, France, England, Spain and Germany.
Course content:
The lectures on classical literature deal with the pre-Hellenistic and Hellenistic periods of ancient Greek literature and the early and classic periods of the Roman literature, while the lectures on Western European literature follow the main periods, tendencies and schools in the literature of Western Europe to the end of the 20th century.
Teaching and assessment:
The syllabus stresses upon the cognitive elements that contribute to comprehending the inception of the artistic phenomena as part of the development of the classical and West European literary process. The course is taught through lectures and seminars. The seminars concentrate upon the interpretation of literary works by using different approaches: semiotic, structural, religious and mythical, etc. Students write a course assignment on a topic given in advance by the course tutor. The course work is defended by the students.

SB16554 Phonetics and Lexicology

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Department of Bulgarian Language, Literature Art, tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Maria Sevdalinova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 664, E-mail: mstefanova@uni-ruse.bg
Abstract:
The course aims at introducing students to: 1) the science of speech which integrates knowledge of the processes of speech production and perception, acoustic and articulatory characteristics of speech sounds and the supersegmental structure of the speech flow; 2) the science of the lexical system of Bulgarian language by revealing the gnoseological, semiological and semantic features of lexical units, their systematic relations and usage in the different styles of speech; 3) methods and approaches to phonetic and lexical analysis. The course is closely linked to the following courses: *Linguistics, Morphology* and *Syntax*.
Course content:
Object of study and tasks of Phonetics and Lexicology. Acoustic, articulatory and functional aspects of the sound. Segmental and supersegmental system of Modern Bulgarian language. Nature and characteristics of the word as a linguistic sign. Semantic variety of the word. Systematic lexical relations. Characteristics of Bulgarian vocabulary. Structure, classification and characteristics of set phrases. Subject and tasks of Bulgarian Lexicography.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Two continuous assessment tests are administered during the semester. The final exam is written.

SB17343 Medieval Bulgarian History

ECTS credits: 5 **Weekly classes:** 1lec+2sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course is designed to acquaint students with: the basic problems of periodization and historiography of the Bulgarian Medieval period: essential problems of the institutional, economic, political and cultural development of the Bulgarian Medieval State. Students completing this course will be able to interpret in an independent way the historical events covered by this course.
Course content:
Periods, sources and historiography of the medieval Bulgarian state. Slavs. Proto-Bulgarians. Establishment of the Bulgarian state on the Balkans. Chan Tervel-the constructor. Political crisis in Bulgaria during 8th century. Bulgaria during the first half of the 9th century. Conversion to Christianity. The deed of St. St. Cyril and Methodius. Spiritual and political progress of Bulgaria during the kingdom of King Simeon. Formation of the Bulgarian nationality.
Teaching and assessment:
The course is taught by lectures and seminars. The attendance of all lections and seminars is obligatory. The term will be validated only if the classes have been attended regularly and if the students have participated in the educational process. The course ends with a written exam.

SB17344 General Medieval History

ECTS credits: 3 **Weekly classes:** 1lec+asem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
One of the voluminous historical disciplines with a rich scope which examines the actual birth and development of modern societies, their folk psychology, norms of behavior, religious principles and cultural phenomena during the period of the 5th - 17th centuries, known as the Middle Ages.
Course content: Crisis in the slave system and the birth of elements of feudal relations in the late Roman Empire. The Great migration of peoples and first barbarian states on the territory of the Western Roman Empire. The Franc state during the Merovings and Carolings. Establishing of feudal relations. Western and Central Europe in the period 9th – 11th century- France, Italy, Germany, England. The Slav peoples during the early medieval times- southern, western and eastern Slavs. Byzantium in the period 6th – 11th century. The Arabs and the Arabic invasions. Medieval cities. The crusades. France and England in the period 11th – 15th century. The hundred - year war. Germany and Italy in the period 11th – 15th century. The Hussite revolution wars. Poland in the period of the essential medieval times. Portugal and Spain during 11th – 15th century. Catholic Church and Western Europe in the period 11th – 15th century. Heretical teachings and movements in Western Europe. Medieval culture and ideology in Western Europe. Humanism and early Italian Renaissance. The Great geographic discoveries. The reformation and the Village war in Germany. The Reformation in Western Europe. The Reformation in Germany. Religious wars. The Dutch middle-class revolution. England and France in the age of the absolutism. Russia during the 17th century. The thirty – year - war in Europe.
Teaching and assessment:
The course is taught in the form of lectures and seminars. The attendance of all lections and seminary exercises is obligatory – the semester will be validated if students have attended classes regularly.

SB15200 Information Technologies in Education and Work in a Digital Environment1

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0lab+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The course objective is students to get thorough knowledge and skills for operating with WORD, EXCEL and PowerPoint programs. The pre-requisite for attending the course is the possession of elementary computer literacy as a basis for gaining further knowledge and skills for using computer techniques. Students get familiar with Microsoft Office applications and learn how to combine the data created with them.
Course content:
Text processing: Create new document and format. Styles and Templates. Macros. Publishing of Word document in the Web. Searching and operation with styles and templates. Create templates and template applications.
Spread sheets: Create tables. Absolute links. Functions. Hyperlinks. Databases, sorting and filtering. *Presentations:* New presentation. Animation. Multimedia presentation. Operating with macros. Publishing of slides in the Web.
Teaching and assessment:
The course is conducted through practice sessions twice a week. The focus is laid on students' individual practical work and the development of complete projects. Students have to work out 3 tasks independently. The course ends with a continuous assessment mark. It is calculated as 10% of student's performance during the course and 30 % for each task result.

S00804 English Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Sr. Assist. Prof. Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Sr. Assist. Prof. Elitsa Dimitrova Georgieva, MA, PhD, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: edgeorgieva@uni-ruse.bg
Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they've acquired in the previous semester and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language. The development of speaking and reading skills are specifically targeted.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel; people and their life in big cities; life styles; culture; vocabulary related to linguistics; making presentations.
Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

S00807 Russian Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Sr. Assist. Prof. Iliyana Gancheva Benina, MA, PhD, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: ibenina@uni-ruse.bg
Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they've acquired in the previous semester and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language. The development of speaking and reading skills are specifically targeted.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel; people and their life in big cities; life styles; culture; vocabulary related to linguistics; making presentations.
Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

S02594 Classical and Western European Literature

ECTS credits: 3 **Weekly classes:** lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumyana Dimitrova Lebedova, PhD, Department of Philology and Natural Sciences, Silistra Branch, tel.: 082 / 888 815, E-mail: rlebedova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course in Classical and Western European Literature plays an essential role in the development of the literary knowledge and skills of the students from the degree programme "Bulgarian Language and History". It aims at introducing students to the literary aesthetics and conventions of the literary schools in the Western European countries: Italy, France, England, Spain and Germany.
Course content:
Lectures and seminars on West European literature follow the major periods, movements and schools in literature of Western Europe until the late 20th century: the Medieval literature, the Renaissance, Classicism, the Enlightenment, the Romanticism, the Realism, the Naturalism, the Symbolism and The Parnasizam.
Teaching and assessment:
The lectures and seminars are tailored to exercise literary-theoretical and historical-literary training of students. The training is conducted through course lectures and seminars. In seminars the focus is on interpretation of literary works, using different approaches: semiotic, structural, religious and mythical, etc. The course ends with a written exam. During the semester the students prepare individually and defend a course assignment on a specific topic given by the lecturer.

SB17110 Bulgarian Morphology

ECTS credits: 4 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The course complies with the recent developments of linguistics and provides a clear idea of the basic principles of how language works, of the characteristic features of the communicative process and of the diversity of the important historical changes that have an effect on language.
Course content:
The word as subject of study of morphology. Parts of speech. Verb tenses. Aspect of the verb. Participles. The Present participle. The Adverb. The Conjunctions. The Particles. The Interjection.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course is considered valid when students have attended classes regularly, participated actively in the learning process and have had positive results on the two tests.
At the end of the semester there is a written exam, which includes also a practical task. Students receive a positive grade only if their answers on the three tasks are correct.

S02596 Bulgarian Revival Literature

ECTS credits: 5 **Weekly classes:** 2lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The history of Bulgarian Renaissance literature comprises aesthetic ideas, phenomena and events that are characteristic of the artistic consciousness and spiritual life of Bulgarians from the middle of the 18th century until the 1870s – 1880s. The course aims to outline the main points, stages and work of the more significant authors of the period that have contributed to the development of national aesthetics from Paisiy to Hristo Botev.
Course content:
Bulgarian Renaissance Literature. The Enlightenment period – from the beginning of the 40s of the 19th century. Enlightenment literature of the 1820s – 1840s. Genre and style tendencies of the literary process up to the 1840s. Beginning and development of the new Bulgarian poetry. Bulgarian Renaissance drama. State and characteristics of development of the periodic press during the Renaissance. Folklore and personal poetry during the Renaissance.
Teaching and assessment:
The course is delivered in two forms – lectures and seminars. The seminars follow the topics covered in the lectures. It is required from students to make use of the knowledge acquired in other courses on which they have already had an exam (Literary Theory, Classical and Western-European literature, Bulgarian Folklore, etc.).
The form of assessment is written exam at the end of the semester and defence of a course work prepared in advance.

SB17345 Archive and Museum Studies

ECTS credits: 4 **Weekly classes:**1lec+2sem+0labs+0ps+0,5se
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The objective of the course is to train the students to gather, examine and systematize historical documents and objects and to prepare them for creative scientific and exploratory work. The basic tasks of the course are: 1. To show the unity and inseparability of the documentary and material heritage and the development of the Bulgarian society; 2. To study the stages for processing and preserving of documents and museum exhibits; 3. To reveal the ways of popularising of archive and museum activities.
Course content:
Knowledge of archives as a science – subject and periods. Documenting the history in the period 681- 1878. Bulgarian legislation and archive museum deed in the end of 19th century. Scientific technical elaboration of the archive and museum founds. Expertise of the scientific and practical value of the documents. Systematizing of archives and documents. Search and selection of the documents for publishing.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students are expected to attend classes regularly and participate actively in seminars. Students' knowledge is assessed by means of continuous assessment tests (at least two). The seminal essay includes the study of documents on a given topic in the State archive in Ruse and the Regional Museum of History – Ruse. Some of the research papers are edited and prepared for publishing. The volume of the seminal essay is about 10 – 12 standard printed pages.

SB17346 History of the Byzantine Empire

ECTS credits: 5 **Weekly classes:** 1lec+2sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course aims at introducing students to the political, economic, material and spiritual culture of one of the biggest medieval empires whose existence is closely linked to the birth and development of the Bulgarian state on the Balkans. The history of Byzantium reflects not only the peculiarities of this region; it is also a bridge between the East and the West, concentrating in itself the collision of two worldwide religions – Christianity and Islam.
Course content:
Byzantine studies as a science. State and administrative structure of Byzantium. Christianity in the Byzantine Empire. Byzantium in the period 4th – 6th century. The Invasion of the Bulgarians of Asparuch. The time of Lion the Sixth and relations with Simeon. The Lekapenos and Konstantin Porphyrogennetos (Konstantin VII). The first Comines – crusades, Eastern policy. The decay of Byzantium during the time of the Angels. Fourth crusade – the fall of Constantinople. Restoring of the Byzantium empire. Turkish invasion on the Balkans and the doom of Byzantium. Cultural heritance of Byzantium.
Teaching and assessment:
Students are introduced to the theoretical background of the subject matter. Individual work is also included in the program – writing of a course assignment.The course is delivered in the form of lectures and seminars. Students are expected to attend classes regularly and participate actively in the seminars. The course ends with a written exam.

SB17347 History of the Balkan People

ECTS credits: 3 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: **Type of exam:**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the detailed history of the people on the Balkans in the period from 14th century until today on the background of the general Bulgarian history. The course focuses on establishing the shared and specific phenomena in the history of the Balkan people. The contents are divided in three units covering the following periods: 1. From the 14th century until the Berlin Congress; 2. Form 1878 until the First World War (WWI) 3. Social, economic, political and cultural development after the WWI.
Course content:
The term “Balkans: as a term in historic courses. Establishment of the Ottoman state. The Ottoman invasion in the Balkans. Religious discrepancies Islam –Christianity. Decline of the Turkish Empire. Greece under the Ottoman rule and the Greek Revival. The Greek National Revolution. The Berlin Treaty and the Balkan people. The Balkans at the end of the 19th and the beginning of the 20th centuries. The Versailles system of peace treaties and the Balkans. Balkan states between the two World Wars. World War Two and the Balkan people.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course of lectures is read by an associate professor or a tutor with a PhD degree. Students’ attendance and active participation in seminars is obligatory. The research paper is based on published sources and research publications on Bulgarian history. The volume of the paper is about 10 – 12 standard printed pages.

SB17348 Bulgarian History 15th – 19th Century

ECTS credits: 3 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: **Type of exam:**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course plays a significant role in the system of the professional and pedagogical development of the future teachers. The course of lectures comprises of two units: 1. Economic status, political status and armed riots and culture of the Bulgarian people in the period 15th – 17th c. and 2. The Bulgarian Revival – the climax of economic development, national identity and he fights for national liberation.
Course content:
Sources. Periods. Turkish military feudal system in the Bulgarian lands. Bulgarian people and the Turkish internal politics. Periods, sources, historiography and character of the Bulgarian Renaissance. Struggle for liberation of the Bulgarians at the end of 18th – 19th c. Struggle for church independence. Rebels and national liberating movement during the first half of 19th century and in the period of the Crimean war. Organised national liberation struggle. The liberation of Bulgaria.
Teaching and assessment:
The course is deliverer in the form of lectures and seminars in two semesters. Students have to attend classes and participate actively in them. Continuous assessments tests (at least two in a semester) are given at defined intervals. If students have not attended classes and they don’t have an excusable reason for that, their semester is not validated.

S00804 English Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Sr. Assist. Prof. Ivelina Dimitrova Petrova, MA, Department of Foreign Languages
tel.: 082 / 888 803, E-mail: ipetrova@uni-ruse.bg
Sr. Assist. Prof. Elitsa Dimitrova Georgieva, MA, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: edgeorgieva@uni-ruse.bg
Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they've acquired in the previous semesters and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language. The skills of writing and reading are specifically targeted in the course.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel, people and their life in big cities, life styles, culture, vocabulary related to methodology, writing different types of essays.
Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups. Students' knowledge is assessed on the basis of the results from two tests administered during the semester. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

S00807 Russian Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Sr. Assist. Prof. Iliyana Gancheva Benina, MA, PhD, Department of Foreign Languages
tel.: 082 / 888 815, E-mail: ibenina@uni-ruse.bg
Abstract:
The course aims at improving students' communicative competence in the relevant foreign language by building upon the knowledge they've acquired in the previous semesters and giving them language resources they will use in their future professions. Emphasis is placed on expanding students' awareness and usage of different grammatical and lexical resources and acquainting the students with the stylistic features of academic language. The skills of writing and reading are specifically targeted in the course.
Course content:
The course contains a wide range of topics, related to the course materials used and the interests and future communicative needs of the students. These include: travel, people and their life in big cities, life styles, culture, vocabulary related to methodology, writing different types of essays.
Teaching and assessment:
The course is taught through practical classes. All language skills are developed in parallel. Learners' autonomy is encouraged by discussing different methods and techniques of foreign language learning. Personal involvement and motivation are encouraged by means of a variety of relevant and interesting tasks and techniques such as group work with spokespersons and posters, listening with note taking and follow-ups. Students' knowledge is assessed on the basis of the results from two tests administered during the semester. The semester is validated provided that students have attended classes regularly and have been actively involved in the learning process.

S02602 Children and Teenage Literature

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturer:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg

Abstract:
The course aims at introducing students to the specifics of children and teenage literature and its social and cultural nature. The focus of study is on writers from classical Bulgarian and foreign literature. The course has a direct link to the study of the theory of literature and methods for teaching Bulgarian language and literature.

Course content:
Essence and specifics of Children and Teenage Literature. Folklore and children literature. The fairy tale. Roots of Children and Teenage Literature in the Classical and Medieval periods. The heritage of the Renaissance and the Enlightenment. The literature of “nonsense”. Children and Teenage Literature and the recognition of Realism – Charles Dickens, Mark Twain. The teenage adventure novel. Renaissance literature for children. Children poetry after the Liberation. Bulgarian children’s literature between the First and Second World War. Contemporary poetry and prose for children.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course is considered valid when students have attended the lectures and seminars regularly and have also submitted a course assignment. The exam involves students answering two questions – one from the field of world literature for children and teenagers and the other – from the field of Bulgarian literature for children and teenagers.

S02603 Modern Bulgarian Literature

ECTS credits: 3 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Rumyana Dimitrova Lebedova, PhD, Department of Philology and Natural Sciences, Silistra Branch, tel.: 082 / 888 815, E-mail: rlebedova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg

Abstract:
The course of lectures presents the development of the ideological and thematic searching in the national literature during the period. It traces the change of styles, aesthetic, philosophic, conceptual and ideological dominants in the Bulgarian literature from the year of 1978 until the 1920s. It examines the classical interpretations of the literary process, the synchronous critical image of the studied period and introduces the latest interpretations of Bulgarian literary tradition.

Course content:
Ivan Vazov – inseparable part of Bulgaria, classicist of Bulgarian literature. Constantin Velichkov. Zachary Stoyanov. Aleko Konstantinov. Pencho Slaveikov. Elin Pelin. Dimcho Debelianov. Peyo Yavorov. Kiril Christov.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course is considered valid only when students have completed the tasks given at the seminars and have attended regularly the seminars and lectures.

SB16555 Bulgarian Syntax

ECTS credits: 5 **Weekly classes:** 1lec+2sem+0labs+0ps+aca

Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg

Abstract:
The course complies with the recent developments of linguistics and provides a clear idea of the basic principles of how language works, of the characteristic features of the communicative process and of the diversity of the important historical changes that have an effect on language.

Course content:
Syntax and as a science and its subject. Word combinations. Classification of simple sentences. Main parts of the simple sentence. Secondary parts of two-compound sentences. Parenthetical syntax units. Complex sentences. The complex sentence – types. The Complex compound sentences – types. Multicomponent complex sentences.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. The students have to prepare an individual task – a course assignment. The course is considered valid when students have attended classes regularly, participated actively in the learning process and have had positive results on the two tests as well as after presenting their executive summaries on a topic of interest and outstanding importance on Bulgarian Syntax. At the end of the semester there is a written exam, which includes also a practical task.

SB16556 Stylistics of Bulgarian Language

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+1ps

Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg

Abstract:
The course main aims are: 1. To provide students with the knowledge of the stylistic potential of linguistic units realized as sign entities in the system of language and in different types of texts; 2. To examine the features of functional styles in Bulgarian literary language; 3. To reveal the character of the text as a supreme linguistic unit with a real communicative value; 4. To clarify the problems connected to the structuring of a text.

Course content:
Common theoretical problems of stylistics as branch of linguistics. Sign communication and style. Model of the communicative process. Features of the linguistic text. Meaning of linguistic texts. Communicative register and semantic structures of relation. Linguistic mechanisms and media for text collocation. Text stylistics.

Teaching and assessment:
The course is delivered in the form of a theoretic set of lectures and practical seminars. Two control tests are administered.

S02601 Pedagogical Psychology

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education

Lecturers:
Prof. Stoyko Vanchev Ivanov, MA, DPed., Department of Pedagogy
tel.: 082 / 888 544, E-mail: svivanov@uni-ruse.bg
Petya Georgieva Cheshmedzhieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: pcheshmedzhieva@uni-ruse.bg

Abstract:
The subject aims at introducing students to the psychological mechanisms and regularities of the educational activities in the educational process.

Course content:
Students will study the new functions of psychological knowledge. They will acquire the latest methods for psycho-diagnosis during game and learning activities, the ways of motivating the teaching/learning process, the psychological conditions underlying the effective educational process. Special attention is paid to the process of forming children's personality through the basic educational activities in educational process.

Teaching and assessment:
The course is taught by using a combination of lectures and seminar classes (tests, methods of psycho-diagnosis).

SB17349 History of the Balkan People

ECTS credits: 4
Weekly classes: 1lec+1sem+0labs+0ps+1ca
Assessment: exam
Type of exam: written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The aim of the course is to acquaint the students with the history of the people on the Balkans in the period from 14th century until today on the background of the general Bulgarian history. The course focuses on establishing the shared and specific phenomena in the history of the Balkan people. The contents are divided in three units covering the following periods: 1. From the 14th century until the Berlin Congress; 2. Form 1878 until the First World War (WWI) 3. Social, economic, political and cultural development after the WWI.

Course content:
The term "Balkans" as a term in historic courses. Establishment of the Ottoman state. The Ottoman invasion in the Balkans. Decline of the Turkish Empire. The Balkans at the end of the 19th and the beginning of the 20th centuries. The Versailles system of peace treaties and the Balkans. Balkan states between the two World Wars. The Balkans in the system of international relations. World War Two and the Balkan people.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. The attendance of all lectures and seminars is obligatory. The semester is validated if students have attended classes regularly. The course ends with a written exam.
The course assignment is based on published sources and research publications on Bulgarian history. Every two weeks the course tutor checks the progress of the course assignment. The volume of the essay should be more than 12 – 15 standard printed pages.

SB17369 Bulgarian History 15th – 19th Century

ECTS credits: 4 Weekly classes: 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course plays a significant role in the system of the professional and pedagogical development of the future teachers. The course of lectures comprises of two units: 1) Economic status, political status and armed riots and culture of the Bulgarian people in the period 15th – 17th c. and 2) The Bulgarian Revival – the climax of economic development, national identity and he fights for national liberation.

Course content:
Turkish military feudal system in the Bulgarian lands. Periods, sources, historiography and character of the Bulgarian Renaissance. Struggle for liberation of the Bulgarians at the end of 18th – 19th c. Struggle for church independence. Rebels and national liberating movement during the first half of 19th century and in the period of the Crimean war. Organised national liberation struggle. The liberation of Bulgaria.

Teaching and assessment:
The course is delivered in the form of lectures and seminars in two semesters. Students have to attend classes and participate actively in them. If students have not attended classes and they don't have an excusable reason for that, their semester is not validated. The course ends with a written exam. The course includes the writing of a course assignment. The grade on the course assignment is included in the final grade, i.e. the exam grade is an arithmetical mean of the course assignment and the exam grade.

SB17351 Ethnology

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course aims at introducing students to the basic theoretical problems of ethnology. Basic problems related to the interpretation of human societies from the ethnologic point of view are examined, as well as the ethnological interpretation of man and his role in the annual cycle of rituals, life cycle, etc.

Course content:
Ethnology as a science. The human, human communities and societies in the system of science. Ethnics and ethnic development processes. Space and time in ethnic studies. Kinship. Systems of kinship. The annual cycle of rituals. Life cycle and human development.

Teaching and assessment:
The course is delivered in the form of lectures which present the recent developments in the field.
Students are introduced to the theoretical background of the learning material. Individual work is also included in the course. The topic of individual work is given during the first week of the semester and the paper has to be submitted by the end of the semester.

SB17352 Cultural and Historic Heritage

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course objective is to introduce students to the core problems of the human civilization formed on the Bulgarian lands, as well as to the society evolution from ancient times to nowadays. The course gives an in depth and clear notion about numerous artifacts – antique, from the middle ages, the Bulgarian national revival to modern times.

Course contents:
The Bulgarian lands in the Stone Age. The Thracians and the Thracian culture historical heritage. The First Bulgarian state – the Golden Age of the Bulgarian culture. The Second Bulgarian state – urban architecture, church constaction; The Turnovo literary school. Late middle age – literary activities and fist printed books. The modern time – sculptures and painting; enlightening activities. Nature sights and resorts.

Teaching and assessment:
The teaching process is conducted by lectures and seminars. Students have two tests during the term. The term is validated if they have regularly attended the lecture classes and if they have satisfactorily done the assigned tasks.
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SB17354 History of Religions

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course examines the issues related to the emergence of the first religious beliefs and ideas in antiquity (animism, totemism, paganism), the development of whole religious and philosophic doctrines (Hinduism, Zoroastrism, etc), and the rise of the world religions (Buddhism, Judaism, Christianity, Islam). The course pinpoints the common elements of the different religious beliefs, elements that underline the idea of universality of religious thought and of the preached moral values.

Course content:
Religion as a spiritual necessity. What is religion and what is religious belief? Emergence of the religious idea. Animism and Totemism. Development of religious philosophy (pantheism, dualism, monotheism). Hinduism. Buddhism. Mazdaism. Judaism. The Decalogue. Appearance and recognition of Christianity. Christianity as a state religion. The church as a religious institution. Christian heresy. Islam – the “borrowed” religion.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. Lecture and seminar attendance is obligatory. The course is considered valid if students have attended classes regularly and have participated in them. Students do two tests during the semester.

SB17370 History of the Ethnic and Religious Communities in Bulgaria

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course presents the religious and cultural differences of the country's ethnic and religious communities. It specifies the specifics of working with the various ethnic and religious groups in our country and the interaction between them.
Course content:
The course content focuses on clarifying specific concepts and examining the main theories of cultural differentiation. Specific specifics of dialogue in a multi-ethnic environment and multicultural education are also examined.
Teaching and assessment:
The training is conducted in the form of lectures and seminar exercises, for the visualization of which multimedia means are used. Classes are compulsory for students. Student ID cards are verified at the end of the semester during regular class visits. The training ends with an ongoing assessment on major issues from the curriculum

SB17353 Regional Studies

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
Students receive scientific theoretical, methodological and practical knowledge in all areas of the Regional Studies activities. They are acquainted with the methods of searching, processing, systematizing and preserving the materials and documents about the past of their home region. Students completing this course will be able to work successfully in the future as teachers, to be actively engaged in the organization of historical and ethnographic museum school exhibition collections, to write the history of the school or the settlement they live or work in.
Course content:
Theoretical aspects of Regional Studies, tasks and methods. Connection of the course with special sciences. Regional Studies research of different periods, etc.
Teaching and assessment:
The course is delivered with the help of visual materials, which developed the practical skills and the habits necessary for the critical evaluation of regional studies materials.

SB17355 Bulgarian Constitutions

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course aims to acquaint students with the basic provisions of the Bulgarian constitutions of 1879. to date, as well as with the proposed constitutional projects in the same period. In this way, the students are given the opportunity to follow the development of the democratic principles of the Bulgarian society, as well as the changes that occurred in the historical process in the political situation in the country.

Course content:
The Tarnovo Constitution, the constitutions of the People's Republic of Bulgaria from 1947 and 1971, the 1991 Constitution of the Republic of Bulgaria

Teaching and assessment:
Classes are held in the form of lectures and seminar exercises. Students are required to attend regularly and actively participate in seminar exercises and lectures. During the semester, at least two tests are done, on the basis of which the teacher forms the final grade at the end of the semester.

SB14715 Modern Bulgarian Literature

ECTS credits: 4 **Weekly classes:** 1lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Rumyana Dimitrova Lebedova, PhD, Department of Philology and Natural Sciences, Silistra Branch, tel.: 082 / 888 815, E-mail: rlebedova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg

Abstract:
The course of lectures presents the development of the ideological and thematic quest of the national literature during the period. It traces the change of styles, aesthetic, philosophic, conceptual and ideological dominants in the Bulgarian literature from the year of 1978 until the 1920s. The course presents the classical interpretations of the literary process, the synchronous critical image of the studied period and introduces the latest interpretations of Bulgarian literary tradition.

Course content:
Ivan Vazov – inseparable part of Bulgaria, classicist of Bulgarian literature. Constantin Velichkov. Zachary Stoyanov. Aleko Konstantinov. Pencho Slaveikov. Elin Pelin. Dimcho Debelianov. Peyo Yavorov. Kiril Christov.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. Every student has to write a course assignment in which they interpret a piece of work from the authors included in the syllabus.
The course is considered valid only if students have completed the tasks given at the seminars and have attended regularly the seminars and lectures.
The course ends with a written exam.

SB14716 Russian Literature

ECTS credits: 4 **Weekly classes:** 1lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The main aim of the course is to present the rich creativity of the most outstanding representatives of Russian literature who have essential contribution to the world literary heritage. The thematic framework of the course includes a selection of Russian classicists as well as contemporary authors. The period examined is 19th and 20th century. The interpretation of literary works of the selected authors is done in the context of the corresponding literary tendencies which are characteristic of the given period.
Course content:
Introduction to Russian literature. Periods of Russian literature from the 19th century and the beginning of the 20th century. The Russian literature at the end of the 19th century and the beginning of 20th century. Russian modernism: symbolism, acmeism, futurism. Russian prose at the beginning of the 20th century. The Emigration prose (Vladimir Nabokov).
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course is considered valid only if students have completed the tasks given at the seminars and have attended classes regularly. Students also have to write individually a course assignment.

S02611 Pedagogy

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: lradoslavova@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The course is designed to introduce students to the basic theoretical fundamentals and main practical methods for putting into practice the educational and upbringing processes in the contemporary secondary school system.
Course content:
Common problems of the pedagogical science. Basic pedagogical concepts. Theory of upbringing – principles and methods of instruction. Theory of education (didactics) – principles of education, methods of education, forms of education, problem and programmed education, differentiation and individualization of education and basic features of the teacher's profession.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The students sit an exam at the end of the term.

SB14538 Inclusive Education

ECTS credits: 3 **Weekly classes:** 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 219, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.

SB15587 Culture of Speech

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The course is designed to help students improve their written and oral speech by acquiring the norms of Modern Bulgarian and the speech etiquette; to learn how and be able to write business letters and documents; to gain an insight on the different type of genre models, standards and requirements for writing scientific reports, articles, scientific announcements, treatises, etc.
Course content:
Culture of speech and society. Conditions for speech activity. Types of communicative spheres. Problems of the Bulgarian speech etiquette: addressing the listener; personal nouns and vocative forms; the form of polite address, third person forms and speech etiquette; holidays and festivities and etiquette. Enrichment of speech culture: literary pronunciation and orthography, contemporary Bulgarian punctuation, etc. Writing business letters. Delivering public speech.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The lectures and the seminars are taught in parallel and the main linguistic problems are illustrated by selected examples, tables, diagrams on OHP or lantern slides. The students prepare a course work which includes the writing of a formal address or congratulatory letter, CV, records of proceedings, contract, letter of intent, etc.

S02615 Modern General History – Part 1

ECTS credits: 5 **Weekly classes:** 2lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course examines historical events from the middle of the 17th till the beginning of the 20th century. The wide range of facts and events makes it possible to follow the historical process in its completeness, to draw the lines of the relations between people and society and to form an awareness about a contemporary civil behaviour.
Course content:
English middle-class revolution; Absolutism in France, Germany, Austria. The creation of USA. French revolution from the end of 18th century. France in the period of consuls and the empire; The Vienna congress and the Sacred alliance; Restoration in France and the July revolution from the 1830; The revolutions in Europe 1848 – 1849; The Civil war in the USA; Unity of Germany and Italy; Europe, Russia and the USA at the end of the 19th century. Austro-Hungarian Empire at the end of 19th century. International relations. First World War.
Teaching and assessment:
The course employs different types of learning experience. Lectures provide the theoretical background on the main topics included in the syllabus. The exam involves answering two questions from the course of lectures supplemented, if necessary, with more theoretical or practical questions. The aim of the course assignment is to introduce students to scientific research publications on a specific problem, to enrich their knowledge about the historic development. Thus, students acquire the necessary understanding for the essence of the historic processes and get to know the dynamics of international relations.

S02617 Dialectology

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The course's main objective is to acquaint students with the dialectological differentiation based on geographical and linguistic principles. The students get to know the relation between the Bulgarian literary language and Bulgarian dialects, as well as with the regional written forms of Bulgarian. Apart from these they are also being taught the methodology of contemporary dialect research.
Course content:
The science of dialectology. Basic terms and notions in dialectology. The formation of Bulgarian dialects. The Bulgarian language among other Slavonic and Balkan languages. Dialectological differentiation of Bulgarian. Character of Bulgarian dialectal differentiation. Teaching Bulgarian in dialect environment. Social dialects. History of Bulgarian dialectology
Teaching and assessment:
The course consists of a theoretical series of lectures and seminars. The semester is validated according to students' attendance of the lectures, the participation in the seminars.

S02618 Phraseology and Lingo-Cultural Studies

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Abstract:
The course aims to enrich the knowledge of students about the different aspects of contemporary research on phraseology – structural and semantic, pragmatic and linguo-cultural. It will also contribute to the development of students' skills to analyze, reach a conclusion and summarize as well as to conduct small scale research on the basis of the acquired skills for working with specific linguistic materials.
Course content:
Characteristic Features of the Phraseological Units (PU), Semantic and Structural Classification of the Phraseological Units, Origin, Systematic Relations of the Phraseological Units, The Phraseological Units from the Perspective of Lexemes, Meaning and Form of the Phraseological Units, Thematic Groups, Stylistic Characteristics and Stylistic Functions of the Phraseological Units, National and Cultural Specifics of the Phraseological Units.
Teaching and assessment:
The course of lectures presents the global topics, while the seminars establish the basic phraseological terms and phenomena through their use in productive tasks. The aim is to facilitate the development of the awareness of students – the future secondary school teachers of Bulgarian language and literature – for the phraseological richness of Bulgarian language and the specific national characteristics and views reflected in it.

SB16856 Aspects of the Linguistic Personality of the Modern Bulgarian

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The elective course of lectures and seminars takes place in the fifth semester of the *Bulgarian language and history* Bachelor Programme. It aims to develop students' knowledge of the specific characteristics and structure of the linguistic personality. The course analyses the typology of the different linguistic personalities and places an emphasis on the effect which Internet and social media have on reading, thinking, memory, linguistic consciousness and communicative behaviour of the contemporary man. It discusses also the problems and the perspectives in the development of the Bulgarian linguistic personality in the 21st century.
Course content:
Linguo-personology as a discipline studying the linguistic personality. The lingo-personology model for the identification of the linguistic personality. The dynamic structure of the linguistic personality in the age of digital technologies and social media. The Bulgarian linguistic personality of the 21st century. Contemporary language technologies and linguo-didactic characteristics of the linguistic personality. The language of the Bulgarian protester. The language of "digital" Bulgarian. The language of emotional Bulgarian personality. The language of Bulgarian media.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The course content is presented through oral presentations, the problem approach, commentaries, discussion as well as the inclusion of various means for visual presentation – figures, graphics, charts, models etc. Two tests are administered in the seminars. The final mark is formed as a result of the administered continuous assessment.

2620 Literary History

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Abstract:
The course presents to students the specificity of the history of literature. It combines the literary, cultural and historical approach. It attempts to outline the main tendencies and problems in the development of the literary process, to trace the emergence of literary history, to discuss the conceptual frameworks of leading literary historians.
Course content:
Literary History – Subject of Study, Aims and Tasks. Approaches to the Study of Literary History. The Role of the Literary Historian. The Problem "Self – Other" in the Bulgarian Literary History. Types of Literary Histories. The Bulgarian Literary Histories. Memoirs, Diaries and Records of Literary History. The Role of the Literary Periodicals in the Shaping of the History of Literature. Literary Debates – Part of the History of Literature. Literary Surveys as a Material of the History of Literature. About a Project: History of the Literary Life of Ruse.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The assessment is continuous and the final mark is given on the basis of students' level of completion of the tasks during the seminars.

SB16857 Trends in the Modernist Literature in Europe from the end of the 19th to the Middle of the 20th Century

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course is elective. Its aim is to develop and expand the literary knowledge of the students on the age of Modernism, paying attention to its specific manifestations in different European countries – Bulgaria, Russia and other Western European countries.
Course content:
The course is divided into two approximately equal parts – the first one gives knowledge on the main authors and characteristics of Modernist literature in other European countries – Great Britain, Germany, France, Austria – Hungary and Russia, while the second one surveys the Modernist movements and tendencies in Bulgarian literature.
Teaching and assessment:
The course is taught through seminars. The seminars concentrate upon the interpretation of literary works by using different approaches: semiotic, structural, mythical, etc. Students are given the assignment to prepare a paper on a specific topic, appointed by the lecturer.

SB16858 Bulgarian Literature form the 1960s to the 2020s

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Abstract:
The elective course presents contemporary Bulgarian literature from the second half of the 20th century to the present day. The lecture course combines the literary and cultural-historical approach.
The aim of training in the discipline is to highlight the main trends and problem areas in the development of the modern literary process.
Course content:
The story in the 1860s. The problem of dissidence. Bulgarian poetry of the 1970s, 1980s and 1990s. Bulgarian prose from the 1980s and 1990s. Bulgarian postmodernism. Bulgarian fiction of the 21st century.
Authors: Vasil Popov, Yordan Radichkov, Yordan Valchev, N. Haitov, Georgi Markov, K. Pavlov, Bl. Dimitrova, N. Stefanova, R. Ralin, St. Tsanev, L. Lechev, P. Matev, I. Davidkov, P. Penev, P. Alipiev, Boris Hristov, Viktor Paskov, Georgi Rupchev, G. Gospodinov, M. Ruskov, Z. Karabashliev, A. Popov, T. Dimova , Zdravka Evtimova
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The assessment is continuous and the final mark is given on the basis of students' level of completion of the tasks during the seminars.

S02621 New Bulgarian Literature

ECTS credits: 2 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: **Type of exam:**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Abstract:
This course is a consolidation course on the History of Bulgarian which makes it possible for the syllabus to include questions on the methodology of literary history, the specific problems of understanding works of art, on the cultural context of the dialogue, the aesthetic quests in it. The course of lectures also includes the tendencies and processes which outline the complex and contradictory nature of the period.
Course content:
Aesthetic development of the Bulgarian literature after WWI. Bulgarian expressionism. Bulgarian diabolism. The story and short novel between the two World Wars. Poetry of the 1940s. The novel of the 1950s and 1960s. Short story transformations during the 1960s and 1970s. The lyrics during the 1960s and 1970s. Features of the literary life during the 1980s and 1990s. Bulgarian postmodernism.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Lectures are presented by the means of the oral method of exposition. At the seminars the problem-solving approach is applied.

S02622 Modern History of Bulgaria – Part 1

ECTS credits: 5 **Weekly classes:** 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The basic focus of the course is on the political, economic and cultural development of Bulgaria during the studied period (1878-1918). It gives the necessary knowledge of the future teachers of Bulgarian History for the events in the most recent period of historic development of our country, facilitates the development of active civil behaviour and focuses their attention on research studies**.**
Course content:
Establishment of the Bulgarian state after the Liberation. The acceptance of the Tarnovo constitution and the appointment of a “knyaz”. Beginning of political life. The unity of Kniazestvo Bulgaria and East Romelia and the Great Powers. Wars for national unity – the Balkan Wars and WWI. Results and morals.
Teaching and assessment:
The course employs different types of learning experiences. The exam is written and covers the syllabus topics.

S02626 Lesson Observation in Bulgarian Language

ECTS credits: 1 **Weekly classes:** 0lec+2sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
Bulgarian language lesson observation aims at acquainting students with the way Bulgarian language and literature is taught in the secondary school. It allows students to link the theoretical knowledge on Methods of Teaching Bulgarian and on the other language courses with practical ideas so that students could establish good rapport with the pupils and become familiar with the teaching process in the Bulgarian school.
Course content:
Presenting linguistic items: in morphology, syntax, lexicology, stylistics and texlinguistics
Practice skills lesson: in morphology, syntax, lexicology, stylistics and texlinguistics
Revision lesson: in morphology, syntax, lexicology, stylistics and texlinguistics
Teaching and assessment:
Students are divided in groups of 10 and observe Bulgarian language lessons taught by mentors at selected schools. The students write down the lesson plans, take notes on preliminary given criteria for lesson evaluation. The lessons observed are discussed after the observation and in this discussion all students and the methodology lecturer participate.

SB15310 Lesson Observation in Literature

ECTS credits: 1 **Weekly classes:** 0lec+2sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
Bulgarian literature lesson observation aims at acquainting students with the way Bulgarian literature is taught in the secondary school. It allows students to link the theoretical knowledge on Methods of Teaching Literature and on the other language courses with practical ideas so that students could establish good rapport with the pupils and to become familiar with the teaching process in the Bulgarian school.
Course content:
Presenting items: Bulgarian and foreign literature, History of Literature, Theory of Literature and Literary Critique
Practice skills lesson: text interpretation
Revision lesson: literature exercises
Teaching and assessment:
Students are divided in groups of 10 and observe Bulgarian Literature, lessons taught by mentors at selected schools. The students write down the lesson plans, take notes on preliminary given criteria for lesson evaluation. The lessons observed are discussed after the observation and in this discussion participate all students and the methodology lecturer.

SB17358 Methods of Teaching History

ECTS credits: 9 **Weekly classes:** 2lec+2sem+0labs+2ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course aims at acquainting students with the results from the scientific methodical research in Bulgaria and abroad and the practical work of Bulgarian teachers. The study material gives a chance to the students to acquire knowledge about the methodical, logical and psycho - pedagogical foundations, so that they can develop professional skills for organisation and managing the process of teaching and learning history.
Course content:
Methodology of Teaching History – scientific foundations. Methodological and psycho-pedagogical bases of the education in history. Didactic principles. Integration tendencies in education. Methods of teaching history. The lesson as a basic organizational form. Types of lessons. Independent work of the pupils during the history classes. Extracurricular activities in history. Personality of the teacher during the education in history.
Teaching and assessment:
The course employs different types of student participation. Students' attendance of classes is obligatory. The exam involves answering two questions from the course of lectures in a written form, supplemented if necessary with more theoretical or practical questions. The course assignment is a research paper on the history, essence and practical application of a specific didactic problem. Its volume is from 5 to 10 pages.

SB17359 Lesson Observation in History

ECTS credits: 1 **Weekly classes:** 0lec+2sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The lesson observation aims at acquainting students with the practical side of teaching History, providing an opportunity for them to get to know teachers and pupils and becoming familiar with the teaching process in Bulgarian schools.
Course content:
Lesson observation is linked to the observation of the actual teaching at two school levels – primary and secondary.
Teaching and assessment:
Students are divided in groups of 10 and they observe History lessons taught by leading teachers at selected schools. The students take notes (including the plan of the lesson, the questions asked by the teacher, etc. At the end of the lesson the leading teacher leads a discussion on the lesson observed. During it students and the teacher discus the teaching methods used, the different interaction patters, the use of the coursebook, working with the map, etc. Special attention is paid to the reaction of the teacher in different situations.

S02625 Methods of Teaching Bulgarian Language

ECTS credits: 5 **Weekly classes: 2**lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The course aims at giving students theoretical and practical knowledge about the nature and specific features of the teaching and instructive process of Bulgarian language at secondary school level. Students receive theoretical knowledge and acquire practical skills which serve as the basis for their work during their teacher training practice.
Course content:
General considerations of the methods of teaching Bulgarian language. Principles of teaching Bulgarian language. Methods of teaching Bulgarian language. Forms of organization of the teaching and learning process of Bulgarian language. Development of linguistic terms. Speech sound teaching and learning. Teaching vocabulary. Teaching morphology. Teaching syntax. Teaching spelling. Teaching stylistics.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students prepare a course assignment on a given topic and illustrate the application of a methodological approach in a specific lesson. The semester is considered valid if students have attended the lectures and seminars regularly and have submitted course assignment approved by the tutor.
The course ends with a written exam. Students write on a summary question from the syllabus and answer questions on the course assignment.

S02627 Methods of Teaching Literature

ECTS credits: 5 **Weekly classes: 2**lec+1sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The course aims at providing students with the basic methodological training of the future teachers of Bulgarian literature (5^{th} – 12^{th} grade). The systematic course acquaints students with the character and specific features of literature as a school subject, with the aims, tasks and stages of the education in literature, with the principles, forms and methods of work in literature lessons and so on.
This course is closely related to the courses on Theory of Literature and Methods of Teaching Bulgarian Language.
Course content:
Aims and tasks of the education in literature. Features of the teaching and learning of literature. Classification of lessons in literature. Methods and methodology of literary analysis. The epic genre in the teaching of literature. The lyrical genre in the teaching of literature. Drama genres in the teaching of literature.
Teaching and assessment:
During the lectures students discuss the different approaches to designing lessons aimed at interpreting different literary texts according to their genre types. The course is considered valid only if students have attended regularly lectures and seminars and have submitted a course assignment. The exam ticket comprises of two questions. The course assignment is included in the final grade.

S02634 New Bulgarian Literature

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Abstract:
This course is a consolidation course on the history of Bulgarian literature which makes it possible for the syllabus to include questions on the methodology of literary history, the specific problems of understanding works of art, on the cultural context of the dialogue, the aesthetic quests in it. The course of lectures also includes the tendencies and processes which outline the complex and contradictory nature of the period.
Course content:
Aesthetic development of the Bulgarian literature after WWI. Bulgarian expressionism. Bulgarian diabolism. The story and short novel between the two World Wars. Poetry of the 1940s. The novel of the 1950s and 1960s. Short story transformations during the 1960s and 1970s. The lyrics during the 1960s and 1970s. Features of the literary life during the 1980s and 1990s. Bulgarian postmodernism.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Lectures are presented by the means of the oral method of exposition. At the seminars the problem-solving approach is applied.

S02635 Historical Grammar

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Todorka Yordanova Georgieva, MA, DPhil., Department of Philological and Natural Sciences, Silistra Branch
tel.: 086 / 821 521, E-mail: tgeorgieva@fs.uni-ruse.bg
Abstract:
The course enhances the previous knowledge acquired in the courses belonging to the historic and linguistic modules unified under the topic Historical Linguistics. The course aims at introducing students to the historic development of Bulgarian language from the period of its origin to modern times.
Course content:
The course content introduces students to the specifics of the historic study of Bulgarian language, periodization of Bulgarian linguistic history and the most important features of pre-written, Old Bulgarian, Medieval Bulgarian and Modern Bulgarian period, the tendencies in the development of vowels and consonants, the changes of the name and verb system in Bulgarian.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. Essential element of education is the work on Old Bulgarian language texts. The course includes continuous assessment tests which serve as the basis for the final grade.

SB17360 Modern General History – Part 2

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The course material is in accordance with the secondary school History curriculum and the state requirements regarding the educational process at university level for undergraduate studies (Bachelor of Arts degree). It examines historic events that have taken place in a long period of time – from the end of he 18th century till today. Therefore, the material is divided into two parts – Part One and Part Two and the border between them is the end of the 19th and the beginning of the 20th century.
Course content:
International relations after World War, Western European countries and the USA in the period between the two world wars, Countries of the Far East in the period between the two world wars, Second World War 1939 - 1945, Western Europe and the United States after Second World War, International relations 1945 – 1990.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The final grade is the grade received on the written exam where students write comprehensively on two questions from the course material.

SB17361 Modern History of Bulgaria – Part 2

ECTS credits: 6 **Weekly classes:** 2lec+2sem+0labs+0ps+1ca
Assessment: exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The course discusses the events and phenomena in the following period – the end of the wars (1919) until today. The main focus is put on the political, economic and cultural development of our country during this period. The establishment of the Bulgarian state system is the underlying idea defended in the current course.

Course contents:
Crisis after the wars (1918-1919). Bulgaria on the brink of Civil War in 1923. The coup d'etat on 9 May. Participation of Bulgaria in WWII (1941-1944). Political life in Bulgaria (1944-1948). Economic politics and development of Bulgaria (1944-1947). The establishment of the Stalin model of socialism (1948-1956). External politics of Bulgaria after WWII. Bulgaria on the way to democracy. The 1980 crisis. Cultural development (1944-1999).

Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students' attendance of classes is obligatory. The course is considered valid if students have attended classes regularly and participated actively in them. The course ends with a written exam.
The course assigment is developed on an assigned problem form Bulgarian history in the period from 1919 till today. For its development students are expected to use published materials, the relevant scientific materials and if possible archived materials. The volume of the course work is about 20 standard printed pages. The progress of its development is reported regularly from students to the tutor.

S02638 Historiography

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps+1ca
Assessment: continuous assessment **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education

Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg

Abstract:
The objective of the course is to provide students with information about another time aspect of human activities. Thus, students will be able form correct judgments about the past and history, to think over them, to enrich their knowledge about the methods of historical investigation and transfer, to develop correct attitude and tolerance which are necessary for quality assessment.

Course content:
Introduction to historiography – periods, aspects, function. Oral and written history. History in image and gesture. Historical thought in the ancient world. Bulgarian historical knowledge. Pre-Christian and Christian period. Medieval historical chronicle tradition. Modern tendencies during 19th century. Professional historiography from the middle of 19th century. History education.

Teaching and assessment:
The course is delivered in the form of lectures and seminars. Students are expected to attend classes regularly and to participate actively in the educational process. The grade from the continuous assessment is based either on at least 2 tests or on an exam during the supplementary exam session.
The course assignment includes: thematic historiography or a personal presentation which includes historiographic analysis of the works of historian. The volume of the course assignment is from 1 to 20 pages. It is assigned during the first week of the semester and has to be submitted during the seminars.

SB14722 Teaching Practice in Bulgarian Language

ECTS credits: 1 **Weekly classes**: 0lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The Teaching Practice in Bulgarian language aims at acquainting students with the teaching process in Bulgarian language in the junior high and high school level. It provides and opportunity for students to put theory into practice and to establish good rapport with pupils, thus becoming familiar with the work in Bulgarian schools.
Course content:
Presenting linguistic topics in morphology, syntax, lexicology, stylistics and text linguistics. Practice skills lessons in morphology, syntax, lexicology, stylistics and text linguistics. Revision lessons in morphology, syntax, lexicology, stylistics and text linguistics.
Teaching and assessment:
At selected schools students are sent to all classes where Bulgarian language is taught. They contact the teacher of the class in advance. The teacher gives them the lesson topics as they are in his / her long-term lesson planning schedule. Students prepare short plans of the lesson they will teach and present it to the teacher or the university lecturer who leads the course in Methods of Teaching Bulgarian Language. At the end of the classes the students and the university methodologist discuss the lessons delivered.

SB14723 Teaching Practice in Literature

ECTS credits: 1 **Weekly classes:** 0lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art,
tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The Teaching Practice in Literature aims at acquainting students with the teaching process in literature in the junior high and high school level. It provides an opportunity for students to put theory into practice and to become familiar with the teaching process in Bulgarian schools.
Course content:
Presenting topics: Bulgarian and foreign literature, History of Literature, Theory of Literature and Literary Critique
Practice skills lesson: text interpretation
Revision lesson: literature exercises
Teaching and assessment:
At selected schools students are divided in all classes where literature is taught. They contact the teacher of the class in advance. The teacher gives them the lesson topics as they are in his / her long term lesson planning schedule. Students prepare short plans of the lesson they will teach and present it to the teacher or the university methodologist who leads the course in Methods of Teaching Literature. At the end of the classes the students and the university methodologist discuss the lessons delivered.

SB17363 Teaching Practice in History

ECTS credits: 1 **Weekly classes:** 0lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The teaching practice in history aims at acquainting students with the teaching process in junior high and high school level. It provides an opportunity for students to put the theoretical knowledge acquired to practice and to deliver their first lessons, i.e. to act in a real classroom situation, to design and teach real lessons, to talk to and with pupils, to establish rapport with pupils, etc.
Course content:
Close link with the specifics of the school systems and the theoretical knowledge and experienced acquired during the Methods of Teaching History course. One-on-one correspondence between the lesson plan and the lesson delivered.
Teaching and assessment:
At selected schools students are divided in all classes where history is taught. The topic of the lesson which they will deliver is in accordance with the topics of the long -term lesson planning schedule of the teacher. At the end of the classes the students and the university methodologist discuss the lessons delivered. The teaching practice ends with a grade which corresponds to the skills and knowledge demonstrated during the teaching in the classroom, i.e. it is not based on a specific lesson observed by the methodologist; it includes other components – rapport with pupils, demanding requirements, creativity, etc.

SB16859 Competency-based Approach and Innovations in Education

ECTS credits: 4 **Weekly classes:** 1lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Diana Petrova Zhelezova-Mindizova, MA, PhD, Dept. of Philology and Natural Sciences
tel.: 086 / 821 521, E-mail: dmindizova@uni-ruse.bg
Abstract:
The course aims to develop students get to know the essence and the main manifestations of the concepts of competence and innovation in education, passing through the presentation of basic competence models and the implementation of the competence approach in the activity of the teacher, based on innovative pedagogical strategies
Course content:
The course focuses on the familiarization of students and the exploration of key competences for lifelong learning based on innovative approaches. The educational content is adapted to the modern realities in Europe and the world, which impose new methodological approaches in teaching and studying it - formation and development of communicative competence, building skills for intercultural communication and teamwork, development of learners' skills for independent and lifelong learning, for creative thinking, capo and their digital competence in the use of educational materials for e-learning in classes and in independent work.
Teaching and assessment:
This is a one semester course. The training ends with a written exam, and the final assessment is based on the results of taking it and the results of the tests.

SB14725 History of the Modern Bulgarian Literary Language

ECTS credits: 3 **Weekly classes:** 1lec+1,5sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Todorka Yordanova Georgieva, MA, DPhil., Department of Philological and Natural Sciences, Silistra Branch
tel.: 086 / 821 521, E-mail: tgeorgieva@fs.uni-ruse.bg
Abstract:
The course aims at providing the students with theoretical knowledge about the development of the modern Bulgarian literary language as one of the most essential cultural processes during the Renaissance, the formation of the norms of the literary language and the elaboration of its expressive means.
The course is closely linked to the following courses: Old Bulgarian Language, History of the Bulgarian Language and Modern Bulgarian Language.
Course content:
History of the new Bulgarian literary language as science.. Birth of the modern stage of development of the Bulgarian literary language. Consideration about building the styles of the Bulgarian literary language during the third quarter of 19th century. Unification processes in the Bulgarian literary language in the period of the Liberation since the beginning of 20th century. Bulgarian literary language during the first two decades of 20th century. Bulgarian literary language during the period of the two world wars. Bulgarian literary language after 9 September 1944.
Teaching and assessment:
The course is delivered in the form of lectures. The seminars also include tests for checking students' progress. The semester is considered valid only if students have attended lectures regularly. The course ends with a written exam on a topic drawn by the students which requires a summary of the knowledge about the history of the modern Bulgarian literary language.

S02644 Pre-Diploma Teaching Practice in Bulgarian Language

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Mira Zhivodareva Dushkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 612, E-mail: mdushkova@uni-ruse.bg
Pr. Assist. Prof. Niya Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
The final teaching practice is the end of the practical training of students from the Bulgarian Language and History Undergraduate Degree Programme. It provides an opportunity for students to put the knowledge acquired during the BA course of education into practice and to become familiar with the teaching progress in Bulgarian schools.
Course content:
Presenting linguistic topic: in morphology, syntax, lexicology, stylistics and texlinguistics. Practice skills lesson: in morphology, syntax, lexicology, stylistics and texlinguistics. Revision lesson: in morphology, syntax, lexicology, stylistics and texlinguistics.
Teaching and assessment:
Students are divided in pairs and teach individually all the Bulgarian language lessons for the week. The teacher of the class observes them while teaching and gives advice or recommendation when necessary, provides support and guidance in the choice of teaching materials.

S02645 Pre-Diploma Teaching Practice in Literature

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Assist. Prof. Petya Nikolova Abrasheva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082 / 888 612, E-mail: pabrasheva@uni-ruse.bg
Abstract:
The final teaching practice is the end of the practical training of students from the Bulgarian Language and History Undergraduate Degree Programme. It provides an opportunity for students to put the knowledge acquired during the BA course of education into practice and to become familiar with the teaching progress in Bulgarian schools.
Course content:
Presenting linguistic topics: Bulgarian and foreign literature, History of Literature, Theory of Literature and Literary Critique. Practice skills lesson: text interpretation. Revision lesson: literature exercises.
Teaching and assessment:
Students are divided in pairs and teach individually all the Bulgarian language lessons for the week. The teacher of the class observes them while teaching and gives advice or recommendation, when necessary, provides support and guidance in the choice of teaching materials.

SB17364 Pre-Diploma Teaching Practice in History

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Nikolay Ivanov Nenov, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 664, E-mail: nnenov@uni-ruse.bg
Assist. Prof. Veselka Atanasova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: vradeva@uni-ruse.bg
Abstract:
The final teaching practice is the end of the practical training of students from the Bulgarian Language and History Undergraduate Degree Programme. It provides an opportunity for students to put the knowledge acquired during the BA course of education into practice and to become familiar with the teaching progress in Bulgarian schools.
Course content:
The final teaching practice corresponds to the annual teaching of the respective teacher, i.e. the time and place of the practice correspond to the long term lesson planning schedule of the mentor.
Teaching and assessment:
The final teaching practice has two stages.
During the first stage all students deliver lessons in one class, while the teacher provides specific guidance and advice with regard to material selection, etc. The aim is for students to acquire practical skills and experience, to get familiar with the pupils, etc. The second stage takes place at the end of the teaching practice when the lesson delivered is evaluated by the university methodologist. The grade given is part of the final grade which includes the grades on the lessons delivered in other subjects, i.e. it is an element of the arithmetical mean grade written in the higher education degree certificate.

S02647 Self-Preparation for the State Exam / Bachelor Thesis

ECTS credits: 3 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: t **Type of exam:**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Consultants:
All lecturers from the Department of Bulgarian Language, Literature, History and Art
Abstract:
The students prepare themselves for a state exam or develop a bachelor thesis. All lecturers from the Department of Bulgarian Language, Literature, History and Art and from the Department of Pedagogy provide consultancy in case students need it.
Every student has to choose whether to develop a Bachelor Degree Thesis in one of the profiles- Bulgarian Language / Bulgarian Literature or History or to sit for a state exam in the other profile.
Course contents:
The students prepare independently depending on the choice made regarding their graduation – writing a Bachelor thesis in Bulgarian language or Bulgarian literature / taking a state exam in Bulgarian language or Bulgarian literature or writing a Bachelor thesis in history / taking a state exam in history.
Teaching and assessment:
Independent preparation. No assessment.

SB16860 Pedagogical Interaction in Multicultural Environment

ECTS credits: 2 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The aim of the course is to develop students' understanding of the educational process from the point of view of intercultural education and to develop students' skills to transform the multicultural environment from an unfavourable factor into a natural resource for social and cognitive development of students in the conditions of game interaction.
Course content:
Globalization and intercultural education; goals, content and methods of intercultural education.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.
A total of five tests on the main topics are performed during the semester. The final grade is formed on the basis of the results of the five tests.

SB16861 Health and Ecological Education

ECTS credits: 2 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219; E-mail: bilieva@uni-ruse.bg
Abstract:
The aim of the training is for students to acquire the necessary knowledge for the health education of adolescents. Certain thematic areas in the course are focused on getting acquainted with the health and environmental components of the environment: natural air, water, soil, food and nutrition; and school: school yard and school building, school furniture and furnishings, microclimate, heating, lighting and harmful factors. Getting acquainted with the institutions involved in the implementation of health and environmental education and upbringing, etc.
Course content:
Nature, tasks and importance of health and environmental science; Physical development of students and morpho-physiological characteristics of school age; Personal hygiene of students; Medical care and health care for students; Microbiological causes and carriers of diseases in children and school age; Environmental problems and impact on natural resources, flora and fauna, etc.
Teaching and assessment:
The training is carried out through a course of lectures and seminars which acquaint students with the main theoretical and current practical aspects of environmental education and health education.

SB16862 Inclusive Education for Children and Students with Special Educational Needs

ECTS credits: 2 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Department of Pedagogy
tel.: 082 / 888 219, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The goal of the course is to broaden the scientific horizon of the future specialists in social pedagogy alongside improvement of the quality of their theoretical training. The themes included contribute to the formation of knowledge about: international principles and legislative framework of education of children with special needs, with organizations and structures through which realize. The preparation is directed to acquire knowledge about innovative processes in theory and practice of special education, knowledge about integration and examine them in different aspects; forming skills to choose of strategies and technologies for supporting interactions, education rehabilitation children with particular needs according to radical changes in general and special pedagogy; mastering methodic of integrative education and etc.
Course contents:
The following themes are included: special education – international principles, referent to education of children with special needs; legislative framework of education of children with special educational needs; organization of special education – kindergarten and special schools; diagnostics of special educational need and orientation to special schools; competent organ to realizing education of special needs; structures without system of national enlightment; comparative study of order special education in European countries and USA.
Teaching and assessment:
The course of lectures and seminars includes illustrations and descriptions of the different psychophysical disorders and behaviour deviations using various interactive methods and skills. The different test methodologies are proposed for examination of different cognitive processes with emphasis on the possible deviations and their pathological features. According to the syllabus a specialized school and kindergarten should be visited by students as well as centers which cater for children with different educational needs. The current mark is based on the results of three tests.

SB16863 Communicative Skills in Educational Environment

ECTS credits: 2 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy
tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course aims to acquaint students, and future teachers, with basic models, strategies, and techniques in pedagogical interaction, to form their ability to communicate at certain levels of the educational process. Attention is paid to the practical options for developing and applying interactive techniques to realize the main goals and objectives in the work of the primary school teacher. Through the seminars included in the curriculum, attitudes and readiness of future pedagogues for the practical application of the forms and the means of communication in the work with pupils, parents and other pedagogical specialists are created.
Course content:
Communication - essence and characteristics, stages and elements; Interpersonal communication. Barriers to communication; Techniques and skills for acquaintance and acquaintance; Speech communication; Models of communication. Formation of skills for transmission and reception of information; Hearing and contact; Planning, organizing and conducting speech communication with communication partners; Conversation skills. Research and ask questions; Dialogue: etymology, meaning, types. Conducting dialogue; The art of presenting - one of the important communication skills of our time; The social-communicative competence of the teacher; Formation of skills for non-verbal communication; Approaches and methods for the formation of personal and social skills in pupils; Formation of skills for adequate and non-aggressive behavior in school; Communication of the partnership between teachers and parents, teachers and other pedagogical professionals, teachers and pupils.
Teaching and assessment:
The basic preparation is realized by acquainting the students with the theoretical and practical bases for the formation of social and personal skills, characteristic for the profession of primary school teacher in accordance with the age of the pupils. The specified topics envisage reaching the students to a deeper awareness of the essence and formation of attitudes and skills for productive pedagogical interaction. The planned activities and methods are visuals, didactic materials, technical and information tools, discussion, work with different sources, group and individual work, solving tests, cases and more.

SB16864 Rhetorical Pedagogy

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art
tel.: 082 / 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course is designed for students of the undergraduate programme "Bulgarian Language and History". It contains a lecture course and seminar exercises.
Course content:
More important topics: Historical and theoretical foundations of rhetoric; Oratory style; Rhetorical figures and tropes; Verbal and non-verbal communication in pedagogical communication; Methods and techniques of communication; Speech culture and techniques.
Education methods:
Rhetoric education is organized in lectures and exercises. Active forms of training are not provided. Practical exercises are part of the lecture course, by refining and updating the theoretical knowledge and seeking their practical effectiveness in concrete case studies, convincing communication, demonstrating genres and styles of oral speech.
The most actively used forms and methods of learning are talk, analysis and interpretation, exercise, brainstorming, speaking and listening, rhetorical persuasion.

SB16865 Management of Educational Projects

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Department of Pedagogy
tel.: 082 / 888 544, E-mail: gggeorgieva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, MA, Department of Pedagogy
tel.: 082 / 888 544, E-mail: dspasova@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the main components of project planning and project management system. Emphasis is placed on the preparation, implementation, management and reporting of projects. The practical seminars, included in the curriculum presuppose that the students will practice the knowledge, skills and competences learned in the development of a project idea.
Course content:
In the course the steps for planning, elaboration, monitoring and project completion are discussed and analyzed in details.
The main topics cover the design, the system, as well as sample project models.
Teaching and assessment:
The course includes lectures and practical seminars. Interactive methods and tools, multimedia presentations, diagrams, tables, models are used in the seminars.

SB16866 e-Learning Lesson Planning and Design

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Abstract:
The aim of the discipline training is to transform the acquired digital competence of future Bulgarian language teachers into digital creativity to create e-lessons suitable for distance learning in an electronic environment.
The discipline is studied by students - future teachers of Bulgarian language and is optional for acquiring the professional qualification "teacher". Therefore, its content includes topics related to the creation and distribution of electronic lessons.
Course content:
Concept of pedagogical design. Types of lessons. Basic didactic tasks in lesson types. Electronic, mixed, mobile learning. Electronic learning objects. Virtual Research Labs. Tools for creating electronic learning objects - texts, graphics, video files, tests, etc. Repositories for storing electronic learning objects. Electronic tests. Applications for creating inspection and evaluation forms. Applications for creating integrated e-lessons. E-Lesson settings for synchronous and asynchronous distribution. Compatibility of e-lessons with platforms for distance learning in an electronic environment - MS Teams, Zoom, Google Classroom, BigBlueButton, Jisti Meet, etc.
Teaching and assessment:
The discipline ends with a continuous assessment. The final assessment is formed on the basis of the displayed results of at least two written works and the defence of individual assignments in a ratio of 1:1.

SB16867 Digital Competence and Digital Creativity

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the dimensions of digital competence and digital creativity. Expected results: will know and be able to apply the concepts of digital competence and digital creativity.
Course content:
Competence. Basic concepts. Competences and competence approach for teaching and learning. Framework for defining digital competences. Professional development and digital competence of teachers. The qualification and professional development of teachers as a key element of the quality of Bulgarian school education. Creativity in learning - basic concepts and concepts. Scientific and theoretical foundations of creativity. The essence of creative activity. Models for analysing creativity. Creativity in the context of learning. Digital creativity. Digital creative skills. Components of digital creative pedagogical practices.
Teaching and assessment:
The course includes lectures and practical seminars. During the course students learn about the competencies and competence approach to teaching and learning, creativity with its basic concepts and concepts, digital creativity, and digital creative skills. Students receive a certificate in the discipline if they have attended lectures and practical exercises according to the Rules for the organization of educational work at the University of Ruse. The training in the discipline ends with an ongoing assessment.

SB16868 State Practical Exam

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: state exam **Type of exam:** written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Bulgarian Language, Literature, History and Art
All lecturers from the Department of Pedagogy
Abstract:
The practical exam is in the form of a lesson delivered by the student in front of a State Examination Board which is formed on the basis of an ordinance issued by the Rector. The members of the State Examination Commission include as a rule the mentor who has supervised the pre-diploma pedagogical practice of the student. Every student delivers a preliminary designed lesson in Bulgarian language or literature and history.
Course content:
Students must demonstrate their knowledge and skills in planning lessons in Bulgarian language, literature and history, as well as their skills in classroom management and teaching of the relevant educational content.
Teaching and assessment:
The State Exam Board decides on the final mark of each student which is an average of the subtotal of marks given on the assessed lessons delivered by the student in Bulgarian language or Bulgarian literature and History.

S02661 State Exam in Bulgarian Language or in Bulgarian Literature

ECTS credits: 4 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: state exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Consultants:
All lecturers from the Department of Bulgarian Language, Literature, History and Art
Abstract:
The state exam is held before the State Examination Board in accordance with an approved syllabus which contains the main topics from the fundamental courses in each of the profiles – Bulgarian language and Bulgarian literature. Students decide which area they will prepare for the State Exam – Bulgarian language or Bulgarian literature.
Course content:
The State exam in the respective area includes all main topics from the courses in Bulgarian language or Bulgarian literature.
Teaching and assessment:
The final year student takes the State exam in front of the State Examination Board.

S02662 Bachelor Thesis in Bulgarian Language or in Bulgarian Literature

ECTS credits: 4 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: bachelor thesis **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department involved in the training process
Abstract:
The Bachelor Thesis is an individual creative assignment, which is fulfilled under the leadership of a research lecturer. Its objective is to give the possibility to the students to demonstrate the knowledge and skills accumulated during their study for achieving the objectives and tasks of the Bachelor Thesis and to present their creative development successfully before an Examination Board.
Course content:
The Bachelor Thesis includes one topic or area of the syllabus and students are allowed to choose in which profile they want to develop a Bachelor Thesis – Bulgarian language or Bulgarian literature.
Teaching and assessment:
The Department of Bulgarian Language, Literature and Art provides:

- the organisation of collecting, confirming and announcing of topic suggestions for the Bachelor Thesis;
- the distribution of topics and research leaders among the students;
- the diploma practice organisation;
- the leadership, review and presentation of the Bachelor Thesis.

Weekly tutorials with the thesis supervisors are scheduled for the students.

The final year student presents the Bachelor Thesis before the State Examination Board.

SB17366 State Exam in History

ECTS credits: 4 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: state exam **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Bulgarian Language, Literature, History and Art
Abstract:
The state exam is held before the State Examination Board in accordance with the approved syllabus which contains the main topics from the fundamental courses in History.
Course content:
The State exam includes all main subjects in History.
Teaching and assessment:
The final year student takes the State exam in front of the State Examination Board.

SB17367 Bachelor Thesis in History

ECTS credits: 4 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: bachelor thesis **Type of exam:** written

Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department involved in the training process
Abstract:
The Bachelor Thesis is an individual creative assignment, which is fulfilled under the leadership of a research lecturer. Its objective is to give the possibility to the students to demonstrate the knowledge and skills accumulated during their study for achieving the objectives and tasks of the Bachelor Thesis and to present their creative development successfully before an Examination Board.
Course content:
The Bachelor Thesis includes one topic or area of the syllabus and students are allowed to choose in which profile they want to develop a Bachelor Thesis in History.
Teaching and assessment:
The Department of Bulgarian Language, Literature, History and Art provides:

- the organisation of collecting, confirming and announcing of topic suggestions for the Bachelor Thesis;
- the distribution of topics and research leaders among the students;
- the diploma practice organisation;
- the leadership, review and presentation of the Bachelor Thesis.

Weekly tutorials with the research leaders are scheduled for the students.

The final year student presents the Bachelor Thesis at the State Examination Board.

UNDERGRADUATE STUDIES IN FINANCIAL MATHEMATICS

PROFESSIONAL STANDARDS

OF A BACHELOR IN FINANCIAL MATHEMATICS

Degree Programme: **Financial Mathematics**
Educational Degree: **Bachelor**
Professional Qualification: **Mathematician-Financier**
Term of education: **4 years (8 terms)**

The **main purpose** of the education and training in this undergraduate programme is to prepare highly qualified specialists in the area of financial mathematics. This is a new and modern field for the countries from the European Union. It finds applications in all bank, insurance and financial institutions, budget organizations and companies which are operating with large capacity of financial assets. The need for such specialists is related to the development of financial models, risk control and the making of complicated mathematical and financial computations. Apart from that the information environment requires from the financial mathematicians excellent knowledge in mathematics, finance, ICT and foreign languages.

GENERAL AND SPECIFIC TRAINING

The students in the undergraduate programme in Financial Mathematics receive:

- **Basic knowledge in the area of mathematics, statistics, informatics, economics, finance and law** – differential and integral computation, linear algebra, differential equations, probability theory, numerical methods, applied statistics, programming, data bases, general economic, financial operations, theories of economic growth.
- **Domain specific knowledge in the area of the applications of mathematics and statistics in economics or finance** - interest, discount and annuity calculations, financial calculations in operations with investment securities operations research in economics, econometrics, modeling in finance, stochastic analysis and applications, insurance mathematics, methods of Monte Carlo in finance, calculus of variations with applications in economy neural network, patterns of mortality probability models, time series analysis of risk, credit risk;
- **Domain specific knowledge in finance** – financial management, financial markets, market research, insurance, portfolio management, analysis of financial ratios, financialengineering, business simulations and optimizations, computer accounting, tax policy;
- **Domain specific knowledge in computer science** – visual programming in EXCEL, computer graphics, Internet technologies, multimedia systems and technologies, information systems, WEB design;
- **Basic knowledge of English and knowledge of English for specific purposes** – fluent in English, including specific terminology in the fields of mathematics, finance, insurance and the economy;
- **Creative knowledge** – word processing with Latex, actively used worldwide for the treatment of mathematical and scientific texts.

GENERAL AND DOMAIN SPECIFIC SKILLS AND COMPETENCES

The graduates acquire general skills in mathematics, statistics, economics, finance, computer science, free use of English. These are strategic thinkers who not only know how to handle numbers, but also understand what actually stands behind each received number. Thanks to these skills they can create effective solutions to problems which are expected to be generated from future random events in the business. These are professionals who are responsible for building the basics of insurance and financial products, health insurance and pension schemes. They are the people that determine the pricing of insurance policies, as well as assessment and risk management and planning of required reserves that companies must set aside to meet future obligations. Their special skills associated with performing complex financial and mathematical calculations; compiling, analyzing and solving mathematical and statistical models in finance; analysis and risk management; programming and work with specialized software; specialized knowledge of English.

CAREER PROSPECTS

The graduates can work in different banking, insurance, financial institutions and budgetary organizations and in all sectors of economy and business.

They can work as actuaries, specialists in risk management or specialists in making banking, financial or insurance products. The requirements to their training and competences are high and are consistent with the excellent prospects for career development.

FURTHER EDUCATION PROSPECTS

The students graduating the undergraduate programme in Financial Mathematics can successfully continue their education in all master programmes in the areas of mathematics, economics and finance. The specialized foreign language training gives them ample opportunity to do so abroad.

CURRICULUM

OF THE DEGREE COURSE IN FINANCIAL MATHEMATICS

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
S00700	Introduction to Economics	6	S02371	Insurance	6
S00701	Calculus, Part I	6	S00870	Calculus, Part II	7
S00769	Linear Algebra and Geometry	7	SB15476	Discrete Mathematics	6
S00770	VBA Programming	6	S01094	Probability Theory	6
SB13824	English in Financial Mathematics 1	5	S00771	English in Financial Mathematics 2	5
	Total for the term:	**30**		**Total for the term:**	**30**
S00072	Sports	1	S00072	Sports	1

Second year

Code	*Third term*	*ECTS*	*Code*	*Fourth term*	*ECTS*
S01223	Ordinary Differential Equations	7	S01463	Finance	5
S01448	Statistics	6	S01548	Partial Differential Equations	5
S01451	Visual Programming in EXCEL	6	SB15292	Numerical Methods	6
SB13824	English in Financial Mathematics 3	5	S01550	Econometrics	5
SB15051	Computational Mathematics	6	SB15445	Programming with Python	5
			SB10203	English in Financial Mathematics 4	4
	Total for the term:	**30**		**Total for the term:**	**30**
S00072	Sports	1	S00072	Sports	1

Third year

Code	*Fifth term*	*ECTS*	*Code*	*Sixth term*	*ECTS*
S02374	Stochastics Analysis and Applications	5	S02378	Insurance Mathematics	7
S02373	Introduction to Financial Mathematics	7	S02379	Monte Carlo Methods in Finance	6
S00876	Operations Research in Economics	7	SB15167	Modelling in Finances	6
SB15296	Neural Networks in Finances	6			
	Elective courses (students choose one course)			***Elective courses (students choose one course)***	
S02375	Typesetting with LaTeX	5	S02381	Web Design	5
S02376	Computer Graphics	5	S02382	Multimedia Systems and Technologies	5
	Total for the term:	**30**		**Total for the term:**	**30**
S00072	Sports	1	S00072	Sports	1

Fourth year

Code	*Seventh term*	*ECTS*	*Code*	*Eighth term*	*ECTS*
S02384	Risk Analysis	6	S00853	Business Economics	3
SB14352	Financial Engineering	6	SB14354	Financial Law	2
SB14353	Computational Finance	6	SB14355	Methodology of Scientific Research	1
			SB14356	Language and Style	1
			S02418	Practicum in Financial Mathematics	3
			S02434	Graduation Self-study	4
Elective courses (students choose one course)			***Elective courses (students choose one course of each group)***		
S02389	Internet Technologies	6	SB15444	Markov Processes	3
S02390	Information Systems	6	S02397	Credit Risk	3
S02438	Business Simulations and Optimization	6	SB15446	Modelling of Financial Markets	3
Elective courses (students choose one course)			***Elective courses (students choose one course)***		
SB15052	Mathematical Economics	6	S02435	Theories of Economic Growth	3
SB15053	Game Theory	6	S02387	Theory and Management of Investment Portfolios	3
			Graduation		
			S02439	State Exam	10
	Total for the term:	**30**		**Total for the term:**	**30**
S00072	Sports	1	S00072	Sports	1

Total for the course of study: 240 ECTS credits

S00700 Introduction to Economics

ECTS credits: 6
Weekly workload: 2lec +2sem+0labs+0ps+se
Assessment: exam
Type of exam: writen and oral
Department involved:
Department of Economics
Faculty of Business and management
Lecturers:
Assoc. Prof. Emil Georgiev Trifonov, MEcon, PhD, Department of Economics
tel: / 888 703, E-mail: etrifonov@uni-ruse.bg
Abstract:
The Economics course is a fundamental economic discipline, dealing with common bases and problems of the modern economy of micro and macro. It gives knowledge of the functioning of the economic system and tools for micro-and macroeconomic analysis and is a base for training in all subsequent economic courses, the curriculum of the subject. Thus formed economic thinking and ensure acquisition of skills for proper guidance and independent choice in the market environment. With these qualities it is an essential element in any economic training who claimed to have academic nature.
Course content:
Essence of economic science. Measuring economic activity: kragooborot income products. Production of goods and services. Cost and revenue of the company. Market and the market mechanism. Elasticity of supply and demand. Competition and market behaviour. Economic systems and market forces. Competition and market behaviour. Pricing and revenue production. Market economy, money supply and banks. State interference in the economy. Macroeconomic policy and economic theory. Management of the economy (fiscal and monetary policy). Currency and exchange-rate mechanism. Policy and international exchanges.
Teaching and assessment:
The course comprises of lectures and seminars. The lectures present the foundations of the course and are illustrated with appropriate examples from the economic reality in Bulgaria. The seminars are based on the lectures and are consistent with the covered topics. Various forms such as tests, tasks and cases are used so that students deepen their knowledge of the studied material. The course ends with a written exam in the form of test questions covering topics from the two studied modules – microeconomics and microeconomics, as well as written presentation on a topic from the course syllabus. The final mark is a medial of the result on the test, the grade on the seminal essay and the results from the two test administered during the term

S00701 Calculus – Part I

ECTS credits: 6
Weekly workload: 2lec +2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Departments involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Miglena Nikolaeva Koleva, MSc, PhD, Department of Mathematics
tel.: 082 / 888 587, E-mail: mkoleva@uni-ruse.bg
Annotation:
The course is fundamental for the mathematical education of the students in the undergraduate programme in Financial Mathematics. It is the foundation for other course as Mathematical Analysis - Part II, Discrete Mathematics, Numerical Methods etc.The content includes an introduction to Mathematical analysis. The syllabus contains topics as: Sets and mappings Real numbers, Basic elementary functions, Limits, Continuity of functions, Derivatives and their applications
Course content:
Basic themes: sets and mappings, sets of real numbers, basic elementary functions, limits of sequences of numbers and functions, continuity of functions, derivatives of functions and applications.
Teaching and assessment:
The educational process comprises of lectures and seminars. In the lectures the educational material is theoretically presented and demonstrated by examples. In the seminars the educational material understanding is controlled and skills for solving problems are developed.

S00769 Linear Algebra and Geometry

ECTS credits: 7
Weekly workload: 3lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Miglena Nikolaeva Koleva, MSc, PhD, Department of Mathematics
tel.: 082 / 888 587, E-mail: mkoleva@uni-ruse.bg
Abstract:
The discipline is a fundamental one for a bachelor degree in mathematics and its applications in economics and finances. It is based on secondary school education and gives knowledge for the courses on Discrete Mathemarics, Computer Graphics and on some of those giving specialized knowledge for mathematics' application in economics and finances as Neural Networks for example.
Course content:
Coordinate systems and vectors. Line in a plane. Matrix operations. Determinants and methods of their calculations. Linear systems solving. Vector spaces and linear operators. Eigen vectors. Basis' ortogonalization. Quadratic forms and canonization. Second degree figures and surfaces and their canonization.
Teaching and assessment:
The seminars follow the lectures and put stress on the individual students' work. A seminal essay is written by the students. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

S00770 VBA Programming

ECTS credits: 6
Weekly workload: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Departments involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: val@ami.uni-ruse.bg
Abstract:
The purpose of the discipline is to give the students the basics of programming and to prepare them for developing in office environment with the programming language Visual Basic for Application, and also for full use of the applications in office environment and developing their own applications. The knowledge and possibilities, which are obtained by learning the discipline Programming with VBA , are basis for the Visual programming in Excel, and also there are necessary for all all disciplines which are related to the programming and can successfully to be used in diploma project and future work in the current spcialty.
Course Content:
Structure and working principle of the computer. Arithmetic and logical basics of computer equipment. Concept of algorithm. Branching algorithms. Algorithms cycles. Algorithms with massifs. Project module and submodule – technology for programming in VBA. Special objects in VBA. Key elements of the programming language VBA. Data types. Constants, variables. Converting data. Structure of VBA program. Assignment operators. Built-in functions and expressions. Communication with the application. Control operators. Linear programs. Programming of branching algorithms. Cycles. Arrays, declaration. Static and dynamic arrays. Procedures and functions. Scope of the names.
Learning and assessment:
The students attend lectures and practical exercises. Practical exercises are conducted on subgroups in computer labs with personal computers. On these exercises the students receive self-solving tasks related to the lecture. The decisions are implemented in an appropriate programming environment VBA in Excel. The course finishes with a current assessment. The final assessment is based on an assessment of the work of students from control work during the semester (70%) and assessment of course work (30%).

0771 English in Financial Mathematics – 1

ECTS credits: 5
Weekly workload: 2lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Diana Stefanova, MA, PhD, Department of Foreign Languages
tel: 082 / 888 532; E-mail: dstefanova@uni-ruse.bg;
Senior Lecturer Elisa Georgieva, MA, Department of Foreign Languages
tel: 082/ 888 532; E-mail: edgeorgieva@uni-ruse.bg
Abstract:
'English for Financial Mathematics' comprises 60 classes and provides skills for oral and written communication in the foreign language in the students' field of study. Vocabulary, including basic terminology from the specialized subjects, is acquired. General topics related to the field of informatics are considered. Skills to extract essential information from a text and write a summary are developed.
Course content:
Introduction to the European Language Portfolio. Presenting oneself – name, educational background, areas of interest, motivation to study Financial Mathematics. Degree courses in Financial Mathematics in Europe and beyond. Note taking strategies during lectures. Basic terms used in differential and integral calculus. Basic terms in differential equations. Applications of differential equations.
Teaching and assessment:
Classes generally follow the routine of introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises. Communicative tasks that require logical and analytical approach are performed. Students are given two written tests during the semester.
The requirements for obtaining a term validation signature are regular attendance, completing assigned tasks and doing the tests. The final mark is based on continuous assessment.

S02371 Insurance

ECTS credits: 6
Weekly workload: 2lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Plamen Yalamov, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082 / 888 466, E-mail: yalamov@allianz.bg
Annotation:
Life without risk is impossible. Risks are all around us. This course aims to acquaint students with what risks are insurable, which are not, and how we can insure against certain events. Insurance is a way to protect the economy against unforeseen events in order to ensure sustainable business development. The course acquaints students with the basic classes. There are also foundations of reinsurance, as an area which is very important for the security of insurance companies. The course is completed in accordance with similar courses in Bulgarian Economic and leading universities. After completion of the course students are expected to have been competent in the field of insurance.
Course content:
Origin of insurance. Principles of insurance business. Conclusion of insurance contracts and documentation. Reinsurance and co. Insurance against fire, business interruption, theft of cash. Insurance "all risk" carriage of goods against breakage of glass, household effects. Insurance license. Liability Insurance. Technical, marine and aviation insurance. Life. Health Insurance. Pension insurance and annuities. Insurance linked to investment funds. Children's insurance.
Teaching and assessment:
The topics discussed during the lectures are illustrated with a rich number of examples. The seminars add to the understanding of the main topics. The seminars include the solving of problems which is organized by the course tutor and which cover the course material studies during the lectures.

S00870 Calculus – Part II

ECTS credits: 7
Weekly classes: 3lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education.
Lecturers:
Assoc. Prof. Miglena Nikolaeva Koleva,MA, DSc, Department of Mathematics
tel.: 082/ 888 587, E-mail: mkoleva@uni-ruse.bg
Assoc. Prof. Yulia Vancheva Chaparova, MSc, PhD, Department of Mathematics
tel.: 082/ 888 226, E-mail: **jchaparova@uni-ruse.bg**
Abstract:
The course is fundamental for the mathematical education iand training of the students in the undergraduate programme in Financial Mathematics. It gets the students acquainted with the basic notions of the mathematical analysis such as definite integral, partial derivatives, and gives them computational abilities to solve linear difference equations and systems. The gained knowledge is necessary for further study of higher mathematics and mathematical finance
Course content:
Basic topics: Indefinite and Definite Integrals, Functions of Two Variables, Linear Difference Equations, Numerical and Power Series.
Teaching and assessment:
The educational process comprises of lectures and seminars. The teaching material is theoretically presented and demonstrated by examples during the lectures. The understanding of the course material is checked during the seminars and students' skills for solving mathematical problems are developed. The basic integrals and variables formulas are demonstrated. The students can use the tables with the presented formulas during the exam and the tests. Students need to prepare for the seminars in advance by learning the presented material during the lectures.

SB15476 Discrete Mathematics

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Iliyana Petrova Raeva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 606, E-mail: iraeva@uni-ruse.bg
Annotation:
Basic notions and methods are introduced for analyzing discrete systems and structures and important applications of them are considered in different branches of mathematics giving an accent on financial mathematics. The course is based partly on the one of Linear algebra and geometry taught in the first semester and have applications in many further courses giving specialized knowledge in the field of mathematics' application both in economics and finances.
Course content:
Arithmetics of integers, set theory, graph theory, binary functions, abstract syllabus and sets of words, finite automata and algebraic approach to coding theory and cryptography, cases in financial mathematics solved by graph optimization.
Teaching and assessment:
The seminars follow the lectures and put stress on the individual students' work. A course assignment is done. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

S01094 Probability Theory

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888-466, E-mail: vpavlov@uni-ruse.bg
Assoc. Prof. Evelina Ilieva Veleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888-466, E-mail: eveleva@uni-ruse.bg
Annotation:
The object of the Course on Theory of Probability is to students knowledge and skills to solve problems of non-deterministic situations. Probability theory involves the infrastructure required for producing such probabilistic models, on the other hand, is the science of analyzing experimental data. The course Analysis 1 is a foundation course of the course in Theory of Probability.
Course content:
Random events. Probability. Conditional Probability. Bayes' Theorem. Bernoulli's Scheme. Random Variables. Expected Values. Specific Discrete and Continuous Distributions. Multivariate distributions. Characteristic function. Distribution of functions of random variables. Convergence of random variables. Law of Large Numbers and Central Limit Theorem.
Teaching and assessment:
The lectures present the material theoretically and illustrate it with appropriate example problems. At the seminars the assimilation of the material is controlled. Two control works, 2 hours each, are conducted during the semester. The control works evaluation is taken in account in the final mark of the subject. At the beginning of the semester each student is given individual problems as a course assignment. It should be presented at the end of semester in a written form and is defended orally. The final assessment is done at the examination, which consists of solving problems and answering questions.

0771 English in Financial Mathematics – 2

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Diana Stefanova, MA, PhD, Department of Foreign Languages
tel: 082 / 888 532; E-mail: dstefanova@uni-ruse.bg;
Senior Lecturer Elisa Georgieva, MA, Department of Foreign Languages
tel: 082/ 888 532; E-mail: edgeorgieva@uni-ruse.bg
Abstract:
'English for Financial Mathematics' comprises 60 classes and provides skills for oral and written communication in the foreign language in the students' field of study. Vocabulary, including basic terminology from the specialized subjects, is acquired. General topics related to the field of economics are considered. Skills to extract essential information from a text and write a summary are developed.
Course content:
Economic indicators. Interpreting data. Presenting figures. Describing trends. Preparing a presentation. Stages and tips. Economic cycles. Recession and recovery. The 'Great Depression' and the 'Credit Crunch'. Economic sectors: primary, secondary and tertiary. Retail banking. Reading skills. Making notes strategically.
Teaching and assessment:
Classes generally follow the routine of introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises. Communicative tasks that require logical and analytical approach are performed. Students are given two written tests during the semester.
The requirements for obtaining a term validation signature are regular attendance, completing assigned tasks and doing the tests. The final mark is based on continuous assessment.

S01223 Ordinary differential equations

ECTS credits: 7
Weekly classes: 3lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yulia Vancheva Chaparova, MSc, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: jchaparova@uni-ruse.bg.
Pr. Assist. Prof. Tihomir Bogomilov Gulov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 489, E-mail: tgulov@uni-ruse.bg
Abstract:
The course “Ordinary Differential Equations” (ODE) gets the students acquainted with the basic notions and methods for ordinary differential equations. The main purpose is to teach students solving and analyzing the behavior of solutions in order to promote their educational and research activities. Some of the topics are methods for solving ODEs in quadraturies, existence and uniqueness theorems for initial problems, phase portrait of linear systems in the plane, stability of equilibrium points, conservative systems. The subject is based on the courses of Linear Algebra, Calculus, Mathematical Analysis.
The gained knowledge is essential for further courses such as “Partial Differential Equations”, “Numerical Methods”, etc.
Course content:
First Order Differential Equations, Existence and Uniqueness, Linear Equations and Systems, Qualitative Theory of Differential Equations
Teaching and assessment:
The educational process is realized by lectures and practical exercises. Lectures are organized to present the material theoretically and by appropriate examples. Practical exercises are orientated towards controlling students’ understanding and developing skills for solving problems. A term certification is obtained according to Internal rules for the educational activities. The exam test includes 6 problems and/or theoretical questions.

S01448 Statistics

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082 /888 466, E-mail: vpavlov@uni-ruse.bg
Annotation:
The course builds on the knowledge obtained in the field of Mathematical Statistics gathered as a result of the education and training in the course of Probability Theory. It puts an emphasis on applications of statistics in economics and finance. During the seminars the students are introduced to specialized software for data processing and statistical analysis SPSS (Statistical Package for Social Sciences). The curriculum is consistent with similar courses in leading Bulgarian and foreign universities.
Course content:
Nature of Statistical Learning. Measuring Scales. Statistical Monitoring. Statistical Group. Statistical Analysis. Graphical Statistical Images. Empirical Statistical Distributions. Numerical Characteristics. Established Representative Statistical Study. Statistical Evaluation. Point and Interval Estimates. Sampling Error. Determination of Sample Size. Statistical Hypothesis Testing. Check For Normality of the Empirical Distribution. Student's Criterion. Chi-Square Criterion. Analysis of Variance. Correlation Analysis. Regression Analysis. Verification Of Statistical Significance Of The Coefficients Of The Regression Model. Adequacy of the Model. Multiple Regression and Correlation. Evaluation of the Model. Applications. Empirical Studies in Business.
Teaching and assessment:
The teaching process comprises of lectures, seminars and a seminal essay. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises.

S01451 Visual Programming in Excel

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Desislava Tsoneva Baeva MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The course aim is to develop students' knowledge about Visual Programming in Excel and to give them new skills to develop their own interface in visual environment. The theoretical material, presented in lecture classes, is illustrated with appropriate examples. The practical exercises are based on programming in VBA environment in MS Excel.
Course content:
Introduction to Objects and Collections. Container, Circulation to Specific Objects in Collections or Container. Adding Objects. Projects and Modules. Menu. Interface Design. Dialogues. Elements of Dialogues. Built-In Dialogues. Custom Dialogues. Properties of Control Elements. Events. Methods. Management of Host Applications of Office.
Teaching and assessment:
Students attend lectures and practical exercises. The practice sessions are held with subgroups in computer labs. During these exercises students have to solve on their own tasks related to lecture material. Decisions are implemented in an appropriate programming environment VBA in Excel. The course finishes with an ongoing assessment. The final mark is based on evaluation of the students from the two control tests conducted during the semester (70%) and the average score achieved as a result of the current control during exercise.

SB13824 English in Financial Mathematics – 3

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Diana Stefanova, MA, PhD, Department of Foreign Languages
tel: 082 / 888 532; E-mail: dstefanova@uni-ruse.bg;
Senior Lecturer Elisa Georgieva, MA, Department of Foreign Languages
tel: 082/ 888 532; E-mail: edgeorgieva@uni-ruse.bg
Abstract:
'English for Financial Mathematics' comprises 60 classes and provides skills for oral and written communication in the foreign language in the students' field of study. Vocabulary, including basic terminology from the specialized subjects, is acquired. General topics related to the field of economics are considered. Skills to extract essential information from a text and write a summary are developed.
Course content:
Writing for academic purposes. Argument and structure. Presenting an argument. Backing up an argument. Using one's own and other people's words. Plagiarism. Quotes. Stock markets. Why do they move? Public listed companies. Initial public offering. Stock markets. Why do they move? Public listed companies. Initial public offering. Financing the company. Income statement/ Profit and loss account. Company reporting. The annual report. The chairman's statement at the AGM. The steps of an audit. The auditor's letter to management. Accountancy and professional ethics.
Teaching and assessment:
Classes generally follow the routine of introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises. Communicative tasks that require logical and analytical approach are performed. Students are given two written tests during the semester.
The requirements for obtaining a term validation signature are regular attendance, completing assigned tasks and doing the tests. The final mark is based on continuous assessment.

SB15051 Computer Mathematics

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+se
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assit. Prof. Stefka Romanova Karakoleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 606, E-mail: skarakoleva@uni-ruse.bg
Abstract:
The course aims at studying the application of modern computer systems for mathematical computations and visualization, and build skills for independent solving various mathematical problems with application in all fields of science. The program focuses on the practical use of mathematics in all fields of business science and practice. Using the Computer Algebra system MATLAB and her symbolic package MUPAD makes the course clear, dynamic and useful.
Course Contents:
The course includes the study and use of commands and functions of the system MATLAB for solving problems of Linear algebra, Geometry, Complex numbers, Functions, Differential and integral calculus, Differential equations, Fourier series and others.
Learning and assessment:
The theoretical part is presented on the lections and of the material being studied of recommended textbooks. The knowledge is applied during the practical exercises in a computer lab with Internet. The students with excellent results of the course will participate in the National Olympiad “Computational Mathematics”.

S01463 Finance

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Economics
Faculty of Business and Management
Lecturers:
Assoc. Prof. Kameliya Boyanova Asenova, PhD, Department of Economics
tel.:082 / 888 416, E-mail: kassenova@uni-ruse.bg
Pr. Assit. Prof. Petar Penchev Penchev, PhD, Depatment of Economics
tel.: 082 / 888 347, E-mail: ppenchev@uni-ruse.bg
Abstract:
The course introduces students to the nature and manifestation of finance es specific monetary relations that underpin the functioning of the fields and branches of economy. An emphasis is placed on the finance in companies and enterprises (where many University graduates will be working) with special attention paid to their capability to influence the parameters of economic growth. This course is a prerequisite for other economic disciplines such as Accounting and Economic and Financial Analyses.
Course content:
The course aims to enlighten the theoretical fundamentals of financing, the forms of its organization and application, the prerequisites for increasing financial effectiveness, the indicators for measuring and assessing financial results, etc.
Teaching and Assessment:
The teaching methods seek to develop methodological and heuristic abilities in students as well as to broaden their world outlook. For this reason a lot of efforts are made to overcome the empirical interpretation of the issues and achieve their acquired knowledge. To that end, the course is taught through lectures and also seminars where students can extend their knowledge of the subject by discussing and solving a variety of specific problems.

1548 Partial Differential Equations

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Yuliya Vancheva Chaparova, PhD, Department of Mathematics
tel. 082 / 888 226, E-mail: jchaparova@uni-ruse.bg
Pr. Assist. Prof. Tihomir Bogomilov Gulov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 489, E-mail: tgulov@uni-ruse.bg
Annotation:
The course is fundamental for the mathematical education of students studying in the undergraduate programme in Financial Mathematics. It forms the basis for other courses such as Numerical Methods etc. .The content includes an introduction to Partial differential Equations
Course content:
Basic topics: :Basic Equations of Mathematical Physics, One Dimensional Wave Equations, Reflection Method, Mixed Problem, Conservation of Energy; One Dimensional Diffusion Equation, Maximum Principle, Poisson Formula, Laplace Equation, Maximum Principle, Black-Sholes Equations, Mean Value Propert of Harmonic Functions; Fouruer Series, Fourier Method for Wave, Diffusion and Laplace Equations.
Teaching and assessment:
The educational process is realized by lectures and seminars. In the lectures the educational material is theoretically presented and demonstrated by proper example problems. In the seminars the educational material understanding is controlled and skills for solving practical problems are developed. A term certification is obtained according to Interval rules for the educational activities. The exam test includes 2 problems and one theoretical question from the educational material .

SB15292 Numerical Methods

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Evelina Ilieva Veleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: eveleva@uni-ruse.bg
Pr.Assist. Prof Ivan Radoslavov Georgiev, MSc, PhD, Department of Applied Mathematics and Statistics
tel. 082/ 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract:
The course studies a number of numerical algorithms for solving wide class of practical problems. The main objectives of the course are: to give basic knowledge in theory of numerical analysis, numerical linear algebra; numerical solution of differential equations; to develop skills for computer realisation of the numerical methods using the programming environment Matlab; to develop skills for intelligent application of approximation techniques to the types of problems that commonly occur in engineering and physical and computer science.
Course syllabus:
Programming with Matlab. Floating-point arithmetic. Numerical methods for solving one nonlinear equation and system of nonlinear equations. Interpolation and polynomial approximation. Numerical integration and differentiation. Direct and iterative methods for solving system of linear equations. Approximation theory. Numerical evaluation of eigenvalue and eigenvectors of matrix. Numerical methods for differential equations.
Teaching and learning methods:
The teaching is caried out by means of lectures and computer workshops. At the lectures the material is explained theoretically and illustrated by appropriate example problems. At the workshops the students solve theoretical and practical problems and use the programming environment Matlab for computer realization of the algorithms. There will be a course assignment that consists in giving different topic to each student, which should be developed theoretically and realized numerically on Matlab. The goal is the student to go alone into given problem. Two written tests, 2 hours each, are conducted during the semster. The final mark is formed according to the results in the written tests, course assignment and written exam.

S01550 Econometrics

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velisar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assist. Prof. Vesela Atanasova Mihova, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082/ 888 424, E-mail: vmicheva@uni-ruse.bg
Abstract:
The course studies some basic methods for measuring economic relationships specified by econometric models. It is concerned with the development of econometric methods, their assumptions, their uses and limitations. These methods are illustrated with examples from various areas of economics and business.
Course content:
Two-variable Regression Analysis, Multiple Regression Analysis, Multicollinearity, Heteroscedasticity, Autocorrelation, Regression on Dummy Variables, Regression on Dummy Dependent Variables, Dynamic Econometric Models: Autoregressive and Distributed-Lag Models, Stationary Time Series and Cointegration, Forecasting with Box-Jenkins Methodology.
Teaching and assessment:
The teaching comprises of lectures and seminars. During the lectures the material is explained theoretically and illustrated by appropriate examples. At the seminars students are taught to develop, estimate and analyse applied econometric models.
There will be a course assignment that consists in giving different economic problem to each student. The student should construct appropriate econometric model, to make an estimation of the parameters of the model, and to analyse the obtained results.
Two written tests, 2 hours each, are conducted during the semester. The final mark is formed according to the results in the written tests, course assignment and written exam.

SB15445 Programming with Python

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: stzancov@ami.uni-ruse.bg
Assoc. Prof. Sergey Dimitrov Antonov, MEng, PhD, Department of Informatics and Information Technologies
tel.:082 / 888 475; E-mail: santonov@ami.uni-ruse.bg
Abstract: The course teaches the basic concepts and concepts of the Python programming language. Emphasis is placed on understanding the basic principles of programming as a whole and deepening language skills - working with expressions and control constructs, organizing checks and loops, working with I/O operations, using features, learning about different libraries and tools which are used to develop desktop and web applications. The program of study is purely practical, filled with many examples, projects and tasks to develop students' skills.
Course content: Installing Python 3. First program, structure, comments. Data input/output. Variables and data types. Mathematical operators. Sequence operators, assignment operators, bitwise operators. Cycles and conditional operators. Mathematical functions. Number types supported. Numerical functions. Introduction to regular expressions. Meta characters. Special sequences Lists. Recursion. Methods and functions for working with files. OOP and Python. Graphical interface. Signal and event processing. Dialogs. Dialog for opening and saving a file. Font and color selection dialog.
Teaching and assessment:
The lectures are combined with a talk and a lecture with elements of interactive and multimedia training, observation, demonstration, etc.. Practical classes are conducted in halls with personal computers and represent practical work under the guidance of a lecturer. Each student is assigned a separate course assignment. Students receive semester certification in a coursework assignment and attendance of at least 70% of the classroom hours provided in this program. At the end of the semester the students' theoretical knowledge is tested by a test on the whole material.

SB10203 English in Financial Mathematics – 4

ECTS credits: 4
Weekly classes: 1lec+0sem+0labs+1ps+cw
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Diana Stefanova, MA, PhD, Department of Foreign Languages
tel: 082 / 888 532; E-mail: dstefanova@uni-ruse.bg;
Senior Lecturer Elisa Georgieva, MA, Department of Foreign Languages
tel: 082/ 888 532; E-mail: edgeorgieva@uni-ruse.bg
Abstract:
'English for Financial Mathematics' comprises 30 classes and provides skills for oral and written communication in the foreign language in the students' field of study. Vocabulary, including basic terminology from the specialized subjects, is acquired. General topics related to the field of economics are considered. Skills to extract essential information from a text and write a summary are developed.
Course content:
Insurance and risk. Personal insurance. Tips on getting the best insurance policy. Insuring risk at Lloyd's. How do companies manage risk? Insurance claims from a natural disaster. Reporting on insurance claims. Talk in higher learning. The dynamics of dialogue. Picking up the 'academic' way of thinking and arguing. Giving a presentation. Speaking to an audience. Pitfalls. Basic rules for presenting. Rehearsing the talk.
Teaching and assessment:
Classes generally follow the routine of introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises. Communicative tasks that require logical and analytical approach are performed. Students are given two written tests during the semester.
The requirements for obtaining a term validation signature are regular attendance, completing assigned tasks and doing the tests. The final mark is based on continuous assessment.

S02374 Stochastic Analysis and Applications

ECTS credits: 5
Workload per week: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Leda Dimitrova Minkova, MSc (Math), PhD (Math), Dept. of Probability, Operations Research and Statistics, University of Sofia,
tel.: 02 / 978 3185, E-mail: leda@fmi.uni-sofia.bg
Abstract:
The course offers a brief description of random processes described by stochastic equations and introduction to stochastic analysis. Special attention is paid to particular Vinerov process and Ito processes. Consider the relationship between equations and stochastic equations with partial derivatives in the context of their application in financial theory. Studied the conditions for the absence of arbitrage and market completeness in terms of probability measures. Displayed formula of Black - Scholes formulas and prices of some exotic options. The course has input links with courses in Calculus, Ordinary and Partial Differential Equations and Probability Theory.
Course content:
Random processes in continuous time. Task for the first time reached the level. Semimartingali. Decomposition of Doubs - Meyer. Stochastic integrals. Ito's formula. Absolute continuity of probability measures. Derivative of the Radon - Nicodemus. Girsanov Theorem. Theorem martingalno performance. Stochastic differential equations driven by Vinerov process. Markowski property decisions. Linear stochastic differential equations. Exponential martingali. Methods for solving the GG. Formula of Feynman-Kac. Semimartingalen model of financial market. Self-financing strategies. Constructing martingalni measures. Eliminating the risk. Conditions for the absence of arbitrage. Completeness of the market. Fair value of European call options. Formula Black - Scholes. Barrier options.
Teaching and assessment:
The teaching process comprises of lectures and seminar exercises. Topics discussed during lectures are to be illustrated and given meaning additionally through seminar exercises.

S02373 Introduction to the Financial Mathematics

ECTS credits: 7
Weekly classes: 3lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Dimitrov Kandilarov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 634, E-mail: ukandilarov@uni-ruse.bg
Abstract:
The course is a based one for a bachelor degree in mathematics and its applications in economics and finances. The programme unit aims to enable students to acquire active knowledge and understanding of some basic concepts in financial mathematics. It gives a mathematical perspective on the valuation of financial instruments.
Course content:
Simple interest, compound interest, relative and conformal interest rate, anticipate interest rate, discount, mathematical and banks discount rates, annuity, periodic interest rate, private means, long loan, secured loans, bonds and other financial derivatives.
Teaching and assessment:
The seminars follow the lectures and put stress on the individual students' work. A course assignment is done. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

S00876 Operations Research in Economics

ECTS credits: 7
Weekly classes: 3lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Abstract:
The course's aim is to make students acquainted with some specific models arising in solving management problems and up-to-date mathematical and statistical methods for their solving, analyzing and interpretation of received solutions. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving larger real models are provided.
Course content:
Subject and aim of operations research. Mathematical model of operations. Efficiecy and optimum criterion. General formulation of the linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with *m* unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex Method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queuing theory. Elements of inventory theory.
Teaching and assessment:
The teaching process comprises of lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the opportunities of the software package MATLAB for solving more complicated and close to the practice problems.

SB15296 Neural Networks in Finance

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Angela Slavova Popivanova, MSc, PhD, DSc, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences
tel.: 0888 132 514, E-mai: slavova@math.bas.bg
Abstract:
The subject is aimed to make students acquainted with general concepts, methods and algorithms from the theory of neural networks with applications in finance. There are examples near to the practice.
The course involves lectures and exercises held at computer laboratories. During the exercises students get to learn how to use simulation tools for neural networks with Matlab.
Course syllabus:
Introduction to neural networks (NM). Structure of neural networks. Training methods and algorithms for NM. Multi-layer networks. Method backpropagation of the error. Self-learning neural networks. Self-organizing networks. Hopfield Networks. Associative memories. Applications of neural networks in finance - bankruptcy prediction, mortgage risk assessment, credit scoring, stock market forecasting, options volatility forecasting, time series forecasting.
Teaching and learning methods:
During the lectures the teaching material is presented theoretically. The goal of the practice classes is theoretical knowledge to find their practical application. Students get acquainted during these classes (held at computer laboratories) with simulation tools for neural networks with Matlab with applications in finance. Course assignment is provided for each student.

S02375 Typesetting with LaTeX

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+cw
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assit. Prof. Stefka Romanova Karakoleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 606, E-mail: skarakoleva@uni-ruse.bg
Abstract:
The course familiarises the students with the basicss of computer typesetting system LaTeX and build skills for independent creation of digital documents in various scientific areas for publishing on paper, compact disk or Internet.
Course Contents:
Structure of the document, floating objects-figures and tables, fonts, mathematical formulas, arrays, matrix, 2D and 3D graphics, importing of eps-graphics, theorems and definitions. Using PDFLaTeX program for creation of hypertext documents and e-books and presentations. Programming with LaTeX. Cration of new commands, environments, theorems, packages and styles.
Teaching and assessment:
The course includes lectures and practical seminars. The main material is presented at the lectures. At the practical seminars the students typeset in computer two documents – article and book with the basic elements of the article/book. The final mark is formed mainly from the exam, but also from work through the semester.

S02376 Computer Graphics

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: current assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vassilev, MEng, PhD, Deptartment of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel. 082 / 888 326, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course “Computer graphics” have to familiarise the students with the basic principles of developing and working of interactive computer graphic systems and to give them the knowledge, which are necessary for development of program systems for geometrical modelling of objects and graphic documents, using computers. Main principles and approaches of visualization of 2-D and 3-D objects are discussed.
Course content:
General information about computer graphics. Structure of interactive graphic systems. Peripheral devices for computer graphics. Architecture of up-date raster graphic displays. Basic graphic plain and 3-D space transformations. Matrix description. Composition of transformations. 3-D objects plain projections. Object description in graphic systems – models. Approximation and modelling of curves – interpolation, cubic splines, B-splines, Bezier curves. Organization of interactive work in computer graphic systems. Computer graphics colour, colours’ models.
Teaching and assessment:
The course comprises lectures and practical classes. The main material is delivered at the lectures. At the seminars the students solve themselves problems from the theoretic material and develop programs using suitable program software (Borland C++, Delphi, Visual C++). The final mark is composed from the mark of continuous students work through the semester (30%) and the exam result (70%).

S02378 Insurance Mathematics

ECTS credits: 7
Weekly classes: 3lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamen Yordanov Yalamov, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082 / 888 466, E-mail: yalamov@allianz.bg
Abstract:
The course aims to familiarize students with basic mathematical models arising in solving management problems of economic realities and modern methods for solving, analysis and interpretation of the obtained solutions. The course emphasized practical application. There are considered examples and problems with economic applications, similar to the practice. The insurance business is an area with many applications of mathematics and models considered are very important in the insurance practice.
Course content:
Essence of General Insurance. Insurance Operations. Role of the Actuary. Statistical Basis of Insurance. Frequency of Damage And Used Distributions. Risk Theory. Capital and Profit. Reinsurance. Billing Practices. Classification of Risks. Forecasting In General Insurance. Techniques for "Run-Off" Results. Calculation of Premiums. Insurance Reserves.
Teaching and assessment:
The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the solving more complicated and close to the practice problems.

S02379 Monte Carlo Methods in Finance

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Ivan Tomov Dimov, MSc, PhD, DSc, Institute of Information and Communication Technologies
tel.: 02 / 979 6641, E-mail: ivdimov@bas.bg
Abstract:
The subject aim is to teach students the basics of Monte Carlo methods in finance and management in solving problems of economic reality. The course deals with modern methods for Monte Carlo analysis and interpretation of the obtained solutions. The course has markedly applied character. Examples and problems with economic applications, similar to the practice are considered. Scientific methods based on mathematical models developed in recent years and widely applied in practice in countries with developed market economy are examined. During the exercise provides a demonstration of the use of computer programs in MATLAB.
Course content:
Basic Definitions: Probability Space, Random Variables. Discrete And Continuous Random Variables. Monte Carlo Las Vegas Methods: Definitions And Examples. Error Control In Monte Carlo. Analysis Of The Error. Computational Complexity Of Algorithms. Efficient Monte Carlo Algorithms. Superconvergent Algorithms. Random Interpolation Quadratures. Quasi-Monte Carlo Algorithms. Adaptive Monte Caro Methods For Linear Problems. Stochastic Financial Models. Analysis Of Options. Monte Carlo Methods For Evaluating American Options And Portfolio. Black-Scholes Model.
Teaching and assessment:
The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the opportunities of the software package MATLAB for solving more complicated and close to the practice problems.

SB15167 Modelling in Finance

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Departments involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assist. Prof. Tihomir Bogomilov Gyulov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 489, E-mail tgulov@uni-ruse.bg
Abstract:
The course offers mathematical methods for analyzing pricing financial derivatives. The students can use the gained knowledge for their master thesis elaboration as well as in practice.
Course contents:
The Black-Sholes equation. European options: mathematical models and numerical simulation. Problems with free boundaries. Numerical options. American options and Asian options.
Teaching and assessment:
The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consulancy and a course work. There is a final written exam at the end of the course.

S02381 Web Design

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: mst@ami.uni-ruse.bg
Assoc. Prof. Valentina Nikolaeva Voinohovska, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: valia@ami.uni-ruse.bg
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the elements for designing a website and web-based applications. The prerequisite for studying the course is the knowledge gained from the following courses: Object-oriented programming, Software engineering, Multimedia systems and technologies, Internet technologies
Course content:
HTML, CSS, Javascript, Web standards, Products used for designing websites, Planning, Navigation schemes, Storyboarding, Placing items on a page, Colour and colour schemes, Choosing colours, Fonts and typography, Using web graphics, Web graphic types and file formats.
Teaching and assessment:
The course comprises of lectures, practice sessions and a course assignment. The lectures give theoretical knowledge on the main requirements and statements for making preliminary preparation, data gathering, design features and development of web-based application. Practice sessions are held in computer labs where students apply theoretical knowledge into practice. The course task is individual and it is prepared as homework. Students get tutorials for developing the course tasks.

S02382 Multimedia Systems and Technologies

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolaeva Voinohovska, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: valia@ami.uni-ruse.bg
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with multimedia basic components and the stages for developing multimedia applications (MMAs). Students study the fundaments of HTML programming language and acquire skills for using modern systems and technologies in designing multimedia CD and Web-based applications.
Course content:
Multimedia – basic terminology, areas of application. Requirements and stages for developing Visual design, navigation and layout. HTML. Multimedia elements: text, graphic, sound, video and animation. Author's systems for designing MMAs. Programming languages in author's systems. Programming languages. Virtual reality.
Teaching and assessment:
Lectures are conducted 2 hours weekly. Practice sessions are 3-hour classes and are held under the supervision of an assistant professor/instructor following the theory taught at lectures. In the beginning of the sessions students do a 5-minute brief test or oral questioning as feedback. Besides practice sessions, students have to work on individual course assignment in extra time. In the end of the course they do a written test covering the lecture material.

S02377 Financial management

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lectures:
Assoc. Prof. Lyudmila Mihaylova Mihaylova, MEcon, PhD, Dept. of Management and Business Development
tel: 082 / 888 518, E-Mail: lmihaylova@uni-ruse.bg
Abstract:
This course will present the theoretical rationale of the main issues in financial management. The focus is on financial planning as a basis for developing specific business initiative. As a result of the course students will be able to make financial statements, prepare assessments and management decisions relating to the financial resources of the firm.
Course content:
Introduction to the Course "Financial Management". Management of the Firm Capital. Management of Revenue and Expenditure of the Firm. Cash Flow Management. Analysis of Liquidity of the Firm. Analysis of Financial Performance of the Firm.
Teaching and assessment:
The traditional way of delivering lectures will be enriched by visual materials put on slides and or multimedia packages. At seminars students will work on case studies. The continuous assessment is on the basis of tests and students' participation. The final note will be the average of the note from the continuous assessment and the one from the final exam..

S02410 Time Series

ECTS credits: 3
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturer:
Prof. Angela Slavova Popivanova, MSc, PhD, DSc, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences
tel.: 0888 132 514, Ee-mai: slavova@math.bas.bg
Abstract:
The course is aimed at making students acquainted with models connected with data varying in time and applied for solving management problems form economy. There are examples near to the practice. Due to the fact that neural networks have application in modern finance, the subject will study the their connection with time series and risk management.
The course involves lectures and practical exercises held at computer laboratories. During the exercises students get to learn how to use simulation tools for application of neural networks in time series forecasting.
Course content:
Examples for time series; Time series components; Stationary models; Autocorrelation function; Data loading; Describing statistics and graphics; Casual processes; General properties; Linear processes; AR(p), MA(q),ARMA(p,q) models; Adequate check; Choice of the model; Time series forecasting; Application of neural networks; Non stationary time series; ARIMA models; Season ARIMA(p,d,q,P,D,Q) s models; Applications in finance.
Teaching and assessment:
During the lectures the teaching material is presented theoretically. The goal of the seminar classes is the theoretical knowledge to find their practical application. Students get acquainted during these classes (held at computer laboratories) with simulation tools for neural networks with applications in finance.

S02384 Risk Analysis

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Iliya Aleksiev Brayanov, MSc, PhD, DZI Insurance PL
tel.: 02 / 902 70 41, E-mail: iliya.brayanov@dzi.bg
Abstract:
The purpose of this course is to make students acquainted with basic concepts, problems and methods in risk analysis and risk management. The course contains information on the application of risk analysis in managing the market and insurance risks and the assessment of capital requirements.
Course content:
Valuation of financial instruments. Risk management – basic concepts. Basic risk measures and methods in risk analysis.. Asset and Liability management (ALM) – basic concepts. ALM models in life insurance. ALM – analysis and reporting. Introduction to insurance risk. Valuation of insurance obligations. Loss distributions. Utility and credibility theory. Risk models, Ruin theory. Risk adjusted performance measurement. Introduction to Solvency 2.
Teaching and assessment:
During the lectures the teaching material is presented theoretically. The theory is illustrated with numerous examples. The goal of the seminars is to improve the understanding of the material. During the classed are solved practical problems and examples from lectures. Continuous assessment involves conducting two tests in the form of tests. Course work (assignment) is provided for each student.

SB14352 Financial Engineering

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturer:
Pr. Assist. Prof. Elitsa Rumenova Raeva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 424, E-mail: eraeva@uni-ruse.bg
Pr. Assist. Prof. Vesela Atanasova Mihova, MSc, PhD, Department of Applied Mathematics and Statistics
tel: 082/ 888 424, E-mail: vmicheva@uni-ruse.bg
Abstract:
The subject aim is to make students acquainted with the basic knowledge in the area of the financial markets and with the main connections in the same area between theory and practice. The character of this course is markedly applied. Models and technologies are preview together with examples and tasks. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving real problems are provided.
Course content:
Introduction in Financial engineering. Investments and incomes. Markets and market structure. Money market. Capital market. Bonds. Market indexes. Bond market. Collective investment scheme and other investment companies. Interest and factors define them. Risk.
Teaching and assessment:
The teaching process is realized through lectures and seminar exercises. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the opportunities of the real practice problems.

SB14353 Computational Finance

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Iliyana Petrova Raeva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 606, E-mail: iraeva@uni-ruse.bg
Abstract:
The course is included in the basic module of the curriculum of undergraduate study programme in Financial Mathematics. The students receive basic knowledge of financial markets: modeling of financial options, basic financial instruments stohastic processes, method "Monte Carlo", etc. Previously submitted ideas and models are summarized in algorithms. It is essential for understanding the matter by students' numerical experiments and individual work during the exercises. For the purpose of discipline will be used software MATLAB and SPSS (for making statistical analysis). The course is related to the courses in Financial Management, Risk Analysis, Financial Markets Theory and Portfolio Management.
Course contents:
Introduction To Computer Finances. Basic Financial Instruments. Contracta Risk-Free Profit. Interest Rate. Modelling of Financial Options. Geometry of Options. Mathematical Model. Binomial Method. Stochastic Processes. "Wiener Process," Stochastic Integral. Stochastic Differential Equations. Risk-Neutral Evaluation. Theorem Girsanov. Random Numbers. Regular Deviations. Linear Congruent Generators. Fibonacci Generators. Random Numbers From Other Distributions. Inversion. Transformation. Method of Acceptance and Rejection. The "Monte Carlo" Method (MCM). Approximate and Absolute Error. Strong and Weak Convergence. MMC - European Options. A Method Of Reducing The Variation. MMC For American Options. Parametric Method. Regression Method. Basics of the Method of Finite Differences. The Crank-Nicolson Method. Linear Complementarity. Inequalities. Addition to the Task of Black-Scholes.
Teaching and assessment:
The theoretical material is presented during the lectures. Some of the illustrations and examples are in the form of presentation. During the practical sessions students solve practical problems which are basically related to calculations. Students develop generalized algorithms to each of the methods or use the developed algorithms under the MATLAB and SPSS software products which are available in the university network system.

S02389 Internet Technologies

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Departments involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr. Tzvetomir Ivanov Vassilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: ceco@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: val@ami.uni-ruse.bg
Abstract: The course aims at familiarizing the students with the services, protocols and technologies in Internet, to give knowledge and skills to client-server technologies, to create server based DataBase applications via Internet. The theoretical material is illustration with many examples. MySQL and PHP (open source code) are used for the seminars, where the students develop small applications. As there is no course as "Computer networks and communications", it also introduces main terms from the computer networks.
Course content: Introduction and main terms in Internet. Client-server technology. World Wide Web (WWW) and HTTP protocol. PHP: Data types, variables, operators, statements. Arrays, strings, files. Dynamic content generation. Cookies and sessions. Apache server. PHP and MySQL linking. Users cerification. Colours and images. Tables and forms. Frames and inserting objects. JavaScript: inserting in HTML. Document and Window objects and their methods.
Teaching and assessment: The teaching is organized in lectures, practical sessions, course work. The lectures explain the theoretical fundamentals of the material and give suitable examples. The students should be able to work alone and develop simple client-sever database application during the practical sessions, which are in computer labs. The course finishes with a continuous assessment mark. It is computed as a weighted sum of two control works (0.3), workshop (0.2) and the course assignment (0.2).

S)2390 Information Systems

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Katalina Petrova Grigorova, MEng, PhD, Department of Informatics and Information Technologies
tel.:082 / 888 464, 888 326, E-mail: katya@ami.uni-ruse.bg
Pr. Assist.Prof. Magdalena Hristova Andreeva, MEng, PhD, Dept. of Informatics and Information Technologies
tel: 082 / 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
The course objective is to introduce the principles of designing, creating and maintaining of information systems. Students study the technologies for analysis and development of applied information systems, as well as for data exchange, management, monitoring and security. The course teaches the main statements and terminology of information system theory, the basic approaches for information systems development, as well as the principles of modeling processes and data. In result of the practice students are able to build up a complete information system.
Course content:
Data and information. System and information system in general. Information system model. Approaches for designing information systems. Information system service life. System analysis. Document movement charts. Block diagrams of data streams. Data dictionaries. Information system architecture. Information system using file servers. Information systems based on client-server architecture. Internet-based information systems architecture. Information systems management.
Teaching and assessment:
The course includes lectures, practice sessions and a course assignment. Lectures are of disputable character. Practice sessions are conducted with student teams on preliminarily assigned tasks. In the end of the term students defend the developed information system. The course assignment is given on. During the term students make three tests including theory and problems. The final grade of the continuous assessment is formed on the basis of the results from the practictice, the course assignment and the tests.

S02438 Business Simulations and Optimization

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+cw
Assessment: continuous assessment
Type of exam: written test
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Assoc. Prof. Aleksandar Petkov Petkov, MEcon, PhD, Department of Management and Business Development
tel.: 082 / 888 776, E-mail: apetkov@uni-ruse.bg
Abstract:
The course aims to implement general knowledge and skills of the students, associated with the modeling and analysis of business organizations by modern methods and techniques of simulation. Students are applying the theoretical knowledge by case studies and business situations.
Course content:
Business process management. Nature and basic concepts of system dynamics. Structure of the dynamic system. Nature and characteristics of business models. Business process modeling. Business simulation. Use of simulations in business. Optimization of business processes. Linear optimization technologies in business. Production program's optimization.
Teaching and assessment:
The teaching is conducted through lectures, exercises and course work. The topics of the lectures gives students fundamental theoretical knowledge. The lectures are illustrated by multimedia and demonstration of dynamic models, created with VenSim and FORIO. The exercises are conducted in a computer lab. The students must be prepared in advance by learning the lectures and handouts presented in the course's WEB site.

SB15052 Mathematical Economics

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuliya Vancheva Chaparova, MSc, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: jchaparova@uni-ruse.bg
Abstract:
The aim of the course is to present the basic mathematical methods for optimization of nonlinear problems under certain constraints as well as to use their applications to the economics. Both classical and modern approach is proposed.
Course contents:
Mathematics: Convexity and Concavity, Unconstrained and Constrained Optimization, Fixed Point Theorems, Fr6chet and Gateaux derivatives of functionals, Euler equation. Applications to Economics: the Consumer's problem, General equilibrium theory, Welfare theorems, Macroeconomic growth models.
Teaching and assessment:
The educational process is realized by lectures and seminars. An individual homework is assigned to each student in the end of the semester. A term validation is obtained according to the Internal rules for the educational activities.

SB15053 Game Theory

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Ivan Georgiev, Department of Applied Mathematics and Statistics
tel.: 082 / 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract: The course presents an introduction to one of the most modern and yet developed subjects in knowledge – the science for game theory. The subject is the process of decision making in a multiplayer environment, where the one's actions potentially interfere with the other's interest and decisions. Analyzing the model, the player builds a behavioural norm which allows for greater utility. This course develops contemporary practical skills about the main approaches in analyzing financial and economic processes, behavioural norm in decision making and applying them in predicting. What is more, the course introduces the students with the fundamental techniques for successfully doing the aforementioned activities, especially mathematical modelling via the creation of particular types of game models and their analysis.
Course content: game models; non-cooperative games; antagonistic games; matrix games, mixed strategies, dominant strategies, linear optimization; bimatrix games; Cournot and Bertrand models; dynamic games – games with complete and imperfect information, games with complete and perfect information, economic models, Stackelberg models; multistage dynamic games with complete and perfect information, symmetric and asymmetric patience models; games with incomplete information, Bayes theory for decision making, Bayes – Nash equilibrium; dynamic games with incomplete information, signaling games, relationship between financial mediators and debitors.
Teaching and assessment: In the lectures the course content is presented in a theoretical manner and it is accompanied by a set of illustrative examples. During the practice the students are solves casussen and problems from the taught material under the guidance and support of the lecturer. Two tests are planned during the semester. The students are intended to develop a coursework assignment, where to include one problem per topic from the taught material. The main way to form the course grade is to conduct a written exam.

S00853 Business Economics

ECTS credits: 3
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Economics
Faculty of Business and Management
Lecturers:
Assoc. Prof. Lyubomir Dimitrov Lyubenov, MEcon, PhD, Department of Economics
tel.: 082 / 888 347, E-mail: llyubenov@uni-ruse.bg
Abstract:
The purpose of the "Business Economics" course is to develop knowledge and skills in the future graduate students (Master level) for the correct and adequate market evaluation of processes and phenomena in real market conditions by means of application of appropriate and contemporary economic methods. The educational process is aimed at acquiring the laws of the market economy and their practical application in specific market situations.
Course content:
The following topics are studied in details: organisational types of enterprises; relations of the enterprise with the budget; the value of money with time and methods for evaluation of investments; repayment schedules of the enterprise; working capital of the enterprise; main capital and capital structure of the enterprise; depreciations of the main capital of the enterprise; costs and revenues in the enterprise.
Teaching and assessment:
The lectures are presented within the classical scheme and visualised with slides and presentations when necessary. After each topic, practical issues are discussed and resolved. The requirements for the validation of the semester are in accordance with the university rules and the final assessment of the knowledge takes the form of continuous assessment – solving of specific tasks and development of theoretical issue.

SB14354 Financial Law

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: exam
Type of assessment: written
Department involved:
Department of Public Law
Faculty of Law
Lecturers:
Pr. Assist. Prof. Elina Atanasova Marinova, ML, PhD, Department of Public Law
tel.: 082 / 888 429, E-mail: elina_marinova@uni-ruse.bg
Abstract:
The importance of public finances determines the importance of financial legislation. Students get acquainted with one of the branches of public law - financial law, which as a body of law is subject to the processes of accumulation, distribution and utilization of national income and control this activity. The main objective of the course is to equip students with knowledge on the legal regulation and management of financial relationships.
Course content:
General Characteristics of the Concept of Financial Law and Its Sources. Financial Law. Financial Relationships. Financial Instruments – General Characteristics, Conditionso Validity And Remedies. Budget Law And Procedure. Legal Regime of Budget Revenues. Legal Characterization of Taxes. Types of Taxes. Legal Characterization of the Fees And Duties. Means To Repay Public Debts. Legal Framework of Financial Control. State Financial Inspection. Court of Auditors. Financial Supervision Commission. Banking and Banking System - The Role of BNB. Currency Legislation and Currency Regime.
Teaching and assessment:
The lectures give students the opportunity to become familiar with the basic regulations in the field of financial law, to interpret and analyze relevant legal regulations. During the course discussions are held and students have the chance to work with the regulations and solve different cases. The exam consists of the written presentaion to a given question from the course syllabus.

SB14355 Methodology of Scientific Research

ECTS credits: 1 **Weekly classes:** 1lec+0sem+0labs+0ps
Assessment: continuous assessment **Вид на изпита:**
Методическо ръководство:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 466, E-mail: vpavlov@uni-ruse.bg
Abstract:
The course aims to familiarize students with the main points of the methodology of research in general and in the field of mathematics. It is directly aimed at graduating of students. An important focus of the course is the development of students's skills for writing a scientific article that is a requirement for the development of the so-called Pre-diploma Graduation Project. Another important focus is connected with creating students' skills for presentation of the research done and the results obtained. Upon the completion of the course students are expected to have developed competences in the field of research development, publication and presentation.
Course content:
Methodology of Research. Main Requirements. Significance of the Problem. Types of Research. Principles and Stages of Research. Academic Article. Structure of a Scientific Article. Literary and Scientific Style. Steps of Writing a Scientific Article. Classification Scheme of Mathematical Areas – Mathematics Subject Classification. International Databases. Indexing. Citation. Impact Factor. Impact-Rank. Presentation of a Scientific Publication. Milestones in the Preparation of a Presentation. Rules for Creating Slides. Scheme of the Presentation. Behaviour During the Presentation. Answering Questions.
Teaching and assessment:
The teaching process is in the form of lectures. Each student receives an individual task to draft and present a short presentation on a freely chosen topic in the field of Financial Mathematics. A discussion is made in the classroom in which students comment on the presentation of their peers and make recommendations.

SB14356 Language and Style

ECTS credits: 1 **Weekly classes:** 2lec+0sem+0labs
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Arts
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The aim of the course is to enhance the knowledge and skills of students in writing formal and business style documents through the acquisition of the linguistic and stylistic specifics of the official documents in Bulgarian and English language and the respective spelling conventions, layout standards and the requirements for such types of documents.
Course content:
The Functional Style – Definition and General Characteristics. The Style of Official Documents as a Functional Variety of the Modern Bulgarian and Modern English Languages. Substyles and Linguistic Characteristics of the Official Language Style in Bulgarian and English. The Style of Official Languages and the Business Language. Genre Specifics of the Bulgarian and English Official Documents – Typology, Formal Requirements, Grammar and Spelling Conventions.
Teaching and assessment:
The course comprises of lectures which present the main theoretical considerationc underlying the discussed topics. Each lecture is supplementeд with a range of tasks and sample texts (in Bulgarian and in English) which illustrate the main types of documents studied. The continuous assessment includes the grading of the written official documents by the students in the two languages, as well as a test that contains questions covering the main topics presented at the lectures. The final grade is the average of the grades received on the submitted written documents and the grade on the test.

S02418 Practicum in Financial Mathematics

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+4ps
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Kandilarov, MSc, PhD, Department of Mathematics
tel.:082 / 888 634, E-mail ukandilarov@uni-ruse.bg
Pr. Assist. Prof. Tihomir Bogomilov Gyulov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 489, E-mail tgulov@uni-ruse.bg
Abstract:
The course summarizes several topics related to the financial markets modelling. The students have the opportunity to gain extra skills and training to solve practical tasks in application of methods studied in previous subjects from the curriculum. These tasks concern basic problems from the financial engineering. The course is made up in conformity with other similar courses taught in Bulgarian universities as well as leading universities from abroad.
The prerequisites are as follows: Probability theory, Statistics, Stochastic analysis and applications, Monte Carlo methods in finance, Time series, Partial differential equations, Numerical methods.
Course contents:
Asset price – binomial model. Arbitrage. European and American style options. Random variables and processes. Itô's integral and formula. Stochastic differential equations. Black-Scholes-Merton model. Risk neutral measure and Girsanov theorem. Monte Carlo methods. Numerical methods in option pricing.
Teaching and assessment:
The course is taught through practical classes. Each student has to work on an individual problem assigned each week. The classes are conducted in computer labs. The continuous assessment grade is based on the work during the practice sessions as well as the results from two tests held in the semester.

SB15444 Markov Processes

ECTS credits: 3
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Вид на изпита: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 466, E-mail: vpavlov@uni-ruse.bg
Pr. Assit. Prof. Stefka Romanova Karakoleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 606, E-mail: skarakoleva@uni-ruse.bg
Abstract:
Markov chains are an important mathematical tool in stochastic processes. The underlying idea is the Markov Property, in order words, that some predictions about stochastic processes can be simplified by viewing the future as independent of the past, given the present state of the process. This is used to simplify predictions about the future state of a stochastic process.
Course Contents:
The course on Markov processes is an important element in the training of students and has a strong impact on their development as good specialists on financial mathematics. The course include the base of the theory of the Markov chains and its applications in financial mathematics.
Learning and assessment:
The training is done through lectures and seminars. In the lectures the students acquaint themselves with the theoretical foundations of the study material, as the theory is illustrated with practical examples. In the seminars, the students acquire the skills to solve a lot of practical problems with application of Markov chains in finance: credit risk measurement, predict market trends, queuing theory. The assessment is by written exam.

S02397 Credit Risk

ECTS credits: 4
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Leda Dimitrova Minkova, MSc, PhD, DSc, Dept. of Probability, Operations Research and Statistics, University of Sofia
tel.: 02 / 978 3185, E-mail: leda@fmi.uni-sofia.bg
Abstract:
Assessing credit risk is a fundamental task rashava by banks lending, insurance companies work with firms from credit agencies and all financial institutions. The purpose of this course is to acquaint students with the basic problems in solving this problem and solving methods. The course contains information on the application of credit risk in credit rating.
Course content:
Modeling the term structure of interest. Model of Merton. Reduced model of credit risk. Timing of the first reach and intensity of the process. Martingal associated with gambling feature. Theorem of martingal performance. Changing the probability measure. Martingal characterization of gambling function. Compensator random moment. Chance of bankruptcy schemes and debt recovery. Credit spreads in the reduced model. Risk assessment and credit rating.
Teaching and assessment:
The teaching process comprises of lectures and seminar exercises. Topics discussed during lectures are to be illustrated and given meaning additionally through seminar exercises.

S02435 Theories of Economic Growth

ECTS credits: 3
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Economics
Business and Management Faculty
Lecturers:
Assoc. Prof. Dyanko Hristov Minchev, MEcon, PhD, Department of Economics
tel.: 082 / 888 557, E-mail: DMinchev@uni-ruse.bg
Abstract:
The course “Theories of Economic Growth” studies the general notions, categories and laws related to the economic growth and the economic development. The subject traces historical the mathematical models, created by economists in different periods which are trying to define the fundamental causes of economic growth, because not a single economic theory is shared by all economists. The subject is closely related to Microeconomics, Economic analysis and Mathematics without which a serious study of economic growth and economic development is not possible.
Course content:
Economic growth and determinant factors. Economic cycle. Early theoretical growth models Keynesian model. Neokeynesian and postkeynesian growth models. Neoclassical and endogenous growth models.
Teaching and assessment:
The training is conducted by means of lectures, where information is presented, and seminars, where some questions raised in the lectures are further clarified with the active involvement of the students. Students' participation in seminars is through presentations, talks, essays and reviews prepared on their own initiative or assigned by the lecturer, which represents their extramural activity.

S02387 Theory and Management of Investment Portfolios

ECTS credits: 3
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlana Petrova Stefanova, MSc, PhD, Department of Computer Systems and Technologies
tel.: 082 / 888-356, e-mail: sstefanova@ecs.uni-ruse.bg
Annotation:
The course aim is to make students acquainted with some basic terminology used in the investment process and more specifically in creating and managing an optimal assets portfolio. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for simulating larger real models are provided.
Course content:
Risk and risk avoidance. Portfolio risk. Risk and no-risk assets. Division of capital between risk and no-risk assets. Diversification. Markovitz model for portfolio choice. Optimal risk portfolio. Portfolio managing. Portfolio efficiency evaluation. Choice of market moment. Hedging. International investments. Taking investment decisions. Restrictions of the client's portfolio managing.
Teaching and assessment:
The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the practical examples.

S02439 State Exam

ECTS credits: 10
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Applied Mathematics and Statistics
Abstract:
The state examination is held in front of the State Examination Commission in accordance with the approved syllabus, which includes main topics from all foundation courses.
The State examination includes tasks from the basic and specialized courses taught during the training: Linear Algebra and Geometry, Mathematical Analysis, Ordinary Differential Equations, Probability, Statistics, Econometrics, Introduction to financial mathematics, Insurance mathematics. The pre-diploma graduation project is developed on a freely chosen topic in the field of Mathematical Modeling and / or Statistics in Economics, Finance, Insurance, Social Work or other application areas.
Teaching and assessment:
The state exam comprises of two parts – a written part which involves the solving of problems and an oral examination where a presentation of an independently developed pre-diploma graduation project. The final evaluation of the state exam is formed as an average of the two parts, provided that on each of them the student has a higher or equal to the average of a fair mark (3.00). If necessary, the final evaluation is rounded according to the rules of mathematical rounding.

UNDERGRADUATE STUDIES IN COMPUTER SCIENCE

PROFESSIONAL STANDARDS

OF A BACHELOR IN COMPUTER SCIENCE

Degree Programme: **Computer Science**
Educational Degree: **Bachelor**
Professional Qualification: **Bachelor in Computer Science**
Term of education: **4 years (8 terms)**

The main target of the study program is to graduate professionals in Computer science who possess deep knowledge and skills for working in the field of Informatics and Computer Science.

The professional development of bachelors in computer science is aimed at software operating, maintenance and development, as well as administration of programming systems and networks.

The Computer Science Bachelors are equipped with professional skills and programming language knowledge in the area of Informatics and Computer Science. Graduates are also provided with good mathematical learning. The professional qualification is guaranteed by the well-balanced proportion of basic courses in Informatics, Mathematics and other practice-oriented subjects.

The study program involves:

- **Basic courses** in the main branches of Informatics and Computer Science, Mathematics, Mechanics, and foreign languages;
- **Specialized** courses covering due knowledge on computer architectures, network communications, computer linguistics, image processing, web design, etc. included in groups of elective subjects;
- **Acquisition of practice-oriented knowledge and skills** for using modern software products.

Bachelors of Computer Science will be able to:

- Quickly adjust to any working environment and creatively apply the knowledge gained;
- Analyze the necessity of automation of relevant firm's activities and suggest adequate software products for the purpose;
- Design and develop or adapt relevant software products to the needs of concrete applications, working in teams with other IT professionals of the company;
- Design, implement and administrate computer networks;
- Teach students at high schools if a teaching certificate has been awarded after completing due optional courses.

CURRICULUM

OF THE DEGREE COURSE IN COMPUTER SCIENCE

First year

Code	First term	ECTS	Code	Second term	ECTS
S01034	Introduction to Programming	8	S01076	Object Oriented Programming	8
S00848	Introduction to Informatics	4	S01083	Computer Architectures	6
S01051	Calculus I	6	S00854	Discrete structures	6
S01065	Linear Agebra and Geometry	8	S01089	Calculus II	6
S00856	English Part I	4	S01106	English Part II	4
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	S00072	Sports	1

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
S01118	Data Structures and Programming	7	S01182	Data Bases	7
S01119	Operating Systems	6	S01183	Computer Networks and Communications	5
S01122	Computer Graphics	7	S01184	Non-procedural Programming	5
S01125	Numerical Methods	6	S00865	Multimedia Systems and Technologies	7
S01181	English for Computing	4			
				Elective courses (students choose one course)	
			S01186	Practicum on OOP	3
			S01187	Practicum on Computer Graphics	3
				Elective courses (students choose one course)	
			S01188	Practicum on Discrete Structures	3
			S01190	Mathematical Software	3
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	**1**

Third year

Code	Fifth term	ECTS	Code	Sixth term	ECTS
S01192	Algorithm Development and Analysis	6	S01212	Artificial Intelligence	6
S01410	Component Oriented Programming	6	S01215	Internet Technologies	6
S01194	Information Systems	6	S01185	Probability and Statistics	5
S01197	Software Engineering,	7			
	Elective courses (students choose one course)			***Elective courses (students choose one course)***	
S01200	Mathematical Methods for Optimization	5	S01198	Practicum on Databases	3
S01248	Operations Research	5	S01199	Practicum on Data Structures and Programming	3
			S00887	Practicum	3
				Elective courses (students choose one course)	
			S01191	The Number Theory	5
			S01260	Coding Theory	5

			Elective courses (students choose one course)		
			SB17541	Introduction to Management	5
			SB16318	Project Management	5
			SB16319	Public Relations	5
			S01444	History of Mathematics and Informatics	5
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	1

Fourth year

Code	***Seventh term***	***ECTS***	***Code***	***Eighth term***	***ECTS***
S01446	Human-computer Interaction	5	S01518	Computer Modeling	4
SB10019	Image Processing	6	S00084	Graduation Self-study	4
SB10020	Programming Languages, Automation, Computing	6			
Elective courses (students choose one course)			***Elective courses (students choose one course)***		
S01475	Programming for Internet	5	SB10022	Social-legal aspects of Information technologies	4
S01481	Web Design	5	SB10023	Information Technologies in Management	4
Elective courses (students choose one course)			***Elective courses (students choose one course)***		
SB10021	Computer Linguistics	5	S01538	Programming of Mobile Devices	4
S01501	Client-Server Technology	5	S01539	Geographical Information Systems	4
			S01544	Visual Programming	4
Elective courses (students choose one course)			***Elective courses (students choose one course)***		
S01218	Practicum on Software Engineering	3	SO1545	Assembler	4
S01245	Practicum on Computer Networks and Communications	3	S01546	System Programming	4
S01244	Practicum on Non-procedural Programming	3			
			Graduation		
			S01553	State Exam	10
			S00083	Bachelor Thesis	10
	Total for the term:	***30***		***Total for the term:***	***30***
SB13965	Sports	1	SB13965	Sports	1

Total for the course of study: 240 ECTS credits

S01034 Introduction to Programming

ECTS credits: 8
Weekly classes: 2l+0sem+0labs+3ps+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vassilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course objective is to give students knowledge for developing algorithms and programmes in C++ programming language. The course focuses on the main data structures in the programming language C++ and on the main operations with that data. Special attention is paid on algorithm development being the basic step for writing programs. The practice sessions aim at acquiring skills for developing algorithms and programs.
Course content:
Algorithm development. Main data types and operation in C++ programs. Controlling structures – branches, choosing a variant, cycles. Arrays and arrays of arrays, pointers, one-dimensional dynamic and multi-dimensional arrays, character strings. Functions. Recursive algorithms and recursive functions.
Teaching and assessment:
The lectures concentrate on the process of algorithm development, testing and verification and their implementation in C++. Students are given suitable examples and independent tasks to practise writing programs and develop new programs. At the practice sessions students write programs and do tests. Each student prepares a course work including 5 tasks and presents them to the lecturer. Students get term validation after successful submissions of all assigned tasks. The examination is in a written form, but students defend their work orally. The test marks and the course work results are taken into consideration for the final examination mark.

S00848 Introduction to Informatics

ECTS credits: 4
Weekly classes: 1lec+0sem+0labs+2ps+0.5se
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course is within the group of the compulsory subjects to be studied during the first semester by students from the bachelor degree programs of Computer Science, and Informatics and Information Technologies in Business. Its goal is to familiarize students with the essence, methods and tasks of Informatics, so that they can catch up with the required level of knowledge.
Course content:
Subject, methods and tasks of Informatics. Data structure and representation in computer. Principle of the program control. Files and file systems (FAT 16/32; NTFS). File formats. Files:- backups, compressing, cryptography, data bases, SQL. Numerical systems. Boolean algebra. Elements of combinatorics used in Informatics. Numbers representation. Machine codes. Representation of fractions formats. Symbols representation and code tables. John fon Neumann's principle. Methods of programs design. Stages of the programming design. Testing methods. Algorithms.
Teaching and assessment:
Lectures are conducted two hours once a fortnight. At the practice sessions students are trained to work independently. They are encouraged to perform the assigned tasks by themselves and when necessary they are assisted and guided by the teacher. Students' activities are continuously assessed so that they get final marks in the end of the semester. Each student writes a paper on an assigned topic associated with the subject domain. In the end of the course the paper is submitted and defended. The continuous assessment includes the marks from two tests. The final grade is formed on the basis of tests results, the paper mark and the assessment of the practice sessions work.

S01051 Calculus I

ECTS credits: 6
Assessment: exam
Weekly classes: 2lec+2sem+0labs+0ps+0.5se
Type of exam: written
Departments involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Antoaneta Tileva Mihova, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: amihova@uni-ruse.bg
Prof. Miglena Nikolaeva Koleva, MSc, DMathSc, Department of Mathematics
tel.: 082/ 888 587, E-mail: mkoleva@uni-ruse.bg
Abstract:
The course is fundamental for mathematical education of students in “Informatics and Information Technologies”. It is a basis for further courses, such as Calculus II, Discrete Mathematics, Numerical Methods, etc. The main purpose of the course is students to get acquainted with the differential and integral calculus of functions of one variable. The fundamental notions for limit, derivative and integral are defined, and their properties and applications are considered.
Course content:
Sets and mappings, Real numbers, Basic elementary functions, Limits, Continuity of functions, Derivatives, Indefinite and Definite integrals and applications.
Teaching and assessment:
Lectures present notions, properties, and main assertions of the material, supported by suitable examples and problems. Practice are built up in accordance with lectures. Students are given three test papers and a paper. A term validation is granted in case of regular attendance at lectures and practice sessions. The exam is written and includes 4 practical and 2 theoretical problems.

S01065 Linear Algebra and Geometry

ECTS credits: 8
Assessment: exam
Weekly classes: 2lec+0sem+0labs+3ps+0.5se
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emilia Angelova Velikova, MSc, PhD, Department of Mathematics
tel.: 082 / 888 848, E-mail: evelikova@ami.uni-ruse.bg
Pr. Assist. Prof. Ralitsa Krasimirova Vasileva - Ivanova, PhD, Department of Mathematics
tel.: 082 / 888 848, E-mail: rivanova@uni-ruse.bg
Abstract:
The presented course is fundamental and obligatory for the specialities in Informatics and Computer Science. In this curriculum the work load per week is strongly diminished. It is based on the secondary school course in Algebra and is connected with Discrete Structures in the same term. It gives knowledge for the courses in Number Theory, Mathematical Analysis, Computer Graphics, Numerical Methods, Coding Theory, Languages and Numerability .
Course content:
Solving systems of linear equations. Determinants. Matrix operations. Linear spaces – subspaces, basis, dimension. Linear mappings - rang and nullity. Euclidean and unitary spaces. Bilinear and quadratic forms. Groups. Lagrange’s theorem. Normal subgroups. Quotient groups and isomorphism theorems. Rings and ideals. Quotient rings and the isomorphism theorem. Integral domains and fields. Splitting fields. Finite fields. Polynomials in several variables. Symmetric and homogeneous symmetric polynomials. Polynomials over numerical fields. The basic theorem of algebra.
Teaching and assessment:
The practice sessions follow the lectures and put stress on the individual student’s work. Students are allotted course assignments. Three test papers are given after every completed part of the course. The final mark can be received before the session time. Its forming is defined in the teaching program of the course.

S00856 English Part I

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Foreign Languages
Faculty of Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Tsvetana Atanasova Shenkova, MA, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
'English Part 1' for Computer Science students comprises 45 hours of classroom work and provides basic skills for oral and written communication in the foreign language in view of the students' field of study. New vocabulary connected with the basic terminology of the specialized subjects is acquired. General topics related to the field of informatics and computer science are considered. Skills to elicit essential information from a text and write a summary are developed. Students are expected to prepare and give a short presentation on a chosen topic related to computing or IT. A prerequisite for 'English Part 1' is an English course taken in secondary school.
Course content:
Living in a digital age. Computer essentials. Inside a PC system. Buying a computer. Input devices. Interacting with your computer. Display screens and ergonomics. Choosing a printer. Devices for the disabled. Magnetic storage. Specifics of technical English grammar and vocabulary.
Teaching and assessment:
The practical exercises include the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the semester.
The requirements for obtaining a semester validation signature are regular attendance, completing assigned tasks, giving a presentation and doing the tests. The final mark is based on continuous assessment.

S01076 Object Oriented Programming

ECTS credits: 8
Weekly classes: 2l+0sem+0labs+3ps+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Assist. Prof. Boyana Nedkova Ivanova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: bivanova@ami.uni-ruse.bg
Abstract:
The course is a continuation of the course “Introduction to programming”. It focuses on the main concepts of object-oriented programming. The programming language C++ is studied in detail and especially the object-oriented part. Classes and objects are studied being the main categories, as well as the main concepts for working with them. The practice sessions aim at acquiring skills for developing object-oriented programs. The programs are implemented using Borland C++.
Course content:
Classes and objects. Components of classes – data members, functions’ members, constructors and destructors. Objects and functions. Friends of classes. Derivatives of classes, inheritance. Streams. Pre-defined operators.
Teaching and assessment:
The lectures give the principles for development of algorithms using classes and objects, as well as their implementation in C++. They are supported with lots of exemplary programs and students have to independently modify the examples and write similar programs for training themselves in programming.
At the practice sessions students write programmes, verify them and do tests. Student’s course work includes two problems for independent work that has is defended and evaluated on submission. The term is validated for students who defend successfully the course work.

S01083 Computer Architectures

ECTS credits: 6
Weekly classes: 2l+0sem+0labs+2ps
Assessment: exam
Type of exam: written
Department involved:
Department of Computing
Faculty of Electrical Engineering, Electronics and Automation
Lectors:
Assoc. Prof. Milen Iliev Lukanchevski, MEng, PhD, Department of Computing
tel.: 082 / 888 674, E-mail: mil@ieee.org
Abstract:
The course addresses architectural aspects of computer systems. Main terms and principles in computer architectures are discussed as well as organization of computations. Modern computer architectures are presented analytically and comparatively. Memory hierarchy and input-output subsystem structure are shown as well. Simulations and real systems are used at the seminars to gain more deep understanding.
Course content:
Computer Architecture Principles. Basic Components. Historical Perspective. Types of Computer Architectures. Computer System Base Structure. Accumulator, Stack and Register Architectures. IA32 Architecture. Working Modes. Computer Memory Hierarchy. Input-output System.
Teaching and assessment:
The lectures introduce main theoretical topics. Each group of lectures ends with conclusion of material and formulation of problems.
At the seminars simulations and real systems are used putting lectures to practice. Each seminar begins with formulation and analysis of problems. At very end the students are asked to summarize in written form their results. The information materials needed are given in electronic form to the students.

S00854 Discrete Structures

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yurii Dimitrov Kandilarov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 634, E-mail: ukandilarov@uni-ruse.bg
Assoc. Prof. Tihomir Bogomilov Gulov, MSc, PhD, Department of Algebra and Geometry
tel.: 082 / 888 489, E-mail: tgulov@uni-ruse.bg
Abstract:
The course is basic for students of Informatics and Information technologies program. Its incoming course links are with General Algebra and Geometry. Students acquire fundamental knowledge about informatics, optimization theory, algorithm theory and their applications.
Course content:
Recurrent equations, abstract machines and automata, introduction to the coding theory.
Teaching and assessment:
The course material is presented at lectures, demonstrated with examples and practice-oriented applications. At practice sessions students gain skills for working independently over assigned tasks. The allotted paper develops students' knowledge for solving different problems and practice oriented tasks. The paper is evaluated acc. to a score table (0 to 20 scores) that is taken into account for the final grade. Students may not go for an exam if the continuous assessment results are very good or excellent and that mark may be considered as a final grade.

S01089 Calculus Part II

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Antoaneta Tileva Mihova, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: amihova@uni-ruse.bg
Prof. Miglena Nikolaeva Koleva, MSc, DMathSc, Department of Mathematics
tel.: 082/ 888 587, E-mail: mkoleva@uni-ruse.bg
Abstract:
Calculus - Part 2 is fundamental subject among the mathematical courses of the speciality. It is a continuation of the subject Calculus - Part 1.The main purpose of the course is students to get acquainted with the differential and integral calculus of functions of several variables. The outgoing relations of the subject are with Numerical methods, Probability and Statistics, and with other elective courses in mathematics and informatics.
Course content:
Function of several variables: differentiation, extremums, implicit functions. Multiple integrals and applications, Curve and surface integrals, Functional series.
Teaching and assessment:
Lectures present notions, properties, and main assertions of the material, supported by suitable examples and problems. Practice are built up in accordance with lectures. Students are given three test papers and a paper. A term validation is granted in case of regular attendance. The exam is written and includes 6 practical and/or theoretical problems. The subject is fundamental among the subjects in the basic module of the specialty Mathematics and Informatics. It is a continuation of the subject Calculus - Part 1. Its outgoing relations are with all mathematical subjects of the study program.

S01106 English Part II

ECTS credits: 4
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Foreign Languages
Faculty of Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Tsvetana Atanasova Shenkova, MA, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
'English Part 2' for Computer Science students extends the foreign language competence of students to cope with specialised literature and professional communication. Work is done to achieve a greater accuracy in the use of typical and common phrases, structures and grammatical models. Authentic texts mainly are used to bring the learners closer to scientific style. Collocations with frequently used terms and notions are considered. Students prepare and give team presentations.
Course content:
Storage devices (optical discs and drives, flash drives); The operating system; Word processing; Spreadsheets and databases; The Internet and email; The Web; Chat and conferencing; Internet security; Graphics and design.
Teaching and assessment:
The practical exercises include the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the semester. The requirements for obtaining a semester validation signature are regular attendance, completing assigned tasks, participating in a team presentation and doing the tests. The final mark is based on continuous assessment.

S01118 Data Structures and Programming

ECTS credits: 8
Weekly classes: 2lec+0sem+0labs+3ps+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturer:
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Assoc. Prof. Kameliya Ilieva Shoylekova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 214; E-mail: kshoylekova@ami.uni-ruse.bg
Abstract:
The course objective is students to gain knowledge on complex data structures, data structure design algorithms and maintenance, application software. Reference practical cases are considered as data structure applications. Data structures and processing algorithms are considered conceptually at first and afterwards implemented in C++.
Course content:
Sorting and searching algorithms. Stack implementation and processing. Queue implementation and processing. Linear linked lists. Sorted lists. Binary trees. Binary search trees. Graphs. Graph presentation. Graph algorithms and applications.
Teaching and assessment:
The lectures focus on data structures in accordance with the syllabus. The accent is placed on data structure presentations, the applied basic operations and types of problems solved with the created data structure. Program implementation in C++. At practice sessions students design and test concrete practical cases using complex data structures. The course work is carried out individually in two stages as homework and it is presented in a pre-set time. Students do 3 tests on theory and practical cases during the term. The course ends with exam. The grade is formed on the basis of the results from the exam, course work and tests.

S01119 Operating Systems

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Kameliya Ilieva Shoylekova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 214; E-mail: kshoylekova@ami.uni-ruse.bg
Abstract:
The course objective is to give students knowledge and skills about the main principles of design and functioning of the operating systems. At the lectures the theoretical material is illustrated with examples from different modern OS. The practice sessions are based on the two most widespread OS: Windows and UNIX. Their organization and way of operation are addressed and compared.
Course content:
Introduction to OS. OS classification. Structure of OS. Processes and threads. Interaction between processes. Parallel processes. Synchronisation. Solutions to classical problems. Mutual blocking. CPU management. Planning algorithms. Memory management. Virtual memory management and protection. Device management. Organization of I/O devices. File system management. Functions and structure of the file system. Multimedia OS. Distributed systems. Protection and security in OS.
Teaching and assessment:
The lectures are 2 hours per week and the theoretic material is delivered at the lectures. The practice sessions take place in computer-equipped labs under the lecturer's supervision on topics as listed. At the practice sessions the students can strengthen the knowledge given at the lectures by discussing the features of particular OS and running examples. The students' knowledge is continuously assessed at the practice sessions with tests. The final grade is computed taking into account the continuous assessment at the practice sessions and the exam results.

S01122 Computer Graphics

ECTS credits: 7
Weekly classes: 2lec+0sem+0labs+3ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vasilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course objective is to familiarize the students with the basic principles of developing and working of interactive computer graphic systems and to give them knowledge needed for the development of program systems for geometrical modeling of objects and graphic documents using computers. Students learn the main principles and approaches for visualization of 2-D and 3-D objects. Special attention is paid to the methods of developing graphic users' interface.
Course content:
General information about computer graphics. Structure of interactive graphic systems. Peripheral devices for computer graphics. Architecture of up-to-date raster graphic displays. Basic graphic plain and 3-D space transformations. Matrix description. Composition of transformations. 3-D objects plain projections. Object description in graphic systems, models. Approximation and modeling of plain curves – interpolation, cubic splines, B-splines, Besie's curves. Organization of interactive work in computer graphic systems. Graphical user interface. Computer graphics color, color models.
Teaching and assessment:
The course comprises lectures and practice sessions. Student subgroups attend the practice sessions in computer labs equipped with modern PCs. During the practice sessions students solve independently problems connected with the lecture theory. E.g. selection of object description material, visualization, interactive manipulating of the object. All operations are carried out in adequate programming environment (Borland Pascal, Borland C++, Delphi, Visual C++). The course ends with exam. The final grade is formed on the basis of student's continuous assessment through the term (30%) and the exam result (70%).

S01125 Numerical Methods

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Evelina Ilieva Veleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 606, E-mail: eveleva@uni-ruse.bg
Assoc. Prof. Ivan Radoslavov Georgiev, Department of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract:
The main objectives of the course are: to give a basic knowledge in the theory of numerical analysis, numerical linear algebra and numerical methods for initial and boundary-value problems for ordinary differential equations; to develop skills for computer realization of the numerical methods using programming environment Matlab; to develop skills for intelligent application of approximation techniques to the types of problems that commonly occur in engineering and physical and computer science.
Course content:
Numerical methods for solving one nonlinear equation and system of nonlinear equations. Interpolation and approximation functions. Numerical integration and differentiation. Direct and iterative methods for solving system of linear equations. Numerical evaluation of matrix eigenvalues and eigenvectors. Numerical solution of initial-value and boundary-value problems for ordinary differential equations.
Teaching and assessment:
The teaching is carried out by means of lectures and computer practice sessions. At the lectures the material is explained theoretically and illustrated by appropriate example problems. At the practice sessions the students solve theoretical and practical problems and use the programming environment Matlab for computer realization of the algorithms.

S01181 English for Computing

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+3ps+0,5p
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Senior Lecturer Tsvetana Atanasova Shenkova, MA, Department of Foreign Languages
tel.: 082 / 888 532, E-mail: tsshenkova@uni-ruse.bg
Abstract:
The subject English for Computing extends the foreign language competence of students with respect to specialised literature and professional communication. Work is done to achieve a greater accuracy in the use of typical and common phrases, structures and grammatical models. Collocations integrating common terms and notions are considered. Students prepare and give individual or team presentations related to establish IT companies or distinguished specialists in the field.
Course content:
Problem and solution; Programming; Flowcharts; An Interview with an Analyst/programmer; Computing words and abbreviations; Contrast; Low-level systems; The CPU; The machine cycle; *will* and *would;* Virtual reality; Future developments; Schooling of the future; Making guidelines and rules; An Interview with an IT Manager; Access systems; Careers in computing; An Interview with a Systems Manager.
Teaching and assessment:
The practice sessions contain the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the term. The requirements for obtaining a term validation are regular attendance, completing assigned tasks, participating in a team presentation and doing the tests. The term mark is based on continuous assessment.

S01182 Data Bases

ECTS credits: 7
Weekly classes: 2lec+1sem+0labs+2ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
доц. д-р. Камелия Илиева Шойлекова-Николова, кат. Информатика и информационни технологии
тел.: 082 / 888 214, E-mail: kshoylekova@uni-ruse.bg
Prof. Katalina Petrova Grigorova, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Abstract:
The purpose of this course is to familiarize students with the main principles of organising, creating and implementing of databases (DBs), database management systems (DBMS), and the information systems building. Students gain knowledge on important topics of database theory, the physical and logical organisation of DB, existing data models and the specificity of the models. The emphasis is on the relational database model.
Course content:
Main terminology in the DB theory, DBMS. Data models. Logical models. DB schema. Relational model. Relational DB schema. Relational algebra and relational calculus. Main operations with the data in the BD. Data manipulaton languages. SQL. Queries. Interaction. Functional dependencies. Relational schema analysis. Normalisation and normal forms. DBMS. Operating principles. Transactions management. DB internal model. Physical organization and access methods.
Teaching and assessment:
The course comprises lectures, seminars, practice sessions and a course work. The lectures introduce important issues from DB organization, designing, building and application. During seminar classes students discuss problems related to DB theory and examine the practical applications. The practice sessions are intended to contribute to students' skills for designing individual DB and learn how to work in teams. The course work target is students to build up skills for DB designing. During the term students do 4 tests including theory and problem solution cases. The course ends with exam. The final grade is formed on the basis of the results from the exam, the course work, the tests and student's activity during the term.

S01183 Computer Networks and Communications

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082/ 888 754, E-mail: rir@ami.uni-ruse.bg
Prof. Georgi Valentinov Hristov, MEng, PhD, Department of Telecommunications
tel.: 082 / 888 663, E-mail: ghristov@uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the principles and ways of connecting computers in networks as well as with the implementation of intercommunication between different levels of connections.
Course content:
Devices and topologies used in computer networks. Networks types. Physical level in networks. Theoretical bases and media for distance data transfer. Channel communication in networks – basic characteristics. Protocols. HDLC and PPP. Ethernet channel. Routine algorithms. Data streams loading and control within a network. Network level with IP protocol. Transformation of IP and MAC addresses. Class-free addressing. Routines in IP networks. Interior protocols – RIP and OSPF. Gateway protocol BGP. Group routine. Transport level. Protocols with sockets – procedures. Transport protocols TCP and UDP. DNS and NetBIOS systems for domain names in networks. DNS and NetBIOS server and clients. Name resolving. Session level in Internet – file transfer and FTP protocol. Application level. SMTP and POP3 protocols. WEB technologies in Internet. Hypertext and HTTP protocol. Security and authenticity in networks. Symmetric and asymmetric encoding. Public key and digital signature.
Teaching and assessment:
The lectures are 2 classes per week. Each student works independently on a course assignment that is evaluated. At the end of the course students make a test covering the lecture topics. The final grade is formed as 0.7 of the test mark, 0.1 of student's work during the practice sessions and 0.2 of the course assignment mark.

S00865 Multimedia Systems and Technologies

ECTS credits: 7
Weekly classes: 2lec+0sem+0labs+3ps+ca
Assessment: exam
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Department of IIT
tel.: 082 / 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with multimedia basic components and the stages for developing multimedia applications (MMAs). Students study the fundaments of HTML programming language and acquire skills for using modern systems and technologies in designing multimedia CD and Web-based applications.
Course content:
Multimedia – basic terminology. Standard carriers of multimedia information. Requirements and stages for developing MMAs. Multimedia elements: text, graphical, sound objects and animation, file formats, compression, software. Author's systems for designing MMAs. Programming languages in author's systems. Introduction to HTML for the need of multimedia. Multimedia and internet – tools, text, images, stream sound and video. Virtual reality.
Teaching and assessment:
Lectures are conducted 2 hours weekly. Practice sessions are 3-hour classes and are held under the supervision of an assistant professor/instructor following the theory taught at lectures. In the beginning of the sessions students do a 5-minute brief test or oral questioning as feedback. Besides practice sessions, students have to work on individual course work in extra time. In the end of the course they do a written test covering the lecture material.

S01184 Non–procedural Programming

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754; E-mail: datanasova@ami.uni-ruse.bg
Assoc. Prof. Sergey Dimitrov Antonov, MEng, PhD, Department of Informatics and Information Technologies
tel.:082 / 888 475; E-mail: santonov@ami.uni-ruse.bg
Abstract:
The course objective is to familiarize students with two non-procedural styles of programming – logical and functional. Students study the fundaments of programming and a concrete programming language, representing the relevant programming style (functional – e.g. LISP, SCHEME or ML and logic – e.g. PROLOG). Non-procedural programming course is in close connection with the following courses – Introduction to Programming, Discrete Mathematics, Data Structures and Programming. It builds up the prerequisite for attending the next coming course “Artificial Intelligence”.
Course content:
Functional programming: Main principles of Functional programming (FP), Constructions and techniques of FP languages, Data structures of FP languages, FP applications; *Logic programming:* Main principles of Logic programming (LP), Constructions and techniques of LP languages, LP applications, Comparative analysis of LP and FP. During the practice sessions students develop programs.
Teaching and assessment:
The course involves lectures, practice sessions and a course work. At lectures students learn the main principles of logic and functional programming, the syntax and semantics of programming languages, the techniques and style of relevant programming mode. Each student works on an individual task referring to compiling a program and its execution on a personal computer. Students use adequate programming languages (LISP, PROLOG, ML).

S01186 Practicum on Object-oriented Programming

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Assist. Prof. Boyana Nedkova Ivanova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: bivanova@ami.uni-ruse.bg
Abstract:
This practicum is a continuation of the courses “Introduction to Programming” and “Object-oriented Programming”. The course objective is to deepen student’s knowledge and practical skills focusing on themes of the object-oriented approach in programming. Making programs in C++ on the basis of classes, objects and object hierarchies, students improve their programming skills and form habits for independently solving of sophisticated problems.
Course content:
Classes, objects, inheritance. Designing of object hierarchy. Virtual functions and classes. Polymorphism. Dynamic objects. Constructors and de-constructors. Commands. Pre-definition of commands. Templates of functions and classes. Creation of libraries. Operation with ready-to-use libraries.
Teaching and assessment:
Students attend the practicum classes. They get individual assignments, comment the methods of solving, and discuss the peculiarities of program implementation by using the object-oriented approach. Students realize the programs in practice and the accent is laid on program settings, program testing as well as on the input data logical and formal testing. The course ends with a continuous assessment mark, based on student’s individual work during the term and the results from the tests.

S01187 Practicum on Computer Graphics

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Assoc. Prof. Sergey Dimitrov Antonov, MEng, PhD, Department of Informatics and Information Technologies
tel.:082 / 888 475; E-mail: santonov@ami.uni-ruse.bg
Abstract:
The course objective is students to gain practical skills on the theoretical knowledge introduced by the course "Computer Graphics". Students learn the operating principles of widespread software products for computer graphics and obtain practical skills for using these products. The focus is also laid on the main methods for graphical data exchange from different software products, as well as on the way of working both with vector and raster images.
Course content:
Destination and basic capacities of modern software products for computer graphics. Operating with texts in graphical systems. Basic graphical primitives, parameters, geometric transformations. Operating with curves – free-hand-drawing and Bezier curves. Organization of working with layers, possibilities, basic parameters of layers. Operating with raster images in systems for vector graphics. Obtaining raster images. TWAIN interface. Processing of raster images. Raster file formats. Practical aspects for choosing file format and compression coefficient; image quality.
Teaching and assessment:
The course is conducted through practice sessions. Students are involved in discussions regarding theoretical and practical aspects of the topic. The lessons are held in computer labs for practical application of theoretical knowledge that is commented in advance. The individual course assignment is a complex task requiring the usage of computer graphics products.

S01188 Practicum on Discrete Structures

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yurii Dimitrov Kandilarov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 634, E-mail: ukandilarov@uni-ruse.bg
Assoc. Prof. Tihomir Bogomilov Gulov, MSc, PhD, Department of Algebra and Geometry
tel.: 082 / 888 489, E-mail: tgulov@uni-ruse.bg
Abstract:
The discipline "Practicum on discrete structures" is a mathematical subject, which gives the students necessary knowledge and skills for solving problems, concerning the new computer system and technologies. It is an instrument for modeling problems in computer sciences. The students gain experience in developing effective working algorithms in order to create different computer systems. They develop framework for building digital micro processing systems and programs. During the lecturers possibilities for applications of discrete mathematics in data base management systems, expert systems, encoding, sorting of information are analyzed.
Course content: Games with optimal strategies; Algorithms for games with optimal strategies; Management data base systems; Sorting information.
Graph theory; Directed, Undirected, Weight, Planar, Euler graph . Algorithms for building of spanning trees. Minimal spanning trees. Tracing of graphs. Analyzers of natural languages. Type of Grammars. Sets models, Algebraic systems.
Teaching and assessment:
According to the presented study syllabus practical tutorials, preparation of a written paper and individual work are envisaged. Course assignments are regularly distributed. During the practice sessions the necessary mathematical volume of knowledge, which is to be applied for constructing algorithms for real systems, is given. Those algorithms are tested during the time interval, which is envisaged for individual work.
The students' knowledge is controlled through 2 written tests during the term. The tests consist of 2 parts: theoretical problems and tasks. Both evaluation marks participate with a weight of ¼ to the final mark.

S01190 Mathematical Software

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Julia Vancheva Chaparova, MSc, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: jchaparova@uni-ruse.bg
Prof. Miglena Nikolaeva Koleva, MSc, DMathSc, Department of Mathematics
tel.: 082 / 888 587, E-mail: mkoleva@uni-ruse.bg
Abstract:
The subject Mathematical Software is elective. It is based on the courses of Algebra, Geometry, Calculus, and Numerical methods. The subject gets the students acquainted with the basic skills of working and programming with the mathematical software *Mathematica* in order to promote their educational and research activities. The focus is put on the experimentation, and visualization.
Course content:
Evaluation of symbolic and numerical expressions, Limits, derivatives, and integrals of functions, Finding extrema, Matrix calculus, Solving algebraic equations and systems of simultaneous equations, Visualization, Analysis of ordinary differential equations.
Teaching and assessment:
The training process is realized by practice sessions. Students discuss and solve applied mathematical problems via *Mathematica*. Each student prepares a course paper including particular problems and presents them to the lecturer. The final examination mark is based on student's performance during the practice sessions, the course paper result and its presentation, and the exam.

S01192 Algorithm Development and Analysis

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course main aim is studying methods for development of algorithms with practice-oriented application. Emphasis is placed on algorithm complexity. Students learn algorithm development techniques, such as recursion, mathematical induction. Algorithms are grouped in themes to facilitate the introduction of the adequate methods for their implementation. During the practice sessions students make programs for the algorithms introduced at the lectures using different methods, they compare and analyze the program specificity.
Course content:
Algorithm in general. Analysis and development. Algorithm complexity. Iteration and recursion. Mathematical induction. Greedy algorithms. Divide and conquer. Dynamic programming. Algorithms using linear data structures. Algorithms using sequences and sets. Graph algorithms. Computational Geometry. Geometric algorithms. Numerical algorithms. Combinatorial algorithms. Parallel algorithms.
Teaching and assessment:
The lectures introduce the possibilities for algorithm development in compliance with the course syllabus. The practice sessions include solving of specific practice-oriented problems using relevant algorithm group. Different program realizations are applied for solving one and the same problem aiming to compare the program realizations. The course work is assigned in steps which students realize individually for a definite time as homework. During the term students do three 3 tests including problems and theoretical material. The course ends with exam. The final grade is formed on the basis of the results from the exam, the course assignment and the tests.

S01410 Component Oriented Programming

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vasilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: vvelikov@ami.uni-ruse.bg
Abstract:
The course familiarizes students with the principles of contemporary Windows and Internet programming, focusing on the diversity of tools and adequate methods of application. Students study the ideology and significant details of Java programming language being a traditionally applied component-oriented language technology suitable both for training and for industry application. The incoming course links of the discipline are: Introduction to Programming, Object-oriented Programming (OOP), Data Structures and Programming. Outgoing course links: Artificial Intelligence, Multimedia Systems and Technologies, Internet Technologies, Programming for Internet.
Course content:
After a concise introduction to the fundamental resources and tools of Windows and Internet programming, follows a time-limited acquaintance with basic language aids and structures that proceeds with detailed studying an important part of Java package structure and classes for realizing some essential Java possibilities.
Teaching and assessment:
The course represents integrity of lectures and practice sessions. Students' assessment is based on the results from the course work comprising two tasks that are fulfilled as homework, and the results from three test papers realized on PC during the regular practice sessions.

S01194 Information Systems

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist.Prof. Magdalena Hristova Andreeva, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
The course objective is to introduce the principles of designing, creating and maintaining of information systems. Students study the technologies for analysis and development of applied information systems, as well as for data exchange, management, monitoring and security. The course teaches the main statements and terminology of information system theory, the basic approaches for information systems development, as well as the principles of modeling processes and data. In result of the practice students are able to build up a complete information system.
Course content:
Data and information. System and information system in general. Information system model. Approaches for designing information systems. Information system service life. System analysis. Document movement charts. Block diagrams of data streams. Data dictionaries. Information system architecture. Information system using file servers. Information systems based on client-server architecture. Internet-based information systems architecture. Information systems management.
Teaching and assessment:
The course includes lectures, practice sessions and a course assignment. Lectures are of disputable character. Practice sessions are conducted with student teams on preliminarily assigned tasks. In the end of the term students defend the developed information system. The course assignment is given on. During the term students make three tests including theory and problems. The course ends with exam. The final grade is formed on the basis of the results from the exam, the course assignment and the tests.

S01197 Software Engineering

ECTS credits: 7
Weekly classes: 2lec+1sem+0labs+2ps+cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course equips students with the required practical skills for developing large-sized software projects. It presents a collection of methods, techniques and tools, from which to select when trying to solve problems that are less well defined and larger than they have previously encountered. After studying this course the student can: analyze a problem so as to enable a computer model to be created; demonstrate competencies in designing, writing and testing software systems; work out relevant software documentation; make software cost estimation.
Course content:
Software and software engineering principles. Software service life models. Gunter model. Software Engineering Tools and Environments. Structural and object-oriented approach for software engineering. Contemporary approaches for software development. Program verification and validation. Software metrics. Software cost estimation. Boem model. Testing and debugging. Prototyping role - automation. Software documentation. Human role in software engineering. Software legislation aspects.
Teaching and assessment:
The lectures are held once a week for a period of two classes. The lectures cover different problems and include discussions on the main aspects of the topic. The seminars are intended for problem solving on topics and aim to deepen students' knowledge attained during the lectures. The seminars focus on UML as a modelling language. The practice sessions are mainly for students' individual work. They solve problems from the software engineering field. Each student develops a part of a given software system as a course workThe course ends with a written exam. The final grade is based on the performance of students during the seminars, the practical sessions and the course work (which form a total of 40% of the final mark) and the grade on the exam (which forms 60% of the final mark)

S01200 Mathematical Methods for Optimization

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Department of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Assoc. Prof. Ivan Radoslavov Georgiev, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract:
The course objective is students to be acquainted with the basic mathematical approaches and modern methods for solving, analyzing and interpreting of problems that arise in economics management. It is practically oriented. The material is suitably presented for students not skilled in mathematics. All examples and problems within the course scope are applicable in practice. During the practice sessions students get familiar with software applications used for solving sophisticated real problems.
Course content:
Introduction to mathematical modelling. General formulation of linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with *m* unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queueing theory. Elements of inventory theory.
Teaching and assessment:
The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are consolidated through practice sessions. Special attention is paid to the software package MATLAB for solving complicated and practice-oriented problems.

S01248 Operations Research

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Todorov Pavlov, MSc, PhD, Departmentof of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: vpavlov@uni-ruse.bg
Assoc. Prof. Ivan Radoslavov Georgiev, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract:
The course objective is students to be acquainted with the basic mathematical approaches and modern methods for solving, analyzing and interpreting of problems that arise in economics management. It is practically oriented. The material is suitably presented for students not skilled in mathematics. All examples and problems within the course scope are applicable in practice. During the practice sessions students get familiar with software applications used for solving sophisticated real problems.
Course content:
Main objectives and goals of the course. Mathematical models of operations. Efficiency and optimum conditions criteria. General statements of the linear optimization problem. Designing linear optimization models. Linear vector spaces. . Systems of *n* linear equations with *m* unknowns (LSE). Properties of the Linear Optimization Problem solutions. Grafical method for solving LOP. Simplex method. Duality of LO. The transportation problem. Multicriteria LO.Integer LO. Network analysis. Planning. Elements of queueing theory. Optimal management of inventory.
Teaching and assessment:
The teaching process is realized through lectures provided with numerous examples. Topics discussed at lecture classes are illustrated with practice-oriented examples. Practice sessions focus on problems in connection with the lecture material. Special attention is paid on the software package MATLAB for solving complicated and practice-oriented problems.

S01212 Artificial Intelligence

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Vasil Kozov, PhD, Dept. of Dept. of Informatics and Information Technologies
tel. 082 / 888 754, E-mail: vkozov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the possibilities, resources and application field for implementation of Artificial intelligence. Five main sections are studied: Heuristic search algorithms, Expert systems, Neural networks, Fuzzy sets, Genetic algorithms. Aiming to ensure basic knowledge, both in theoretical and practical parts. Incoming course links: Object-oriented programming, Non-procedural programming, Data structures and programming and Algorithm Development and Analysis.
Course content:
Fundaments, means and philosophy of the Artificial intelligence. Solving problems, Search strategies, Heuristics search algorithms, Knowledge presentation, Expert systems, Neural networks, Fuzzy sets, Genetic algorithms and application.
Teaching and assessment:
The practice sessions follow the theory taught at lectures. The course task is an extract from a complex practice-oriented problem. The final grade is formed on the basis of the course task evaluation, but mainly on the result from the exam that is a written test.

S01215 Internet Technologies

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / / 888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082/ 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the resources, application field and approaches of modern programming languages for Internet. The focus is laid on the diversity of programming environments and tools, as well as on the established and continually innovated technological practices. Students get familiarized with the capacities and tools of Java programming language for Internet. A quarter of the course duration is intended for studying the capacities and tools of the .NET Framework as well, stating the analogy of the practical philosophy between them. Another significant course objective is to provide students with primary knowledge and solid base for studying further the special Internet technologies fields. Incoming course links: Object-oriented programming, Multimedia systems and technologies. Outgoing course links: Programming for Internet.
Course content:
After brief introduction to the principle resources and tools of the Internet programming, students gain knowledge on a main part of Java packages and classes used for programming of Internet applications. They are also familiarized with the resources and tools provided in .NET Framework.
Teaching and assessment:
The practice sessions follow the theory taught at lectures. The course work consists of two parts and requires solving of a practice-oriented problem or it is a modular extract from such a problem. The final grade is formed on the basis of the evaluation of both parts of the course work, but mainly depends on the result from the exam including a written test and a theoretical question.

S01185 Probability and Statistics

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Evelina Ilieva Veleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 466, E-mail: eveleva@uni-ruse.bg
Pr. Assist. Prof. Elitsa Rumenova Raeva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082 / 888 424, E-mail: eraeva@uni-ruse.bg
Abstract:
Probalistic models stay at the basis of self-learning systems and artificial intelligence systems. Today it is practically impossible to solve any practical problem containing quantitatively measurable values without the help of Statistics. The course objective is students to be familiarized with the probalistic-statistical approach for studying and management of different practice events of accidental character, to learn the main statistical procedures and modes for achieving statistical conclusions.

Course content:
General terminology. Probability, Conditional probability, Random variables, Numeric traits, Frequently applied distributions, Law of large numbers, Central limit theorem, Introduction to mathematical statistics, Scores, Domains, Testing of hypothesis, Regression.
Teaching and assessment:
At lectures students learn the main theoretical statements, the most important applications, the methods of solving practical problems. The practice sessions consolidate the lecture material and develop students' technical skills. The course assignments allow students' individual work on suitable topics and practical tasks. Students do two 2-hour tests including solving of theoretical and practical problems. The final grade is formed on the basis of the continuous assessment results, the course assignment and the examination mark.

S01198 Practicum on Databases

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Katerina Georgieva Gabrovska-Evstatieva, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 470, E-mail: kgg@ami.uni-ruse.bg
Abstract:
The course is studied in the 3rd year of specialty Informatics and Information Technologies. The practicum focuses on generating skills necessary to analyze, design, create and make use of databases. It is related to the theoretical course in databases and extends the practical skills for designing and developing relational databases. Team working and self-evaluation are encouraged during the practicum activities.
After completing the course students know how to design and develop a database in a concrete DBMS. The knowledge gained is helpful for preparing the diploma thesis and for future scientific work.
Course content:
DBMS – general information. Creating empty data base. Working with tables. Data types. Specifying field characteristics. Fields definition. Creating relationships among table. Data sorting and filtering. Data manipulation. Queries. Type of queries. Query properties. Forms. Form properties. Data insertion, edition and deletion through forms. Reports. Report properties. Report fields properties. Data base protection. Menus. Main form of the system.
Teaching and assessment:
The course is conducted through 2-hour practicum sessions per week and preparing of paper. For the practicum sessions the students are grouped in teams and work in a specific DBMS on the assignment that is allotted as sub-tasks of the required paper. The completed tasks are reported to the lecturer in due time.
The final grade of the continuous assessment is based on the paper mark and student's activities during the term.

S01199 Practicum on Data Structures and Programming

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course is intended for students from the 3rd year of study. Its main objective is to build up skills for using complex data structures in solving concrete practical problems. This practicum follows the course of the same name and gives students an opportunity to practice team work. Special attention is paid on the realization of definite algorithms applying different methods and using various data structures. The comparison of different solutions is used for finding the most proper method and structure applicable for a given problem.
Course content:
Stack and queue representation. Applications. Linear list representation. Binary trees. Traversals. Application. Graphs. Representation. Traversals. Shortest paths. Development of methods and program implementation of a comparatively complex problem.
Teaching and assessment:
The course includes practicum and a written paper. The practicum classes are held for 2 lesson weekly. During the first half of the term students' teams solve simple problems on concrete themes. The second half is focused on solving a complex problem requiring to make a choice for using a definite data structure, development of methods for solving the problem and its program implementation. The course ends with a continuous assessment formed on the basis of student's results during the term.

S00887 Practicum

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist.Prof. Katerina Georgieva Gabrovska-Evstatieva, PhD, Department of Informatics and Information Technologies
тел: 082 / 888 470, E-mail: kgabrovska@ami.uni-ruse.bg
Abstract:
During this Practicum students design an IT Information system based on the knowledge gained from the subjects studied to that stage. The organization of the individual student's work within the Practicum follows the recommendations of the Rational Unified Process (RUP). The course objective is students to be able to design and develop artifacts for phase elaboration within the frame of a complete software system.
Course content:
Project assignment to a team. Roles and tasks of each team member. Project planning: requirements, activities, classes, diagrams sequence and teams collaboration. Specification of the data model. Schedule of task testing, test cases and test scripts. IT system development. Tests and test documentation. Project completion and submission.
Teaching and assessment:
The practice and seminar sessions aim to deepen students' knowledge on subjects concerning the development of IT systems. Each student is allotted an individual task and is trained to develop relevant skills for phase collaboration. The continuous assessment is based on student's work during the practice sessions (40%), the results from the team task fulfillment and defence (30%) and the results from the project phase representation (30%).

S01191 The Number Theory

ECTS credits: 5 **Weekly classes**: 2ec+2sem+0labs+0ps+ca
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Antoaneta Tileva Mihova, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: amihova@uni-ruse.bg
Abstract:
The knowledge of Number Theory is useful for specialists in Informatics and Information Technologies. The modular Arithmetic, an essential part of the course, is in the base of the mechanical presentation of any number. The origin of Informatics is closely connected with Mathematics and the proof for it is the elementary number theory. The course is based on the courses of Algebra and Discrete Structures. The course on Design and Analysis of Algorithms and the course on Coding Theory could rely on Number theory.
Course content:
Divisibility of integers, g.c.d and l.c.m. Prime integers. Fundamental theorem of Arithmetic. Congruences. Fermat and Euler theorems and their applications. Congruences with one unknown. Systems of first degree congruences. Congruences of arbitrary degree. Congruences of second degree modulo a prime number. Gauss law of reciprocity of quadratic remainders. Chain fractions. Diophantus first degree equations with two unknowns. Pell's equation.
Teaching and assessment:
If possible, most of the practical tutorials are performed using the system *Mathematica*. One two-hour control work takes place. During the exam the student works on 1 problem (chosen among 2) analytically and with the system *Mathematica.* Students prepare a term paper which is obligatory for the term validation. The forming of the final mark is defined in the teaching program.

S01260 Coding Theory

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yurii Dimitrov Kandilarov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 634, E-mail: ukandilarov@uni-ruse.bg
Abstract:
The course is basic for students of IIT study program. It is closely related to one of the basic problems of the modern Informatics and Information Technologies. It is based on the knowledge gained from courses in Algebra, Discrete structures, Programming and Number theory. This course provides students with important tools for problem modeling in computer sciences.
Course content:
Introduction to error correcting codes and linear codes, encoding and decoding with a linear codes, Hamming codes, prefect codes, Cyrillic codes.
Teaching and assessment:
The course is conducted by lectures and practice sessions. A major part of theorems are given without proofs, referring to suitable examples and problems. Students' progress is observed by regular feedbacks at lectures and practice sessions. Students are given two test papers and a course assignment which are evaluated by a six-score table. The continuous assessment mark is based on the test results and the course assignment mark.

SB17541 Introduction to Management

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Assoc. Prof. Emil Nikolov Kotsev,MEcon, PhD, Department of Management and Business Development
tel: 082/ 888 617, E-mail: ekotsev@uni-ruse.bg
Abstract:
The course Introduction to Management aims to provide students with expertise on fundamental themes selected from the wide range of management topics. The teaching material is designed in accordance with the students' aspirations of getting theoretical knowledge in the field of organizations and fundamental, management functions. The course is relatively self-dependent in the curriculum of specialty Informatics and Information Technologies. However, it is useful to build on knowledge and skills acquired in Economics and to be a prerequisite for E-business. The course links with the demand of knowledge for practitioners, and holds out opportunities for career development.
Course content:
The course includes the following topics: Management – history of theory and practice; Planning; Organizing; Motivation, Control, Decision Making, Strategic Management, and Management of Human Resources.
Teaching and Assessment:
During the learning process the topics are explained through traditional lecture methods. They are supplemented with visual aids and appropriate examples. That supports purposeful conducting of the seminars. The seminars and the lectures are organized in parallel. The instructor who carries out the seminars does a continuous assessment based on attendance and student's participation in discussions. The quality of submitted papers, the extent of acquired knowledge and practical skills are evaluated too. The final evaluation is based on 4 separate assessments, which enable high grade objectivity.

SB16318 Project Management

ECTS credits: 5 **Weekly classes**: 2lec+2sem+0labs+0ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Assoc. Prof. Milena Peneva Kirova, PhD, Department of Management and Business Development
tel.: 082 / 888 726, E-mail: mkirova@uni-ruse.bg
Assoc. Prof. Daniela Nikolaeva Yordanova, MA, PhD, Dept. of Management and Business Development
tel.: 082 / 888 520, E-mail: dyordanova@ecs.uni-ruse.bg
Abstract:
Project management, with its focus on the accomplishment of unique outcomes with limited resources under critical time constraints, is an important aspect of contemporary operations management. This course is designed to teach the basic principles of good project management and provides students with the knowledge and skills to participate effectively in project teams. The course content has incoming relations with “Marketing”, “Management” and other courses contents and outgoing relations with the development of bachelor thesis and future practice.
Course content:
The course focuses on such topics as: the essence, objective, and main functions of project management, types of public and private projects. Emphasis is placed on the project management principles, project definition, and project design. Continuing attention is paid to detailed planning and scheduling, project team building, fund raising, risk management and quality management. Concepts are applied to monitoring and project completion.
Teaching and assessment:
Most of the teaching is by lecturers introducing the main issues of project management. Practice sessions help students consolidate the knowledge they gain at lectures. Computer software packages are used for project management training. Authentic project management forms help task completion. By the end of the second week of the term the students have an essay assignment, which is an individual task based upon all topics discussed in the practice sessions. The essay must be 7 to 8 pages long and should be submitted before the end of the term. The final grade is formed as the average of the essay mark and the written exam mark.

SB16319 Public Relations

ECTS credits: 5 **Weekly classes**: 2lec+2sem+0labs+0ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of European Studies and International Relations
Faculty of Business and Management
Lecturer:
Assoc. Prof. Nataliya Trofilova Venelinova, PhD, Department of European Studies and International Relations
tel.: 082 / 888 810, E-mail: nvelelinova@uni-ruse.bg
Abstract:
The aim of the subject is to provide basic knowledge on the nature of Public relations (PR) as a social communication technology, its subject area and the range of its application in the practices of public institutions, commercial and non-commercial organizations.
Course content:
The subject content includes the following: origin and formation of PR; definitions and basic notions; the RACE-algorithm as a technological PR-process; nature of the audiences, type and situation segmentation; communication of PR and types of communication; barriers for efficient communication; media and techniques for relations with the mass media; corporate PR and image; public matters, problem lobbying and management; corporate culture, corporate identity and PR; PR and the internal communication; social responsibility and sponsorship; PR-campaign; PR in crisis; specialized PR; ethic standards for practicing PR.
Teaching and assessment:
These include three contact forms: lectures, seminars and paper (P). The lectures present the theme system of the subject and formulate the issues to be discussed and practically interpreted. The seminars reveal the practical potentials of the subject matter as regards the real communication behavior of the organization. The assigned paper (P) stimulates the application of knowledge for the solution of inherent PR problems such as: audience segmentation, image analysis, planning PR activities.
The final assessment consists of a test (exam), which includes not only multiple choice but also open-ended questions and a practical case. The term mark is based on test (70%), presentations (10%), and P (20%).

S01444 History of Mathematics and Informatics

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Departments involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Julia Vancheva Chaparova, MSc, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: jchaparova@uni-ruse.bg
Abstract:
The subject History of Mathematics and Informatics is elective. The aim of the course is to present the historical development of the basic ideas and events in Mathematics and Computing from the ancient to 20th century such as the development of notions for numbers and counting systems, geometry, solving algebraic equations, mathematics in 18th and 19th centuries and the development of the mathematical analysis, the development of computer technics.
Course content:
History of mathematics in Babilon, Egypt and ancient Greece. History of mathematics in XVII, XVIII and XIX centuries: Cardano, Decart, Euler, Lagrange, Gauss, Cauchy, Weierstrass. Mathematics, computer science, and computer technics in XX century.
Teaching and assessment:
The educational process is realized by lectures and seminar classes. Appropriate items of history of mathematics and computing science are presented using multimedia, overheads and web based materials.

S01446 Human–computer Interaction

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 /888 754, E-mail: datanasova@ami.uni-ruse.bg
Abstract:
The main objective is to familiarize students with the main principles, approaches and techniques for designing and developing human-computer interactions (HCI). The stress is placed on the project building and the testing methods of prototype development and evaluation, as well as on the psychological aspects of the HCI. Students are involved in discussions about the effects of human factors on interface designs and development of applied software; methods and techniques for user-centered and analysis-based structural design of interaction; HCI evaluation.
Course content:
Introduction to HCI. HCI components. The human aspects of HCI. Cognitive models for HCI. Visual perception and representation. Concentration and mental models. Interface metaphors and conceptual models. User interface design aspects. Principles and models of user-centered design. Structural design frame. Design supports. Principles and rules. Instructions, standards and metrics. Design costs evaluation. Evaluation role. Data accumulation – methods and techniques. Experiments and standardization. Expert assessments.
Teaching and assessment:
The course includes problem-oriented themes which are put forward for discussion. Practice session accent is place on the individual student's work. Students deal with solving problems related to designing and creating of HCI. Each student individually develops software user's interface of a software system as a course assignment. The course ends with a continuous assessment mark, formed on he basis of the test papers results (T_1 and T_2), the course assignment result (ca) and student's activities mark during practical sessions (ps) in accordance with the formula: 0,3(T1+T2)+0,4ca+0,3ps.

SB10019 Image Processing

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082/ 888 754, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the basic problems and principles of image processing. Special attention is paid on the methods for raster graphical image compression. The course themes refer to problems and tasks which are often encountered in practice on using digital images. The course helps students get profound knowledge and use the computer techniques in fields where the raster graphical images are applied, i.e. the computer graphics, robot vision, medical engineering, etc.
Course content:
Introduction to image processing. Hardware components of image processing systems. Basic terminology and principles for digital images processing. Rasterization, level quantization, digital image parameters. Image transformations. Image enhancement - spatial and frequency domain methods. Image restoration. Image segmentation. Representation and description. Texture. Principles of image recognition and interpretation. Digital image compression.
Teaching and assessment:
Students attend lectures and practice sessions. Students get individual tasks related to the lecture material. The algorithms are implemented in a chosen programming language and environment. Students apply free or licensed software for applying more complex methods of image processing and making comparative analysis of the results.

SB10020 Programming Languages, Automation, Computing

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 /888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr.Assist.Prof. Valentin Petrov Velikov, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 326, E-mail: vvelikov@ami.uni-ruse.bg
Abstract:
The course goal is to equip students with knowledge for carrying out quantitative comparative analysis of the main approaches for programming based on their computation models. Some important problems of the computation models are discussed as well as the issue for choosing the appropriate model for programming when processing definite data structures.
Course content:
Relations. General Algebra. Theory of automata, and formal languages. Determined and nondetermined finite automata. Theory of algorithms. General Computational Model. Turing Machine, and Turing - Church Thesis. 'While' program and problems of the structural programming languages. Functional program, and problems of programming language ML. Logic program, and problems of programming language Prolog. Control production system, and problems of programming language Net. Insolubility, complexity, the classes P and NP, PN.
Teaching and assessment:
Each group of lectures ends with a summary with an accent on the main points. During the seminar sessions students solve problems related to the material taught. Each seminar session begins with a short introduction to the theory and an explanation of the algorithm for implementing the task. The course ends with a written examination. The final mark is based on the results from the written examination, the course work and the continuous assessment.

S01475 Programming for Internet

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754; E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 470; E-mail: mdimitriov@ami.uni-ruse.bg
Abstract:
The course is studied as Elective subject and its objective is students to be familiarized with the resources, principles and approaches of the modern programming for Internet. The focus is laid on the diversity of programming environments and tools, as well as on the established and continually innovated technological practices. Students get familiarized with the capacities and tools of .NET Framework for Internet programming. Another significant course objective is to provide students with primary knowledge and solid base for studying deeper the .NET Framework as well as the special Internet technologies fields. Incoming course links: Object-oriented programming, Multimedia systems and technologies, Internet Technologies. The knowledge gained from attending the course is helpful for preparing diploma projects and future work careers.
Course content:
After brief introduction to the principle resources and tools of the Internet programming, students gain knowledge on the basic language tools and constructions of C# and the focus is laid on studying the programming and testing environment as well as on a main part of the package structure and classes for implementing basic applications of the .NET Framework.
Teaching and assessment: The practice sessions follow the theory taught at lectures. The course assignment requires solving of a practice-oriented problem or it is a modular extract from such a problem. The final grade is formed on the basis of the evaluation of the course assignment and the results from three test papers which are to be implemented on computer in the integrated environment.

S01481 Web Design

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: vvoinohovska@uni-ruse.bg
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the elements for designing a website and web-based applications. The prerequisite for studying the course is the knowledge gained from the following courses: Object-oriented programming, Software engineering, Multimedia systems and technologies, Internet technologies
Course content:
Functionality and efficiency of a website. Problems and solutions. Website designing process. Resources control. User-oriented design. Target group, platforms. Data structuring. Contents arrangement. Components, techniques, restrictions, problems. Design templates. Basic principles for programming a website. Website elements. Application of website coding. Making choice for using proper tools in designing and coding of web-based application. Testing and evaluation of web-based application, web standards, security, search engines, products used for designing websites, development of the Web. Reconstruction of media space.
Teaching and assessment:
The course is conducted through lectures, practice sessions and course task. The lectures give theoretical knowledge on the main requirements and statements for making preliminary preparation, data gathering, design features and development of web-based application. Practice sessions are held in computer labs where students apply theoretical knowledge into practice. The course task is individual and it is prepared as homework. Students get tutorials for developing the course tasks.

SB10021 Computer Linguistics

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 /888 754, E-mail: datanasova@ami.uni-ruse.bg
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies
тел.: 082 / 888 214; E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The course introduces students to the automated analysis of texts, text generation, discourse and dialogue, document processing, machine translation, non-verbal communications, speech analysis and synthesis, speech generation. Theoretical knowledge and practical skills acquired in the field of computer linguistics can successfully be applied for developing of real systems. The course incoming links are with informatics courses taught in earlier terms. The knowledge gained from studying computer linguistics is helpful for developing bachelor thesises by graduates.
Course content:
Main themes: Basic statements in linguistics. Speech recognition. Text identification. Basic grammar categories in the Bulgarian language. Language analysis. Language generation. Text and speech generation. Discourse and dialogue. Documents processing. Machine translation. Non-verbal communications. Speech encoding and decoding. Mathematical methods. Language resources. Evaluation of language processing results.
Teaching and assessment:
The lectures are 2 hours per week. The main theoretical themes are taught through lectures. At the practice sessions students solve problem cases under the lecturer's supervision on topics included in the syllabus. Students reinforce the knowledge acquired at the lectures by studying methods and software tools for formal language processing. Students' knowledge is continuously assessed in the practice sessions by doing tests. The final grade is based on the results from the exam.

S01501 Client-Server Technology

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082/ 888 754, E-mail: rir@ami.uni-ruse.bg
Pr. Assit. Prof. Metodi Lyubchev Dimitrov, MEng, PhD, Department of IIT
tel.: 082 / 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
The course aims to provide students with knowledge and skills for the implementation of client-server technology, including work with remotely-based databases. Deals with applications written in Java. The technologies for distributed computing RMI and CORBA, the technologies JDBC and others are learned. Students learn about the types of drivers for implementation of JDBC. The course builds on the basic knowledge in Programming, English, Databases, Component Oriented Programming and Internet Tecnologies. The knowledge acquired is used for diploma project and future practice of bachelors graduates.
Course content:
Client-server technology - architectures. Client-server architectures in the business environment. Butler's Pyramidal model. Technology JDBC. Client-server frameworks. Object Request Brokers. RMI и CORBA technologies. Drivers for implementation of JDBC. Architecture and configuration of Apache-Tomcat. Methods for setting status-codes in JSP. Filters in JSP. Methods for session tracking in JSP. Security.**Teaching and assessment:**
The teaching is organized in: lectures, practice sessions, course work. The lectures explain the theoretical fundamentals of the material and give suitable examples. The students should be able to work alone and develop simple applications during the practice sessions, which are in computer labs. The course finishes with

a continuous assessment mark. It is computed as a weighted sum of two control works (0.4) and the course work (0.2).

S01218 Practicum on Software Engineering

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 326; E-mail: gea@ami.uni-ruse.bg
Abstract:
The course is included in the group of the 6th term's Elective subjects for specialty "Informatics and IT" and its objective is to consolidate the knowledge and skills gained in the foregoing compulsory course of the same name. Students apply the acquired knowledge and skills for developing programming systems and they practice working in teams. The accent is placed on the individual efforts for solving specific software problems. After studying this course students should be able to design and develop software systems; they should have practiced and learnt working in teams.
Course content:
Students get guidelines for developing individual course assignments on different themes. Technology of course work. Methods of evaluation. Forming work teams. Data and system models. Model description. Specification development. Software system design. User interaction design. Prototype system development. Prototype testing. Software documentation. Software cost estimation.
Teaching and assessment:
Students form work teams for developing a software project as a course assignment. Students work on project specification, design, data input, program testing, project description and defence. The course ends with a continuous assessment grade formed on the basis of student's activities during the practicum sessions (50%), course assignment mark (20%) and project defence (30%).

S01245 Practicum on Computer Networks and Communications

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082/ 888 754, E-mail: rir@ami.uni-ruse.bg
Prof. Georgi Valentinov Hristov, PhD, Department of Telecommunications
tel.: 082 / 888 663, E-mail: ghristov@uni-ruse.bg
Abstract:
The course objective is students to get practical knowledge and skills in the field of local area networks (LAN) and wide area networks (WAN) – functioning, building methods, control and security. Based on one of the most widespread operating systems – LINUX, the course themes are grouped in two parts. In the first part students study the file system features, files and directories security, command interpreter resources, Linux editing tools. The second part of the course is addressed to administrating Linux computer networks. The focus is put on the usage of network functions, protocols and on the building means, settings and maintenance of LAN and Internet.
Course content:
Introduction to Linux, Linux file system, Command interpreter, User system management, Administrating TCP/IP computer networks, Static and dynamic routing, Names in internet, Service configuring in internet, Security in internet.
Teaching and assessment:
Practice sessions are conducted in computer labs under the supervision of an assistant professor/instructor. After discussing important course topics students implement individual tasks in practice.

S01244 Practicum on Non-procedural Programming

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: datanasova@ami.uni-ruse.bg
Assoc. Prof. Sergey Dimitrov Antonov, MEng, PhD, Department of Informatics and Information Technologies
tel.:082 / 888 475; E-mail: santonov@ami.uni-ruse.bg
Abstract:
The course objective is students to extend the knowledge and skills acquired on studying Logic and Functional Programming in the 4th term. The first part of the course focuses on teaching a new functional programming language (Haskell, Lazy, Goffer) and its possibilities. The second half of the course places an accent on the new application fields of the logic programming and the untaught capacities of the Prolog language. During the practice sessions students deepen theoretical knowledge, develop and test programs in relevant programming language. Incoming course links: Introduction to Programming, Data Structures and Programming, Discrete Mathematics, Non-procedural Programming.
Course content:
Functional programming: Introduction to programming using a new language (Haskell, Lazy, Goffer). Similarities and differences between LISP and the new language. First order functions. Programming language environment. Data types. Input-output. Lists. Tree-like structures. Modules and abstract data types (ADT). *Logic programming:* Using PROLOG for designing Artificial Intelligence systems, Planning systems, Natural language processing, Development of elementary expert system with PROLOG.
Teaching and assessment:
Teaching is carried out through practice sessions and a course task. Practice sessions are conducted in computer labs. Each student works on individually assigned task that includes compiling a program and running it on computer. The program should be realized in relevant language (Haskell, Lazy, Goffer, PROLOG). The course tasks and helpful references are given in the beginning of the course. Students can get tutorials for developing the tasks.

S01518 Computer Modelling

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Ivo Draganov, MEng, PhD, Department of Technical Mechanics
tel.:082 / 888 572, E-mail: idraganov@uni-ruse.bg
Abstract:
Students study the principles and methods of computational technology for applied science research as a combination of mathematical modeling and numerical experiments. Emphasis is laid on computer modeling of objects, phenomena and processes characteristic for natural sciences, humanities, and for Mathematics. Special attention is paid on solving model problems using the MATLAB® software product. The focus is put on the application of the synthetic optimizing approach as means and aim of computer modeling.
Course contents:
Introduction to computer modeling. Optimization technology in modeling. Methodology of mathematical modeling. Methodology of numerical experiments. Examples: models of Newtonian Mechanics, modeling of processes in biological, economical and social systems; computer modeling of psychological phenomena.
Teaching and assessment:
The course is conducted through lectures and practice sessions held in computer labs, equipped with MATLAB® software product, as well as individual consultations on the assigned course work that is submitted as a written report. The course ends with an exam. The final grade is formed on the basis of the results from the course work, its oral defence before the lecturer, the mark for the theoretical question development and student's activities during the practice sessions.

SB1524 Social-legal Aspects of the IT

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies
тел.: 082 / 888 214; E-mail: dbaeva@ami.uni-ruse.bg
Pr. Assist. Prof. Anna Nikolova Nikolova, MA, PhD, Department of Civil Law
tel.: 082 / 888 434, E-mail: anikolova@uni-ruse.bg
Abstract:
The course objective is to provide students with knowledge on the theoretical models and concepts related to the changes in economy, sociology, marketing, psychology and law consequent to the development of the new communication technologies. Students learn the issues of author's right, the significance of licenses and contracts permitting the use of software products and databases; the statements concerning legal problems which lead to criminal prosecution.
Course content:
The information society: basic theoretical concepts. The Cyberspace as a special social, psychological and cultural medium. Social-legal aspects of an individual's behavior in the information environment. Labour relationships in the new economic conditions. IT spheres of influence. Author's rights on software products. Rights on databases. Entitling the use of software products and databases. License contracts. Protection of author's rights and other related rights. Electronic statements, e-documents, e-signatures. Trademarks. Domains. Personal data protection. E-commerce legislation. Illegal content. Torrents. Computer crimes.
Teaching and assessment:
Lectures are conducted 3 classes weekly. During seminar sessions students discuss the important issues of a given topic with accent on a definite case study. The course ends with a written examination. The final mark is formed from the Examination mark and the participation in the Seminar sessions (0,6E+0,4sem).

SB10023 Information Technologies in Management

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Pr. Assist. Prof. Miroslava Ilieva Boneva, MA, PhD, Department of Management and Business Development
tel.: 082 / 888 776, E-mail: mboneva@uni-ruse.bg
Abstract:
The course builds up student's knowledge in the field of management and technologies needed for its information provision. The focus is placed on problems rising in the business sphere. Students study contemporary management technologies, the dependence and synchronization between management needs of information and the technologies for its delivery.
Course content:
Information technologies in business. Information system analysis. Information technologies in management of business organizations. Enterprise resource planning and management systems. Marketing information systems. Manufacture information system. Finance information system. Human resources management system. Decision support information system. Executive information system. Database of management information system.
Teaching and assessment:
The lecture material provides due theoretical knowledge for carrying out the practice sessions. Students practice specific techniques for management data gathering, processing and analysis. They get acquainted with different structures of management information systems, designing technologies and application. Practice sessions are held in computer labs, where students gain knowledge on the main functions of the modern information systems and work out exemplary solutions for management data processing.

S01538 Programming Mobile Devices

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082/ 888 754, E-mail: rir@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, MEng, PhD, Dept. of Informatics and Information Technologies,
tel.: 888 326, E-mail: vvelikov@ami.uni-ruse.bg
Abstract:
The course aims at giving the students knowledge and skills about types of mobile devices and their programming. Two programming approaches are addressed: Java/Android/Android Studio and in the Microsoft Visual Studio environment. The course steps on basic knowledge in maths, English, programming and depends on: Component oriented programming, Programming for Internet and Internet technologies. The acquired knowledge will be used in the diploma project and future practice of the graduates.
Course content:
Introduction. Types of mobile devices. Programming in Java/Android. Developing a simple application. User interface: Layouts, widgets, dialogs, menus. Views, activities, services and intents, broadcast receivers, content providers. Phone hardware using. Graphics, animations and multimedia. File system, flash memory. Threads and timers. Network programming. DataBases. OS Windows 10 and mobile possibilities. WPSilverlight and UWP.
Teaching and assessment:
The teaching is organised in lectures and practice sessions. The lectures explain the theoretical foundations of the material and give suitable examples. The students should be able to work alone and develop simple applications during the practice sessions, which are in computer labs. The course finishes with a continuous assessment grade. It is computed as a weighted sum of two control tasks (0.4) and the practice work (0.2).

S01539 Geographical Information Systems

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Georgi Nikolov Krastev, MEng, DTSc, Department of Computing
tel.: 082 / 888 672, E-mail: gkrastev@ecs.uni-ruse.bg
Abstract:
The course objective is students to gain knowledge about geographical information systems, their basic applications and components. The course provides students with the possibility to experience operating with concrete software products and lays the foundations for professional growth in such a dynamically developing field.
Course content:
History of GIS, basic terminology, functionality, components and applications. Data base with geographically referenced information. Meta data. Main functions. Basic data formats. Operation with geographically refined data. Basic cartography principles. Creating maps. Layers and symbols, classification methods and styles. Labels and annotation. Geo-coding. GIS data base design. Main resources of geographically referenced data and methods of application. Validation of geographically referenced data. Data analysis in 3D. Cartographic algebra. Raster data base. Topographic analysis. Distances. Visualization techniques. Image processing. Perspectives of GIS design.
Teaching and assessment:
Lectures are 2 hours weekly. Practice sessions are 3-hours weekly. Each student gets a course work that has to be worked out as homework. Course works are defended and evaluated in the end of the course. Students do two test papers on theory and practice-oriented problems. The course ends with a continuous assessment mark. The final grade is formed as a sum of 0,7 of the test paper results, 0,1 of student's activities mark and 0,2 of course assessment mark.

S01544 Visual Programming

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlozar Stefanov Tsankov, MEng, PhD, Dept. of Informatics and Information Technologies,
tel.: 082 / 888 645, E-mail: stzancov@ami.uni-ruse.bg
Assoc. Prof. Desislava Tsoneva Baeva, MEng, PhD, Dept. of Informatics and Information Technologies
тел.: 082 / 888 214; E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the programming language “Visual Basic for Applications”; to efficiently use its applications in MS office environment; to be able to develop their own applications. Prerequisite for studying it is the knowledge acquired from the course “Mathematics” in the 1st academic year as well as the Object-oriented programming. The knowledge and skills gained from this course are the basis for developing the assigned tasks and projects, as well as for preparing the diploma thesis and for successful future career.
Course content:
Introduction to VBA. Programming for MS office. VBA and objects in MS office. Data types. Macros creating and editing. Built-in functions and expressions. Commands for assigning. Commands for control. Arrays. Introduction to objects and collections. Procedures and functions. Projections and modules. Designing of interface. Menus. Dialogue windows. Elements of dialogue windows. Events. Methods.
Teaching and assessment:
Lecture theory illustrated with relevant examples is consolidated at practice sessions. The continuous assessment at practice classes aims to provide students’ feedback and keep them in line with the course progress. The final grade is formed on the basis of the end test result, the entry test result, practice session activities and course work mark.

S01545 Programming in Assembler

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tsvetomir Ivanov Vasilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 470; E-mail: mdimitriov@ami.uni-ruse.bg
Abstract:
The purpose of this course is to acquaint the students with the main principals of how the computer works, which are not obvious to the high level programming languages. The architecture of the 80x86 and Pentium processors is discussed, as well as some of the main instructions for data transferring, arithmetical and logical instructions, input-output and others.
Course content:
Architecture of the processors 80x86 and Pentium; instructions for the processors 80x86 and Pentium; conditional and cycled programs; macros; BCD arithmetic; files; assemblers and linkers.
Teaching and assessment:
The lectures address basic theoretical statements related with programming in Assembler. The labs are for program realization of the problems. Two written examinations are taken – in the middle and at the end of the term. During the seminars the degree of mastering the theory and the possibility for solving problems is also assessed.

S01546 System Programming

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vassilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Pr.Assist.Prof. Magdalena Hristova Andreeva, MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
The course introduces students to the system programming logics. The focus is placed on the substance, principles, methods and means of the system programming languages. Students study in details pointers and their application in address mathematics and operations with functions, strings, arrays, structures and files. The possibilities of the toolkits and methods are taught and illustrated with programming language C (K&R C, ANSI C and C as sub-set of C++). Students acquire practical skills for solving problems using “C” programming language.
Course content:
Organization and main modules in Windows. Optimizing the working environment. Inter-processors communications. Signals. Program channels. Common memory. Semaphores. Messages. Classical problems and their solving with addressed techniques. Threads. Differences between threads and processes. Thread handling. Methods for synchronizing competitive threads. Multi-tasks and multi-threads of problems. Priorities, Specialized modules. Memory organization and control. Dynamical memory distribution for processes; Security and protection; Model for protection.
Teaching and assessment:
The lectures address basic theoretical statements related with system programming. Each thematic group ends with summary and focuses on the main points. In the lab lessons programs realization is done. Each lab begins with analyses of the given problem. Two written examinations are taken – in the middle and at the end of the term. During the labs is also assessed the degree of mastering the theory and the possibility for solving problems.

S01553 State Exam

ECTS credits: 10
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
All lecturers at the Department of Informatics and Information Technologies
Abstract:
The State Exam takes place before a State Examination Commission upon a preliminary approved syllabus which includes questions from the areas of: Iinformatics, Information Technology.
Course content:
The written state exam covers all major topics studied during the period of education and training in the areas: Iinformatics, Information Technology.
Teaching and assessment:
The students develop the topics from the studied areas and present them before the State Examination Commission.

S00083 Bachelor Thesis

ECTS credits: 10
Weekly classes: 0lec+0sem+0labs+0ps
Assessment:
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Informatics and Information Technologies
Abstract:
The state examination is held in front of the State Examination Commission in accordance with the approved syllabus, which includes main topics from all foundation courses.
Course content:
The State examination includes all main courses studied during the course of education.
Teaching and assessment:
The final year student takes the State examination which is evaluated by the State Examination Commission

UNDERGRADUATE STUDIES IN SOFTWARE ENGINEERING

PROFESSIONAL STANDARDS

OF A BACHELOR IN SOFTWARE ENGINEERING

Degree Programme: Software Engineering
Educational Degree: **Bachelor**
Professional Qualification: **Bachelor in Software Engineering**
Term of education: **4 years (8 terms)**

The Software Engineering specialty at RU "Angel Kanchev" is intended for training specialists with higher education, possessing knowledge and skills in the field of design and development of modern software systems. Prepared personnel will be able to solve the main problems of the entire life cycle of creating quality and effective software applications. The curriculum was developed according to the requirements of the international professional organizations ACM and IEEE Computing Society and is a successful combination of informatics, mathematics and applied disciplines. There is a sequence of disciplines covering all aspects of software production, which is a guarantee of the good qualification of the graduates of the specialty. A characteristic feature of training in all disciplines is the organic inclusion in the educational process of computer-based technologies for learning and self-training, as well as very good practical training based on the most modern information technologies and a constantly updated material base. State-of-the-art licensed and freely distributed software installed on high-performance, networked computers is provided and used.

Students study modern programming languages and environments, data structures, algorithm design and analysis, computer networks, databases, distributed systems, web-based systems, mobile applications, artificial intelligence, project management, and more. They receive basic mathematical knowledge related to the specialty in the field of applied mathematics. Mandatory fundamental disciplines in the curriculum provide the necessary broad-based training in computer science and software technologies. Electives allow for more in-depth training. Optional disciplines provide the opportunity to study specialized courses in the fields of mathematics, economics, business, law, psychology, language learning and others.

Graduates will master basic methods for analysis, specification, development, testing, validation, documentation and maintenance of software systems. They will be able to use and create software in various areas of human activity, applying modern approaches, models and techniques to build appropriate solutions, demonstrate abilities for good communication and conflict resolution. Software engineering majors will possess skills in software project management and teamwork. Those who wish can also acquire pedagogical legal capacity through the forms of optional training.

Graduates of the specialty will be able to work effectively as designers and software developers independently and in a team. They will have professional competence and skills in designing, developing and managing software systems.

Bachelors in Software Engineering will have the opportunity for a wide professional exposure in software and other companies as independent professionals and team members. They will be able to apply in practice the studied modern practices and modern tools for analysis, design, implementation, testing and implementation of modern software systems. They will be able to occupy any position in companies developing software systems, as well as in business organizations or in public administration as analysts, designers, developers, project managers, experts, consultants and others. Specialists with a bachelor's degree will have the necessary preparation and the opportunity to continue their studies in the next master's degree in a wide range of specialties in natural and computer sciences in all Bulgarian universities.

CURRICULUM

OF THE DEGREE COURSE IN SOFTWARE ENGINEERING

First year

Code	First term	ECTS	Code	Second term	ECTS
S01034	Introduction to Programming	8	SB14895	Object Oriented Programming	8
S00848	Introduction to Informatics	4	S01083	Computer Architectures	6
S00701	Calculus I	6	S00854	Discrete structures	6
S01065	Linear Agebra and Geometry	8	S01089	Calculus II	6
S00856	English Part I	4	S01106	English Part II	4
	Total for the term:	**30**		***Total for the term:***	**30**
S02791	Sports		SB13965	Sports	

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
S01118	Data Structures and Programming	7	SB14900	Software Modeling and Analysis	7
SB14896	Basic of Software Engineering	5	S01183	Computer Networks and Communications	5
S01899	Operating Systems	6	SB14899	Software Testing	5
S01246	Numerical Methods	5	S01182	Data Bases	7
S01181	English for Computing	3	S01184	Non-procedural Programming	6
	Elective courses (students choose one course)				
SB14897	Coding Theory	4			
SB14898	The Number Theory	4			
	Total for the term:	**30**		***Total for the term:***	**30**
SB13965	Sports		SB13965	Sports	

Third year

Code	Fifth term	ECTS	Code	Sixth term	ECTS
S01192	Algorithm Analysis and Design	5	SB14904	Web Design and multimedia technologies	6
S00867	Component Oriented Programming	5	S01215	Internet Technologies	6
SB14901	Software requirements and specifications	6	S01185	Probability and Statistics	5
S01122	Computer Graphics	7	S01212	Artificial Intelligence	5
	Elective courses (students choose one course)			***Elective courses (students choose one course)***	
SB14902	Mathematical optimization methods	4	S01198	Practicum on Databases	3
SB14903	Operations Research	4	S01199	Praktikum on Data Structure and Programming	3
	Elective courses (students choose one course)			***Elective courses (students choose one course)***	
S01186	Practicum on OOP	3	SB16317	Fundamentals of Managements	5
S01245	Practicum on Computer Networks and Communications	3	SB17542	Communication skills	5
	Total for the term:	**30**		***Total for the term:***	**30**
SB13965	Sports		SB13965	Sports	

Fourth year

Code	*Seventh term*	*ECTS*	*Code*	*Eighth term*	*ECTS*
SB14906	Human–computer Interaction Design	7	SB16332	Management of Software projects	5
SB14907	Cloud Computing	6	S00084	Graduation Self-study	4
SB14908	Software Verification and Validation	8			
	Elective courses (students choose one course)			***Elective courses (students choose one course)***	
SB14909	Practicum on Internet Technologies	3	S00907	Programming of Mobile Devices	4
SB14910	Practicum on Computer Graphics	3	S00906	Geographical Information Systems	4
	Elective courses (students choose one course)		S00905	Visual Programming	4
SB14911	Web server applications	6	S00908	Computer Linguistics	4
SB14912	Cybersecurity and Data Protection	6		***Elective courses (students choose one course)***	
			SB14914	Social legal aspects of SE	3
			SB16333	Economics of SE	3
				Elective courses (students choose one course)	
			SB14916	Parallel programming	4
			SB14917	Software design patterns	4
			SB14918	Big data processing	4
				Graduation	
			S01553	State Exam	10
			S00083	Bachelor Thesis	10
	Total for the term:	**30**		***Total for the term:***	**30**
SB13965	Sports		SB13965	Sports	

Total for the course of study: 240 ECTS credits

S01034 Introduction to Programming

ECTS credits: 8 **Weekly classes**: 2l+0sem+0labs+3ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vassilev, MEng, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Assoc. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326; E-mail: ptx@ami.uni-ruse.bg
Abstract:
The course objective is to give students knowledge for developing algorithms and programmes in C++ programming language. The course focuses on the main data structures in the programming language C++ and on the main operations with that data. Special attention is paid on algorithm development being the basic step for writing programs. The practice sessions aim at acquiring skills for developing algorithms and programs.
Course content:
Algorithm development. Main data types and operation in C++ programs. Controlling structures – branches, choosing a variant, cycles. Arrays and arrays of arrays, pointers, one-dimensional dynamic and multi-dimensional arrays, character strings. Functions. Recursive algorithms and recursive functions.
Teaching and assessment:
The lectures concentrate on the process of algorithm development, testing and verification and their implementation in C++. Students are given suitable examples and independent tasks to practise writing programs and develop new programs. At the practice sessions students write programs and do tests. Each student prepares a course assignment including tasks and presents them to the lecturer. Students get term validation after successful submissions of all assigned tasks. The examination is in a written form, but students defend their work orally. The test marks and the course work results are taken into consideration for the final examination mark.

S00848 Introduction to Informatics

ECTS credits: 4 **Weekly classes**: 1lec+0sem+0labs+2ps+0.5p
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel. 888 326; E-mail: gatanasova@ami.uni-ruse.bg
Abstract:
The course is within the group of the compulsory subjects to be studied during the first semester by students from the bachelor degree programs of Computer Science, Informatics and Information Technologies in Business and Software Engineering. Its goal is to familiarize students with the essence, methods and tasks of Informatics, so that they can catch up with the required level of knowledge.
Course content:
Subject, methods and tasks of Informatics. Data structure and representation in computer. Principle of the program control. Files and file systems (FAT 16/32; NTFS). File formats. Files - backups, compressing, cryptography, data bases, SQL. Numerical systems. Boolean algebra. Elements of combinatorics used in Informatics. Numbers representation. Machine codes. Representation of fractions formats. Symbols representation and code tables. John von Neumann's principle. Methods of programs design. Stages of the programming design. Testing methods. Algorithms.
Teaching and assessment:
Lectures are conducted two hours once a fortnight. At the practice sessions students are trained to work independently. They are encouraged to perform the assigned tasks by themselves and when necessary they are assisted and guided by the teacher. Students' activities are continuously assessed so that they get final marks in the end of the semester. Each student writes a paper on an assigned topic associated with the subject domain. In the end of the course the paper is submitted and defended. The continuous assessment includes the marks from two tests. The final grade is formed on the basis of tests results, the paper mark and the assessment of the practice sessions work.

S00701 Calculus, Part 1

ECTS credits: 6 **Workload per week:** 2 l + 2 s + 0 lab + 0 p+1r.
Assessment: exam **Type of exam**: written

Department involved: Department 27 Mathematics**,** Faculty of Natural Sciences and Education
Lecturers:
1. Assoc. Prof. Yuliya Chaparova, PhD, Dept. of Mathematics, tel.: 082/ 888 726,
E-mail: jchaparova@uni-ruse.bg
2. Pr. Assist. Prof. Nikolay Dimitrov Dimitrov, PhD, Dept. of Mathematics,
tel.: 082/ 888 727, E-mail: ndimitrov@uni-ruse.bg

Annotation:
The subject is basic for mathematical education in courses of Computer Science and Software Engineering. It is a base for further subjects as Mathematical Analysis II, Discrete Mathematics, Numerical Methods etc.The contents includes an introduction to Mathematical analysis.
Course syllabus:
Basic themes: sets of real numbers, basic elementary functions, limits of sequences of numbers and functions, continuity of functions, derivatives of functions and applications, Indefinite integrals.
Teaching and learning methods:
The educational process is realized by lectures and seminars. In the lectures the educational material is theoretically presented and demonstrated by proper example problems. In the seminars the educational material understanding is controlled and skills for solving practical problems are developed. A term certification is obtained according to Interval rules for the educational activities. The exam test includes 6 problems from the educational material.

S01065 Linear Algebra and Geometry

ECTS credits: 8 **Weekly classes:** 2lec+0sem+0labs+3ps+0.5r
Assessment: exam **Type of exam:** written

Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Angelova Velikova, PhD, Dept. of Mathematics,
tel.: 082/ 888 848, E-mail: evelikova@uni-ruse.bg, office: 1.404
Pr. Assist. Prof. Ralitsa Krasimirova Vasileva-Ivanova, PhD, Dept. of Mathematics,
tel.: 082/ 888 848, E-mail: rivanova@uni-ruse.bg, office 1.404

Abstract:
The current aims of the course are: to study basic mathematical facts and possibilities for their application using a computer algebraic system *Maple*. The material is presented in an accessible form, mainly without proof.
Course content:
Linear Algebra and Geometry presents basic mathematical concepts of linear algebra and analytical and synthetic geometry that are applied to analyze economic performance. It forms links with other mathematical, computer and economic disciplines such as Mathematical Analysis, Programming, Computer Graphics, etc.
Teaching and assessment:
The main mathematical concepts, their properties and their applications in problem solving methods Practical classes are held in computer labs and serve to: master the study material; developing skills for its implementation for task solving; developing skills to use specialized software to solve mathematical problems with an applied character.

S01947 English Part I

ECTS credits: 4
Weekly classes:0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Foreign Languages
Faculty of Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Lec. Krassimira Ivanova, MSc, Department of Foreign Languages
tel.: 082 /888 803; E-mail: kivanova@uni-ruse.bg
Abstract:
'English Part 1' for Computer Science students comprises 45 hours of classroom work and provides basic skills for oral and written communication in the foreign language in view of the students' field of study. New vocabulary connected with the basic terminology of the specialized subjects is acquired. General topics related to the field of informatics and computer science are considered. Skills to elicit essential information from a text and write a summary are developed. Students are expected to prepare and give a short presentation on a chosen topic related to computing or IT. A prerequisite for 'English Part 1' is an English course taken in secondary school.
Course content:
Living in a digital age. Computer essentials. Inside a PC system. Buying a computer. Input devices. Interacting with your computer. Display screens and ergonomics. Choosing a printer. Devices for the disabled. Magnetic storage. Specifics of technical English grammar and vocabulary.
Teaching and assessment:
The practical exercises include the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the semester.
The requirements for obtaining a semester validation signature are regular attendance, completing assigned tasks, giving a presentation and doing the tests. The final mark is based on continuous assessment.

SB14895 Object Oriented Programming

ECTS credits: 8
Weekly classes: 2l+0sem+0labs+3ps+1ca
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, PhD, Department of Informatics and Information Technologies
tel. 888 754, E-mail: rir@ami.uni-ruse.bg
Assistant Prof. Boyana Nedkova Ivanova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: bivanova@ami.uni-ruse.bg
Abstract:
The course is a continuation of the course “Introduction to programming”. It focuses on the main concepts of object-oriented programming. The programming language C++ is studied in detail and especially the object-oriented part. Classes and objects are studied being the main categories, as well as the main concepts for working with them. The practice sessions aim at acquiring skills for developing object-oriented programs. The programs are implemented.
Course content:
Classes and objects. Components of classes – data members, functions’ members, constructors and destructors. Objects and functions. Friends of classes. Derivatives of classes, inheritance. Streams. Pre-defined operators.
Teaching and assessment:
The lectures give the principles for development of algorithms using classes and objects, as well as their implementation in C++. They are supported with lots of exemplary programs and students have to independently modify the examples and write similar programs for training themselves in programming.
At the practice sessions students write programmes, verify them and do tests. Student’s course work includes two problems for independent work that has is defended and evaluated on submission. The term is validated for students who defend successfully the course work.

S01083 Computer Architectures

ECTS credits: 6
Weekly classes: 2l+0sem+0labs+2ps
Assessment: exam
Type of exam: written
Department involved:
Department of Computing
Faculty of Electrical Engineering, Electronics and Automation
Lectors:
Assoc. Prof. Milen Iliev Lukanchevski, MEng, PhD, Department of Computing
tel.: 082 / 888 674, E-mail: mil@ieee.org

Abstract:
The course addresses architectural aspects of computer systems. Main terms and principles in computer architectures are discussed as well as organization of computations. Modern computer architectures are presented analytically and comparatively. Memory hierarchy and input-output subsystem structure are shown as well. Simulations and real systems are used at the seminars to gain more deep understanding.
Course content:
Computer Architecture Principles. Basic Components. Historical Perspective. Types of Computer Architectures. Computer System Base Structure. Accumulator, Stack and Register Architectures. IA32 Architecture. Working Modes. Computer Memory Hierarchy. Input-output System.
Teaching and assessment:
The lectures introduce main theoretical topics. Each group of lectures ends with conclusion of material and formulation of problems.
At the seminars simulations and real systems are used putting lectures to practice. Each seminar begins with formulation and analysis of problems. At very end the students are asked to summarize in written form their results. The information materials needed are given in electronic form to the students.

S00854 Discrete Structures

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yurii Dimitrov Kandilarov, MSc, PhD, Department of Mathematics
tel.: 082 / 888 634, E-mail: ukandilarov@uni-ruse.bg
Assoc. Prof. Tihomir Bogomilov Gulov, MSc, PhD, Department of Algebra and Geometry
tel.: 082 / 888 489, E-mail: tgulov@uni-ruse.bg

Abstract:
The course is basic for students of Informatics and Information technologies program. Its incoming course links are with General Algebra and Geometry. Students acquire fundamental knowledge about informatics, optimization theory, algorithm theory and their applications.
Course content:
Recurrent equations, abstract machines and automata, introduction to the coding theory.
Teaching and assessment:
The course material is presented at lectures, demonstrated with examples and practice-oriented applications. At practice sessions students gain skills for working independently over assigned tasks. The allotted paper develops students' knowledge for solving different problems and practice oriented tasks. The paper is evaluated acc. to a score table (0 to 20 scores) that is taken into account for the final grade. Students may not go for an exam if the continuous assessment results are very good or excellent and that mark may be considered as a final grade.

S01089 Calculus Part II

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Antoaneta Mihova, PhD, Department of Mathematics
tel.: 082 / 888 226, E-mail: rk-mat@uni-ruse.bg
Pr. Assist. Prof. Nikolay Dimitrov Dimitrov, MSc, PhD, Department of Mathematics
tel.: 082/ 888 727, E-mail: ndimitrov@uni-ruse.bg
Abstract:
Calculus - Part 2 is fundamental subject among the mathematical courses of the speciality. It is a continuation of the subject Calculus - Part 1.The main purpose of the course is students to get acquainted with the differential and integral calculus of functions of several variables. The outgoing relations of the subject are with Numerical methods, Probability and Statistics, and with other elective courses in mathematics and informatics.
Course content:
Function of several variables: differentiation, extremums, implicit functions. Multiple integrals and applications, Curve and surface integrals, Functional series.
Teaching and assessment:
Lectures present notions, properties, and main assertions of the material, supported by suitable examples and problems. Practice are built up in accordance with lectures. Students are given three test papers and a paper. A term validation is granted in case of regular attendance. The exam is written and includes 6 practical and/or theoretical problems. The subject is fundamental among the subjects in the basic module of the specialty Mathematics and Informatics. It is a continuation of the subject Calculus - Part 1. Its outgoing relations are with all mathematical subjects of the study program.

S01106 English Part II

ECTS credits: 4
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: written and oral
Department involved:
Department of Foreign Languages
Faculty of Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Lec. Krassimira Ivanova, MSc, Department of Foreign Languages
tel.: 082 /888 803; E-mail: kivanova@uni-ruse.bg
Abstract:
'English Part 2' for Computer Science students extends the foreign language competence of students to cope with specialised literature and professional communication. Work is done to achieve a greater accuracy in the use of typical and common phrases, structures and grammatical models. Authentic texts mainly are used to bring the learners closer to scientific style. Collocations with frequently used terms and notions are considered. Students prepare and give team presentations.
Course content:
Storage devices (optical discs and drives, flash drives); The operating system; Word processing; Spreadsheets and databases; The Internet and email; The Web; Chat and conferencing; Internet security; Graphics and design.
Teaching and assessment:
The practical exercises include the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the semester. The requirements for obtaining a semester validation signature are regular attendance, completing assigned tasks, participating in a team presentation and doing the tests. The final mark is based on continuous assessment.

S01118 Data Structures and Programming

ECTS credits: 7
Weekly classes: 2lec+0sem+0labs+3ps+2cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, PhD, Deptment of Informatics and Information Technologies
tel. 888 326, e-mail: gatanasova@uni-ruse.bg
Assoc. Prof. Kameliya Ilieva Shoylekova, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 214; E-mail: kshoylekova@ami.uni-ruse.bg
Abstract:
The course objective is students to gain knowledge on complex data structures, data structure design algorithms and maintenance, application software. Reference practical cases are considered as data structure applications. Data structures and processing algorithms are considered conceptually at first and afterwards implemented in C++.
Course content:
Sorting and searching algorithms. Stack implementation and processing. Queue implementation and processing. Linear linked lists. Sorted lists. Binary tree. Binary search tree. Graphs. Presentations. Graph algorithms and applications.
Teaching and assessment:
The lectures focus on data structures in accordance with the syllabus. The accent is placed on data structure presentations, the applied basic operations and types of problems solved with the created data structure. Program implementation in C++. At practice sessions students design and test concrete practical cases using complex data structures. The course work is carried out individually in two stages as homework and it is presented in a pre-set time. Students do 3 tests on theory and practical cases during the term. The course ends with exam. The final assessment is formed on the basis of the results from the exam, course work and tests.

SB14896 Basics of Software Engineering

ECTS credits: 5
Weekly classes: 2lec+0labs+2ps+2r
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: phristova@ami.uni-ruse.bg
Abstract:
The course is included as compulsory in the third semester of specialty "Software engineering". The purpose of the training is to give students a basic understanding of software engineering. To acquaint students with principles in the development of large software systems. To give them knowledge of the whole process of developing modern software systems with an emphasis on the initial stages of development.
Course content:
Software engineering and its place as a share of knowledge. Basic concepts in software engineering. Software Process - Phases, models, modeling languages. Classic Life Cycle Models of a Software System. Waterfall model. Iterative and expanding software systems development. Prototyping. Spiral model Model of Gunther. Modern software development techniques. Flexible methodologies. Design of software systems. Software architecture. Introduction to UML. Software measurement. Software metrics. The Human Factor in Software Production. Legal aspects of software development.
Teaching and assessment:
Students have to read the written material on lecture topics in advance. Some details are discussed and suitable examples are given. The practice sessions are mainly for students' individual work. They solve problems from software engineering field. Developing a referral requires students to show that they can independently explore and describe a problem related to the specification, design and development of a software project. The course ends with exam. The final grade is based on the results from the exam (60%), practice sessions activities (40%).

S01899 Operating systems

ECTS credits: 6
Weekly classes: 2lec+0sem+0labs+2ps+1kw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Kameliya Ilieva Shoylekova-Nikolova, MEng, PhD, Department of Informatics and Information Technologies, tel.: 082 / 888 214, E-mail: kshoylekova@uni-ruse.bg
Abstract:
The course objective is to give students knowledge and skills about the main principles of design and functioning of the operating systems. At the lectures the theoretical material is illustrated with examples from different modern OS. The workshops are based on the two most widespread OS: Windows and UNIX. Their organization and way of operation are addressed and compared.
Course contents:
Introduction to OS. OS classification. Structure of OS. Processes and threads. Interaction between processes. Parallel processes. Synchronisation. Solutions to classical problems. Mutual blocking. CPU management. Planning algorithms. Memory management. Virtual memory management and protection. Device management. Organization of I/O devices. File system management. Functions and structure of the file system. Multimedia OS. Distributed systems. Protection and security in OS.
Learning and assessment:
The lectures are 2 hours per week and the theoretic material is delivered at the lectures. The workshops take place in computer-equipped labs under the lecturer's supervision on the topics shown above. At the workshops the students can strengthen the knowledge given at the lectures by discussing the features of particular OS and running examples. The students' knowledge is continuously assessed at the workshops with tests. The final grade is computed taking into account the continuous assessment at the workshops and exam.

SB1246 Numerical Methods

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps+0.5se
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Evelina Ilieva Veleva, MSc, PhD, Department of Applied Mathematics and Statistics
tel.: 082/ 888 606, E-mail: eveleva@uni-ruse.bg
Assoc. Prof. Ivan Radoslavov Georgiev, Department of Applied Mathematics and Statistics
tel.: 082/ 888 424, E-mail: irgeorgiev@uni-ruse.bg
Abstract:
The main objectives of the course are: to give a basic knowledge in the theory of numerical analysis, numerical linear algebra and numerical methods for initial and boundary-value problems for ordinary differential equations; to develop skills for computer realization of the numerical methods using programming environment Matlab; to develop skills for intelligent application of approximation techniques to the types of problems that commonly occur in engineering and physical and computer science.
Course content:
MATLAB programming environment. Error analysis. Numerical methods of algebra: exact and iterative methods for solving SLAU, eigenvalues and eigenvectors. Approximation of functions, general problem of approximating functions. Nonlinear equations and optimization. Numerical integration and differentiation. Numerical solution of ODE: Cauchy problem – Runge – Kuta methods and multistep methods. Differential methods for boundary value problems for ODS.
Teaching and assessment:
The teaching is carried out by means of lectures and computer practice sessions. At the lectures the material is explained theoretically and illustrated by appropriate example problems. At the practice sessions the students solve theoretical and practical problems and use the programming environment Matlab for computer realization of the algorithms.

S01181 English for Computing

ECTS credits: 3
Assessment: continuous assessment
Weekly classes: 0lec+0sem+0labs+3ps
Type of exam: written and oral

Department involved:
Department of Foreign Languages
Faculty of Mechanical and Manufacturing Engineering
Lecturers:
Lec. Krassimira Ivanova, MSc, Department of Foreign Languages
tel.: 082 /888 803; E-mail: kivanova@uni-ruse.bg

Abstract:
The subject English for Computing extends the foreign language competence of students with respect to specialised literature and professional communication. Work is done to achieve a greater accuracy in the use of typical and common phrases, structures and grammatical models. Collocations integrating common terms and notions are considered. Students prepare and give individual or team presentations related to establish IT companies or distinguished specialists in the field.
Course content:
Desktop publishing systems; Multimedia; Web design; Computer languages; A career in computing; Networks; video games; New technologies; Future computers.
Teaching and assessment:
The practice sessions contain the following components: introducing new information; summary and revision; presenting and analysing individually accomplished tasks; knowledge reinforcement through diverse exercises - role-plays, work on authentic texts and in a computer room. Students are given two written tests during the term. The requirements for obtaining a term validation are regular attendance, completing assigned tasks, participating in a team presentation and doing the tests. The term mark is based on continuous assessment.

SB14897 Coding Theory

ECTS points: 4
Assessment: continuous assessment
Work load per week: 2lec+1sem+ca
Type of the exam:

Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education
Lectures:
Assoc. Prof. Antoaneta Tileva Mihova, MSc, PhD, Dept. of Mathematics, phone 888 727,
E-mail: amihova@uni-ruse.bg

Annotation: The course is oriented for students in Software Engineering. The course is an introduction to the theory of error-correcting codes. It is based on the knowledge of Linear Algebra and Geometry, Discrete Structures and Programming.
Course content: Haming distance. Binary symmetric channel. Hadamar matrices and Hadamar codes. Encoding and decoding with linear codes. Syndrome decoding. Hamming codes, Golay codes and Reed-Mullar codes.
Teaching and assessment: At the lectures basic concepts and facts of coding theory are illustrated with many examples. At the seminars the students solve tasks related to lecture material. At the beginning of the semester each student is given an individual course assignment. Two written tests are made through the semester. The final continuous assessment is the average of two written tests, if the student is defended the course assignment.

SB14898 **The Number Theory**

ECTS credits: 4
Weekly classes: 2ec+2sem+0labs+0ps+1ca
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc Prof. Antoaneta Mihova, PhD, Dep.of Mathematics, tel.: 082 / 888 226, E-mail: rk-mat@uni-ruse.bg

Abstract:
The knowledge of Number Theory is useful for specialists in Informatics and Information Technologies. The modular Arithmetic, an essential part of the course, is in the base of the mechanical presentation of any number. The origin of Informatics is closely connected with Mathematics and the proof for it is the elementary number theory. The course is based on the courses of Algebra and Discrete Structures. The course on Design and Analysis of Algorithms and the course on Coding Theory could rely on Number theory.

Course content:
Divisibility of integers, g.c.d and l.c.m. Prime integers. Fundamental theorem of Arithmetic. Congruences. Fermat and Euler theorems and their applications. Congruences with one unknown. Systems of first degree congruences. Congruences of arbitrary degree. Congruences of second degree modulo a prime number. Gauss law of reciprocity of quadratic remainders. Chain fractions. Diophantus first degree equations with two unknowns. Pell's equation.

Teaching and assessment:
If possible, most of the practical tutorials are performed using the system *Mathematica*. One two-hour control work takes place. During the exam the student works on 1 problem (chosen among 2) analytically and with the system *Mathematica.* Students prepare a term paper which is obligatory for the term validation. The forming of the final mark is defined in the teaching program.

SB14900 Software Modeling and Analysis

ECTS credits: 7
Weekly classes: 1lec+1labs+3ps+1cw
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, PhD, Dep. of IIT, tel. 888 326, E-mail: gea@ami.uni-ruse.bg

Abstract:
The subject is included as compulsory in the fourth semester of specialty "Software Engineering". The aim of the training is to present the principles and techniques for modeling and analysis of large software systems. To give students a basic understanding of the place of modeling and analysis in the life cycle of the software system. Students will be acquainted with the characteristics of the modeling and analysis of the different components of the computer systems as well as with the specifics of the different types of systems - real-time systems, systems managed by business processes / workflows, embedded systems, domains.

Course content:
Software systems modeling of and its place in the software life cycle. Basic concepts in modeling. Basic principles in modeling - decomposition, abstraction, generalization, projection. Different views and patterns. Formal approaches to modeling and their application. Design according to requirements - preconditions, consequences, multivariate and model choice. Introduction to Mathematical Modeling and Formal Notices. Types of models. Modeling information and data. "Essence - Connection" model. Class Diagrams. Behavioral modeling. Status charts. Analysis of cases of use. Interaction diagrams. Models of deviation in the behavior of the software system and its effect. Tree-by-error analysis. Modeling the architecture of software systems. Architectural templates and component charts. Modeling of Domains. Engineering approaches to domain design. Modeling business systems. Business processes. Organizations. Goals. Workflows. Embedded Systems Modeling. Real-time systems. Interface protocols. Basic Principles in Analysis of Software Systems. Forms of analysis - completeness, integrity, sustainability. Correctness in the analysis process. Static analysis. Simulation. Model testing. Reliability analysis. Problem mode and tree error analysis. Formal analysis. Proof of theorems.

Teaching and assessment:
The course includes lectures, seminars and practical exercises and a course assignment. During the lectures, the basic points of the subject are discussed and the basic principles and concepts are clarified. The seminars are devoted to the discussion of specific problems in the lectured material, related to individual stages and perspectives of the modeling of software systems. During the practical exercises attention is paid to students' independent work. Students decide assignments on the subject of the exercise independently, receiving assistance and counseling from the lecturer when necessary. Exercise activity is evaluated and at the end of the semester a summary assessment is made for each student.
The course ends with a written exam. The student receives a cumulative assessment of the control (K1 and K2) and the course assignment (KZ) of the following formula: TK = 0,4 (K1 + K2) + 0,3K3 + 0,3PU.

S01183 Computer networks and communications

ECTS credits: 5
Weekly workload: 2l + 0 s + 0 lab + 2 p + 1,0cw
Assessment: continuous assessment
Type of exam: written and oral
Departments involved:
Department of Informatics and Information Technologies
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Prof. Georgi Hristov, PhD, Dept. of Telecommunications, tel.: 888 663, e-mail: ghristov@uni-ruse.bg
Abstract:
The course objective is to provide the students with working knowledge of the basic tasks, principles and methods used in telecommunication networks, as well as their main areas of application. The lectures include architecture, functionality, interfaces and protocols, which are main part of the modern telecommunication networks. Some of the lectures include information about the newest technologies used for data transmission.
In addition a number of practical problems are discussed during the lectures. The lectures let the students know about different kind of method and techniques, which solute the above problems.
Course content:
Network Protocols and communications. Hierarchical Network design. Router Architecture. IPv4 addressing and structure of IPv4 addresses. IPv6 protocol – overview, motivation and basic characteristics. Fixed Length Subnet Masking and Variable Length Subnet Masking. IPv4 – IPv6 integration mechanisms. Switching process – basic switch configuration. Virtual Local Area Networks. Static and Dynamic Routing in communication networks. Network security – access control lists. Network Address Translation.
Teaching and assessment:
The topics of the lectures give the possibility to the students to get acquainted theoretically with the main issues of the communication networks. Students have the availability to practice their knowledge during the planed exercises. The department of Telecommunications has equipped laboratories with CISCO devices. During the practice, students create simulated models of communication networks, which are then investigated.

SB14899 Software testing

ECTS credits: 5
Weekly classes: 1lec+0sem+0lab+2ps+1cw
Assessment: exam+cw
Type of exam: written
Department involved:
Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
- Assoc. Prof. Rumen Ivanov Rusev, PhD – Dept. of IIT, tel. 082 888 326, e-mail: rir@ami.uni-ruse.bg
- Pr. Assist. Prof. Metodi Dimitrov, PhD, Dept. of IIT, tel. 082 888 470, e-mail: mdimitrov@ami.uni-ruse.bg
- Pr. Assist. Prof. Sergey Dimitrov Antonov, PhD, Dept. of IIT, tel. 082 888 475, email: santonov@uni-ruse.bg

Abstract:
The course aims to introduce students to the basic principles of designing, developing and executing software tests. During the course, different categories of tests are considered, thus giving students a thorough knowledge of the subject area. Attention is also paid to the various ways of automation. The course uses knowledge from the following disciplines, studied in previous semesters - Introduction to Programming, Object-Oriented Programming, Operating Systems. The acquired knowledge can be used in the following disciplines - " Modelling and Analysis of Software", "Software Requirements and Specifications Analysis", "Software Verification and Validation" and "Management of software projects".
Course content:
Software testing. Relationship between quality assurance, quality control and software testing. Types of software tests. Unit testing. Test driven development. Unit testing and mock objects. Version control systems. Continuous integration. Software testing as part of Continuous Integration. Integration Tests. End-to-end tests. Test Automation. Containers and software testing. System tests. Performance and load tests.
Teaching and assessment:
Students attend lectures and practical exercises. Practical classes are conducted in groups in halls with computers, which have appropriate software products. During the classes, students reinforce the knowledge gained during the lectures. For this purpose, students receive self-study tasks related to the lecture material. Ongoing discipline control involves working on coursework assignments, which are evaluated. This evaluation influences the final evaluation. At the end of the course, each student must take an exam. At the exam, each student receives his or her own task from a known field and have several hours to fulfill the assignment. In order to be allowed to go to the final exam, each student must have been present of more than the half of the lectures, on all practical exercises and must have submitted his or her coursework. The student may have been absent from some of the exercises because of a reasonable cause, but he or she must be present on no less than 50% of all exercises. The course ends with an exam. Assessment is made on the basis of the student's work assessment during the semester (10%), the assessment obtained from the course work (10%) and the assessment obtained in the result of the passed exam (80%).

S01182 Data Bases

ECTS credits: 7 **Weekly classes**: 2lec+1sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof, Kameliq Ilieva Shoylekova - Nikolova, PhD, Dept. of Informatics and Information Technologies
tel. 888 214, E-mail: kshoylekova@ami.uni-ruse.bg
Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel. 888 464, 888 326, E-mail: katya@ami.ru.acad.bg
Abstract:
The purpose of this course is to familiarize students with the main principles of organising, creating and implementing of databases (DBs), database management systems (DBMS), and the information systems building. Students gain knowledge on important topics of database theory, the physical and logical organisation of DB, existing data models and the specificity of the models. The emphasis is on the relational database model.
Course content:
Main terminology in the DB theory, DBMS. Data models. Logical models. DB schema. Relational model. Relational DB schema. Relational algebra and relational calculus. Main operations with the data in the BD. Data manipulation languages. SQL. Queries. Interaction. Functional dependencies. Relational schema analysis. Normalisation and normal forms. DBMS. Operating principles. Transactions management. DB internal model. Physical organization and access methods.
Teaching and assessment:
The course comprises lectures, seminars, practice sessions and a course work. The lectures introduce important issues from DB organization, designing, building and application. During seminar classes students discuss problems related to DB theory and examine the practical applications. The practice sessions are intended to contribute to students' skills for designing individual DB and learn how to work in teams. The course assessment target is students to build up skills for DB designing. During the term students do 2 tests including theory and problem solution cases. The course ends with exam. The final grade is formed on the basis of the results from the exam, the course assessment, the tests and student's activity during the term.

S01184 Non–procedural Programming

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova,PhD, Department of Informatics and Information Technologies
tel. 082 888 754; E-mail: datanasova@uni-ruse.bg
Ch. assistant Sergey Dimitrov Antonov, PhD, Department of Informatics and Information Technologies
tel. 082 888 475; E-mail: santonov@uni-ruse.bg
Abstract:
The course objective is to familiarize students with two non-procedural styles of programming – logical and functional. Students study the fundaments of programming and a concrete programming language, representing the relevant programming style (functional – e.g. LISP, SCHEME or ML and logic – e.g. PROLOG). Non-procedural programming course is in close connection with the following courses – Introduction to Programming, Discrete Mathematics, Data Structures and Programming. It builds up the prerequisite for attending the next coming course "Artificial Intelligence".
Course content:
Functional programming: Main principles of Functional programming (FP), Constructions and techniques of FP languages, Data structures of FP languages, FP applications; *Logic programming:* Main principles of Logic programming (LP), Constructions and techniques of LP languages, LP applications, Comparative analysis of LP and FP. During the practice sessions students develop programs.
Teaching and assessment:
The course involves lectures, practice sessions and a course assessment. At lectures students learn the main principles of logic and functional programming, the syntax and semantics of programming languages, the techniques and style of relevant programming mode. Each student works on an individual task referring to compiling a program and its execution on a personal computer. Students use adequate programming languages (LISP, PROLOG, ML).

SO1192 Algorithms Analysis and Design

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel. 888 326, e-mail: gatanasova@uni-ruse.bg
Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel. 888 464, e-mail: katya@ami.uni-ruse.bg
Abstract:
The course main aim is studying methods for development of algorithms with practice-oriented application. Emphasis is placed on algorithm complexity. Students learn algorithm development techniques, such as recursion, mathematical induction. Algorithms are grouped in themes to facilitate the introduction of the adequate methods for their implementation. During the practice sessions students make programs for the algorithms introduced at the lectures using different methods, they compare and analyze the program specificity.
Course content:
Algorithm in general. Analysis and development. Algorithm complexity. Iteration and recursion. Mathematical induction. Greedy algorithms. Divide and conquer. Dynamic programming. Algorithms using linear data structures. Algorithms using sequences and sets. Graph algorithms. Computational Geometry. Geometric algorithms. Numerical algorithms. Combinatorial algorithms. Parallel algorithms.
Teaching and assessment:
The lectures introduce the possibilities for algorithm development in compliance with the course syllabus. The practice sessions include solving of specific practice-oriented problems using relevant algorithm group. Different program realizations are applied for solving one and the same problem aiming to compare the program realizations. The course work is assigned in steps which students realize individually for a definite time as homework. During the term students do three 3 tests including problems and theoretical material. The course ends with exam. The final grade is formed on the basis of the results from the exam, the course work and the tests.

S00867 Component Oriented Programming

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tsvetomir Ivanov Vasilev, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 475, E-mail: tvassilev@uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov,PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: vvelikov@ami.uni-ruse.bg
Abstract:
The course familiarizes students with the principles of contemporary Windows and Internet programming, focusing on the diversity of tools and adequate methods of application. Students study the ideology and significant details of Java programming language being a traditionally applied component-oriented language technology suitable both for training and for industry application. The incoming course links of the discipline are: Introduction to Programming, Object-oriented Programming (OOP), Data Structures and Programming. Outgoing course links: Artificial Intelligence, Multimedia Systems and Technologies, Internet Technologies, Programming for Internet.
Course content:
After a concise introduction to the fundamental resources and tools of Windows and Internet programming, follows a time-limited acquaintance with basic language aids and structures that proceeds with detailed studying an important part of Java package structure and classes for realizing some essential Java possibilities.
Teaching and assessment:
The course represents integrity of lectures and practice sessions. Students' assessment is based on the results from the exam practice work on PC (70%), two tasks that are fulfilled as homework (10%) and the individual practice work (20%) during the semester.

SB14901 Software requirements and specifications

ECTS credits: 6 **Weekly classes:** 2l+0sem+0labs+2ps+cw
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Atanasova, Department of IIT, tel. 888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Ekaterin Minev, PhD, Department of IIT, tel. 888 326, E-mail: eminev@uni-ruse.bg
Abstract:
The course presents the basic concepts and principles of designing software requirements, the tools, techniques and methods used for this purpose, as well as their description. The covered topics are related to the eliciting and collection of software requirements; definition of business, user, functional and non-functional requirements and their analysis, specification and validation; and software prototyping. Students also receive knowledge about management of the process for determining and specifying the software requirements and the role of the business analyst. For further understanding of the topics, the students are involved in a course project where it is expected to acquire some skills for application, interpretation, comparison, opposition, arrangement and systematization, derivation of causes, prediction of consequences, through independent work in groups. The encouragement to work in a team is a key point in the considered subject.
Course content:
Introduction to software requirements., Eliciting, collection and analysis of requirements, Role of business analyst and templates for documenting requirements, Specification and data analysis, Software prototyping, Agile approach to defining software requirements, Management practices in determining software requirements. Methods and control in case of changing requirements.
Teaching and assessment:
The lectures are 2 hours weekly. The lecture notes and supplementary materials are presented during the classes. Homework is assigned for the purpose of self-preparation and expansion of knowledge. The practical exercises are two hours per week in computer room under tutor supervision. During the practical exercises, the knowledge obtained at lectures is checked and expanded via encouragement of creative practical approach on the covered topics. The coursework is aimed at playing different roles in the process of creating and documenting software requirements and specifications as well as building tolerant cooperation between all participants in the team. The final grade for the subject is formed from a written exam in a test form and the grade from the coursework correspondingly.

S01122 Computer graphics

ECTS credits: 7 **Weekly classes:** 2lec+0sem+0lab+3ps+1cw
Assessment: exam **Type of exam:** written
Department involved:
Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Vassilev, MEng, PhD – Deptartment of IIT, tel. 888 475, Email: tvassilev@ami.uni-ruse.bg
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD – Department of IIT, tel. 888 475, Email: rir@ami.uni-ruse.bg
Assist Prof. Boyana Nedkova Ivanova, MSc, PhD, Dept.of IIT, tel. 888 326, E-mail: bivanova@ami.uni-ruse.bg
Abstract:
The course “Computer graphics” have to familiarise the students with the basic principles of developing and working of interactive computer graphic systems and to give them the knowledge, which are necessary for development of program systems for geometrical modelling of objects and graphic documents, using computers. Main principles and approaches of visualization of 2-D and 3-D objects are discussed.
Course content:
General information about computer graphics. Structure of interactive graphic systems. Peripheral devices for computer graphics. Architecture of up-date raster graphic displays. Basic graphic plain and 3-D space transformations. Matrix description. Composition of transformations. 3-D objects plain projections. Object description in graphic systems – models. Approximation and modeling of curves – interpolation, cubic splines, B-splines, Bezier curves. Organization of interactive work in computer graphic systems. Computer graphics colour, colours’ models.
Teaching and assesment:
The course comprises lectures and practical classes.
The main material is delivered at the lectures. At the workshops the students solve themselves problems from the theoretic material and develop programs using suitable program software (Borland C++, Delphi, Visual C++).
The final mark is composed from the mark of continuous students work through the semester (30%) and the exam result (70%).

SB14902 Mathematical optimization methods

ECTS credits: 4 **Weekly classes:** 2l+1sem+0labs+0ps+ca
Assessment: **current evaluation** **Type of exam**: written
Department(s) involved: Dept of Appl. Mathematics and Statistics
Lecturers:

1. Prof. Velizar Pavlov, MSc (Math), PhD (Math), Dept. of Numerical Analysis and Statistics
   Phone: 888-466, e-mail: vpavlov@uni-ruse.bg
2. Assoc. Prof. Ivan Radoslavov Georgiev, PhD Dept. of Numerical Analysis and Statistics,
   Phone: 082-888 424, e-mail: igeorgiev@uni-ruse.bg

Annotation:

The subject aim is to make students acquainted with some specific models ansmg in solving management problems and up-to-date mathematical optimization methods for their solving, analyzing and interpretation of received solutions. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving larger real models are provided.

Course syllabus:

Efficiency and optimum criterion. General formulation of the linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with m unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex Method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queuing theory. Elements of inventory theory.

Teaching and learning methods:

The teaching process is realized ttlrough iectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises.

SB14903 Operations Research

ECTS credits: 4 **Weekly classes:** 2l+1sem+0labs+0ps+ca
Assessment: **current evaluation** **Type of exam**: written

Department(s) involved: Dept of Appl. Mathematics and Statistics
Lecturers:

1. Prof. Velizar Pavlov, MSc (Math), PhD (Math), Dept. of Numerical Analysis and Statistics
   Phone: 888-466, e-mail: vpavlov@uni-ruse.bg
2. Assoc. Prof. Ivan Radoslavov Georgiev, PhD Dept. of Numerical Analysis and Statistics,
   Phone: 082-888 424, e-mail: igeorgiev@uni-ruse.bg

Annotation:

The subject aim is to make students acquainted with some specific models arising in solving management problems and up-to-date mathematical and statistical methods for their solving, analyzing and interpretation of received solutions. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving larger real models are provided.

Course syllabus:

Subject and aim of operations research. Mathematical model of operations. Efficiency and optimum criterion . General formulation of the linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with m unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex Method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queuing theory. Elements of inventory theory.

Teaching and learning methods:

The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the opportunities of the software package MATLAB for solving more complicated and close to the practice problems.

S01186 Practicum Object Oriented Programing

ECTS credits: 3 **Weekly classes:** 0л+0су+0лу+2пу
Assessment: **Type of exam:**
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:

1. Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD – Department of IIT, tel. 888 475, Email: rir@ami.uni-ruse.bg
2. Assistant Prof. Boyana Nedkova Ivanova, PhD, MSc, Department of Informatics and Information Technologies, tel. 888 326, E-mail: bivanova@ami.uni-ruse.bg

Annotation:

OOP-Practicum is a continuation of the disciplines "Introduction to Programming" and "Object Oriented Programming". Its purpose is to deepen the knowledge on topics, connected with the object-oriented approach in programming. Students will improve their programming skills and acquire habits for solving complex problems on their own by independently implementing C ++ programs, related to the use of classes, objects, and building object hierarchies,

Course content:

Classes, objects, inheritance. Object hierarchy design. Virtual functions and virtual classes. Polymorphism. Dynamic objects. Constructors and destructors. Operators. Operator overloading. Function and class templates. Creating libraries. Working with ready-made libraries.

Training technology:

Students attend practical exercises, during which they are given various tasks whose solution methods and peculiarities of realization are discussed. Then the students implement solutions of the tasks, with emphasis on setting up the programs, checking their operability and formal and logical control of the input data. The course ends with an overall assessment, formed on the basis of students' work during the semester and the conducted tests.

S01245 Workshop on Computer Networks and Communications

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps+1ca
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD – Department of IIT, tel. 888 475, Email: rir@ami.uni-ruse.bg
Prof. Georgi Hristov, PhD, Dept. of Telecommunications, tel.: 888 663, E-mail: ghristov@uni-ruse.bg

Abstract:
The course objective is students to get practical knowledge and skills in the field of local area networks (LAN) and wide area networks (WAN) – functioning, building methods, control and security. Lectures cover the reason for the complexity of routing algorithms - coordination between the different units in the network, overload of communication channels, etc. The lectures also include interior routing protocols (within Autonomous system) and exterior routing protocol (between Autonomous systems). In addition, a number of practical problems are discussed during the lectures. The lectures let the students know about different kind of method and techniques, which solute the above problems.

Course content:
Switching Process in IP networks. Virtual Local Area Networks. VLAN trunking protocol. Spanning Tree Protocol. Inter VLAN routing. Routing data and packet forwarding. Graph Theory. Dijkstra's algorithm – shortest path calculation. Bellman–Ford algorithm – shortest path calculation. Routing Table theory. Static and Dynamic routing. Interior Routing Protocols.

Teaching and assessment:
Practice sessions are conducted in computer labs under the supervision of an assistant professor/instructor. After discussing important course topics students implement individual tasks in practice. During the practice, students create simulated models of communication networks, which are then investigated.

SB14904 Web Design and multimedia technologies

ECTS credits: 6 **Weekly workload**: 2lec+0sem+0lab+3ps +cw
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Voinohovska, DSc, Dept. of IIT, tel. 888 645, email: vvoinohovska@uni-ruse.bg
Assoc. Prof. Svetlozar Tsankov, PhD, Dept. of IIT, tel. 888 645, email: stsankov@uni-ruse.bg.
Abstract:
The course objective is students to get familiar with the main components of multimedia systems, the stages and models for developing e-learning resources, languages and environments for creating multimedia applications and Web-based applications.
Course content:
Introduction to Multimedia. Areas of application. Requirements, milestones and technology for creating multimedia applications; Essentials of multimedia and essential tools for creating and editing text, images, video and audio information; Authoring systems for creating multimedia applications and systems for developing and managing e-Learning courses; Animation - nature, types, purpose, elements, characteristics. Application of animation in training, multimedia and web design; Models and environments for creating e-learning resources; Web design with HTML5 - text, images, colors, lists, hyperlinks, tables, forms, validation; CSS3 styling - styling text, background, images, box model, positioning, additional styling techniques; Internet technologies, Bootstrap, Mobirise, WordPress; Website development. Planning, Navigation, Scripting, Content, Adding Multimedia Elements; SEO Website Optimization. Meta tags, posting.
Teaching and assessment:
Lectures are held 2 hours per week and the practice sessions and 3 hours per week. Five minutes at the beginning of the lesson is devoted to examination of students' knowledge. The course assignment include developing multimedia application with author's system and web based application. Semester validation is given for more than 50 percent-attendance at lectures and lack of unreasonable absence from workshops. The number of reasonably missed classes must not be more than 70% of the total classes despite of the causes. The course ends with continuous assessment that is formed as 0.5 of the test-paper result, 0.1 of the workshop participation and 0.4 of the course assignment.

S01215 Internet Technologies

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, Department of Informatics and Information Technologies
tel. 082 888 754 / 32, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, Department of Informatics and Information Technologies
tel. 082 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
The course objective is students to be familiarized with the resources, application field and approaches of modern programming languages for Internet. The focus is laid on the diversity of programming environments and tools, as well as on the established and continually innovated technological practices. Students get familiarized with the capacities and tools of Jakarta EE programming language for Internet. Another significant course objective is to provide students with primary knowledge and solid base for studying further the special Internet technologies fields. Incoming course links: Object-oriented programming and Component-oriented programing.
Course content:
After brief introduction to the principle resources and tools of the Internet programming, students gain knowledge on a main part of Jakarta platform, used for programming of Internet applications.
Teaching and assessment:
The practice sessions follow the theory taught at lectures. The course work consists of two parts and requires solving of a practice-oriented problem. The final grade is formed on the basis of the evaluation of week tasks, both parts of the course work and on the result from the exam including a written test and a theoretical question or practical task.

S01185 Probability and Statistics

ECTS credits: 5
Assessment: exam
Weekly classes: 2lec+0sem+0labs+2ps+1ca
Type of exam: written

Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Evelina Ilieva Veleva, MA, PhD, Department of Applied Mathematics and Statistics tel. 082/888 606, E-mail: eveleva@uni-ruse.bg
Pr. Assist. Prof. Vesela Atanasova Mihova, MMath, PhD, Department of Applied Mathematics and Statistics tel.: 082/ 888 424, E-mail: vmicheva@uni-ruse.bg

Abstract:
The course aims to teach students basic concepts and methods of probability theory and statistics for data analysis and processing. Examples close to the practice in the field of computer science are considered. The course includes lectures and practical exercises in a computer room. During the exercises students learn the specialized capabilities of MS Excel for statistical analysis.

Course content:
Basic concepts in Probability Theory. Axiomatic definition of probability. Random variables. Laws of distribution and numerical characteristics. Some common distributions. Systems of random variables. Law of Large Numbers. Central Limit Theorem. Introduction to Statistics. Point estimates. Confidence intervals. Statistical testing and hypothesis. Nonparametric hypotheses. Regression and correlation analysis.

Teaching and assessment:
Through the lectures students learn the basic theoretical formulations, the most important applications, the methods of solving practical problems. The planned exercises reinforce the lecture material and develop the technical skills of the students. The course assignments allow students to work independently on appropriate topics and examples. There are two two-hour control works on solving theoretical and practical tasks. The final mark is formed on the basis of the current control, the course assignment and the passed exam.

S01212 Artificial Intelligence

ECTS credits: 5
Assessment: exam
Weekly classes: 2lec+0sem+0labs+2ps+1
Type of exam: written

Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, PhD, Department of Informatics and Information Technologies, tel. 082 888 754, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Sergey Dimitrov Antonov, PhD, Department of Informatics and Information Technologies, tel.. 888 475 E-mail: santonov@ami.uni-ruse.bg

Abstract:
The course objective is students to be familiarized with the possibilities, resources and application field for implementation of Artificial intelligence. Some main sections are studied: Heuristic search algorithms, Expert systems, Knowledge representation, Neural networks, Fuzzy sets, Genetic algorithms, Machine Learning. Aiming to ensure basic knowledge, both in theoretical and practical parts. Incoming course links: Object-oriented programming, Non-procedural programming, Data structures and programming and Algorithm Development and Analysis.

Course content:
Fundaments, means and models of the Artificial intelligence. Solving problems, Search strategies, Heuristics search algorithms, Knowledge representation, Expert systems, Neural networks, Fuzzy sets, Genetic algorithms and application, Machine Learning.

Teaching and assessment:
The practice sessions follow the theory taught at lectures. The course task is an extract from a complex practice-oriented problem. The final grade is formed on the basis of the course task evaluation, but mainly on the result from the exam that is a written test.

S01198 Database workshop

ECTS credits: 3
Weekly workload: 0lec+0sem+0labs+2ws+1cw
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assist. Prof. Katerina Gabrovska, PhD, Dept. of IIT
tel. 888 470, Email: kgg@ami.uni-ruse.bg
Abstract:
The course is studied in the 3rd year of specialty Software Engineering. The workshop focuses on generating skills necessary to analyze, design, create and make use of databases. It is related to the theoretical course in databases and extends the practical skills for designing and developing relational databases. Team working and self-evaluation are encouraged during the workshop activities.
After completing the course students know how to design and develop a database in a concrete DBMS. The knowledge gained is helpful for preparing the diploma thesis and for future scientific work.
Course content:
DBMS – general information. Creating empty data base. Working with tables. Data types. Specifying field characteristics. Fields definition. Creating relationships among tables. Data sorting and filtering. Data manipulation. Queries. Type of queries. Query properties. Forms. Form properties. Data insertion, edition and deletion through forms. Reports. Report properties. Report fields properties. Data base protection. Menus. Main form of the system.
Teaching and assessment:
The course consists of 2-hours workshop sessions per week and writing a course work. For the workshop sessions the students are grouped in teams and work in a specific DBMS on the assignment that is allotted as sub-tasks of the required essay. The completed tasks are reported to the lecturer in due time. The final grade of the continuous assessment is based on the course work mark and student's activities during the semester.

S01199 Workshop on Data Structures and Programming

ECTS credits: 3
Weekly classes: 0lec+0sem+0labs+2ps+1ca
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Evgenieva Atanasova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: gatanasova@ami.uni-ruse.bg
Abstract:
The course is intended for students from the 3rd year of study. Its main objective is to build up skills for using complex data structures in solving concrete practical problems. This workshop follows the course of the same name and gives students an opportunity to practice team work. Special attention is paid on the realization of definite algorithms applying different methods and using various data structures. The comparison of different solutions is used for finding the most proper method and structure applicable for a given problem.
Course content:
Stack and queue representation. Applications. Linear list representation. Binary trees. Traversals. Application. Graphs. Representation. Traversals. Shortest paths. Development of methods and program implementation of a comparatively complex problem.
Teaching and assessment:
The course includes workshops and a written paper. Workshops are held 2 hours weekly. During the first half of the term students' teams solve simple problems on concrete themes. The second half is focused on solving a complex problem requiring to make a choice for using a definite data structure, development of methods for solving the problem and its program implementation. The course ends with a continuous assessment formed on the basis of student's results during the term.

SB16317 Fundamentals of management

ECTS credits: 5 **Weekly workload:** 2 L + 2S + 0 Lab+ 0 P
Assessment: exam **Type of exam**: written
Department involved: Dept. of Department of Management and Business Development, Faculty of Business and Management
Lecture:
Assoc. Prof. Emil Nikolov Kotsev, PhD, Department of Business Development and inovation,
tel: 888-617, E-mail: ekotsev@uni-ruse.bg
Abstract:
The course aims to provide students with some basic managerial skills and expertise. The teaching material is designed in accordance with the students' aspirations of getting theoretical knowledge practical training in the field of management of organizations from the sector of software engineering. Theories and methods for planning, organizing, leading, and management control are introduced in the course. Students are introduced to the peculiarities of making management decisions, managing change in the organization and managing conflicts that have arisen. Students acquire practical approach to decision making. They analyze and review practical examples, case studies and conduct managerial role games in order to develop practical skills for their future career. Knowledge gained has input connection to "Cyber security and data protection", Economics of Software Engineering".
Course content:
The course includes the following main topics: Management context; Organization, management, manager; Development of Management – theory and practice; Management functions - planning, organizing, leading and management control; Management decision; Change management and conflict in the organization.
Teaching and Assessment:
In the teaching course besides the classical lecture methods it is planned to use also modern digital tools. The bigger part of the taught material is being illustrated by appropriate examples from practice. This assists the efforts for implementing more purposeful seminars. The seminars are synchronized with the lectures. Students are expected to do their lecture readings beforehand, so that they will be able to participate in class discussions more adequately. The assistant professor carries out a continuous assessment and gives an average evaluation for the term, based on the overall student's participation in the discussions, in the debates on causes and on the prepared essays. Along with the examination of the level of acquired professional knowledge on Management, the skills for applying them in practical situations are also being viewed. The overall evaluation is built on the base of the participation assessment during the term and the exam grade.

SB14905 Communication skills

ECTS credits: 5 **Weekly classes**: 2lec+2sem+0labs+0ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of European studies, International Relations and Security
Faculty of Business and Management
Lecturers:
Assoc. Prof. Nataliys Venelinova, Department of European studies, International Relations and Security
tel. 082 888 810, E-mail: nvenelinova@uni-ruse.bg
Abstract:
The course objective is to give basic knowledge about the nature of communication, types of communication, basic communication skills, to examine in depth the characteristics of the communication act and its specifics depending on the nature of communication - interpersonal, group, intergroup, mass. The course should build knowledge and understanding of the communication processes, roles and functions of the participants, to bring the features of communication practices to interpret them in the light of communications in specific areas such as national, Euro-Atlantic and global security.
The input links of the course are from: Foreign language..
Course content:
The topics are divided into three main modules - Introduction and general theory of communications; Key communication skills; Module 3: Analytical communication skills
Teaching and assessment:
The seminars follow the lecture material. The course task aims to analyse a given type of communication situation; to plan, describe and argue an adequate communicative reaction. The assessment of the course is formed by the exam result, the course assignment and the student's work during the seminars.

SB14906 Human–computer Interaction Design

ECTS credits: 7 **Weekly classes**: 2lec+0sem+0labs+2ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, Department of Informatics and Information Technologies
tel. 888 255 / 754, E-mail: datanasova@ami.uni-ruse.bg
Assoc. Prof. PlamenkaTodorova Hristova, Department of Informatics and Information Technologies
tel. 888 326, E-mail: phristova@ami.uni-ruse.bg
Abstract:
The main objective is to familiarize students with the main principles, approaches and techniques for designing and developing human-computer interactions (HCI). The stress is placed on the project building and the testing methods of prototype development and evaluation, as well as on the psychological aspects of the HCI. Students are involved in discussions about the effects of human factors on interface designs and development of applied software; methods and techniques for user-centered and analysis-based structural design of interaction; HCI evaluation.
Course content:
Introduction to HCI. HCI components. The human aspects of HCI. Cognitive models for HCI. Visual perception and representation. Concentration and mental models. Interface metaphors and conceptual models. User interface design aspects. Principles and models of user-centered design. Structural design frame. Design supports. Principles and rules. Instructions, standards and metrics. Design costs evaluation. Evaluation role. Data accumulation – methods and techniques. Experiments and standardization. Expert assessments.
Teaching and assessment:
The course includes problem-oriented themes which are put forward for discussion. Practice session accent is place on the individual student's work. Students deal with solving problems related to designing and creating of HCI. Each student individually develops software user's interface of a software system as a course assignment. The course ends with an exam.

SB14907 Cloud Computing

ECTS credits: 6 **Weekly classes**: 2l+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Associate Prof. Rumen Rusev, PhD, Dept. of Informatics and Information Technologies,
tel. 082 888 754, e-mail: rir@uni-ruse.bg
Pr. Assist.Prof. Magdalena Andreeva, PhD, Dept. of Informatics and Information Technologies,
tel. 888 470, e-mail: mhandreeva@uni-ruse.bg
Pr. Assist.Prof. Metodi Dimitrov, PhD, Dept. of Informatics and Information Technologies,
tel. 888 470, e-mail: mdimitrov@uni-ruse.bg
Abstract:
The course aims to give students the knowledge and skills in the field of Cloud Computing. The fundamental principles and paradigms are discussed. As a result, the students will be able to use the common cloud services, to deploy applications and to use cloud resources.
The knowledge and skills acquired in the study of Cloud Computing course are useful for future implementation in the software industry. The course uses initial knowledges form Internet Technologies, Computer Network and Communications, and other basic courses.
Course content:
Introduction to the Could computing. Deployment models – Public, Private, Community, Hybrid Cloud; Microsoft Azure architecture – data centers, regions, zones of availability. Resources, resource groups, resource management. Virtualization. IaaS – virtual machines; PaaS - App Service. Azure Storage Service – Blob, Queue, Table, Files, Disk and storage tiers; Database services - QL Database, Db for MySQL & PostgreSQL; Cloud security – network and application security. Azure Firewall; Azure security center. Service lifecycle. Service-level agreement, cost management. Good practices. IaaS, PaaS, SaaS best providers.
Teaching and assessment:
The lectures explain the fundamental principles, models and resources of the cloud computing. The students should be able to work alone and apply the knowledge during the workshops, which are held in computer labs. The course ends with an ongoing assessment.

SB14908 Software Verification and Validation

ECTS credits: 8 **Weekly classes**: 3lec+0sem+0labs+2ps+ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, PhD, Department of Informatics and Information Technologies
tel. 082 888 754; E-mail: datanasova@uni-ruse.bg
Assist. Prof. Boyana Nedkova Ivanova, PhD, Dept. of IIT, tel. 082 888 326, E-mail: bivanova@ami.uni-ruse.bg
Abstract:
The course aims to help students master the modern requirements for verification and validation of software. The course is aimed at learning about and using the basic strategies and methods of verification and validation of software products. As a result of the course, students will be able to select and use the right software tools at different stages of verification and validation of software products and apply them in their future work.
The exercises are practical work of students in order to analyze and apply the various strategies and methods applied to a specific software system.
The knowledge and skills acquired during the study of Verification and validation of software are the basis for their future implementation in the software industry, and can be used in the discipline of Project Management and in the development of their thesis. The course is based on what is studied in Software Testing, Software Modeling and Analysis, Software Requirements and Specifications Analysis, etc.
Course content:
Software verification and validation - general concepts. Importance for software quality assurance (SQA - Software Quality Assurance), Software testing strategies. Code verification, Software metrics, Software testing techniques. Software Specification Testing, Black Box Testing, White Box Testing - Flow Testing, White Box Testing - Data Testing, Website Testing, Applicability Testing, Website Validation, Genetic Validation Algorithms of software, Document testing, Security tests, Load testing.
Teaching and assessment:
The training in the discipline includes lectures, practical exercises and a course assignment. Lectures discuss the basic strategies, methods and theoretical foundations of software verification and validation.
The practical exercises are conducted in subgroups in halls with personal computers. Students receive in advance the topic of the assignment for work during the exercise. At the beginning of the exercise the students' preparation for the lesson is checked. Then each student completes an individual or team assignment. Appropriate software tools are used, depending on the topic of the exercise.
The course assignment is developed in teams by students. There are certain hours for assignment consultations

SB14909 Internet Technologies Workshop

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps+1ca
Assessment: ca **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, Department of Informatics and Information Technologies
tel. 082 888 754 / 32, E-mail: datanasova@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, Dept. IIT, tel. 082 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, Dept. of IIT, tel. 082 888 326; E-mail: val@ami.uni-ruse.bg
Abstract:
The workshop supports the discipline of Internet technologies, and its purpose is related to the consolidation of knowledge in various Jakarta EE technologies. During the course, students deepen their knowledge in Servlet technology, RESTful web services, JSF, JPA, CDI, WebSockets and MVC.
In the exercises attention is paid to the independent practical work of the students on the development of specific software tasks.
The input links of the course are from: "Internet technologies" and "OOP".
Course content:
Servlet, RESTful web services, Jakarta Enterprise Beans, Jakarta Server Faces, Jakarta Persistence, Web sockets, Jakarta MVC.
Teaching and assessment:
The practice sessions follow the theory taught at lectures. The course work consists of two parts and requires solving of a practice-oriented problem. The final grade is formed on the basis of the evaluation of both parts of the course work, but mainly depends on the result from the exam including a written test and a theoretical question or practical task.

SB14910 Workshop on Computer Graphics

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+2ps+ca
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Rumen Ivanov Rusev, MEng, PhD, Dept. of IIT, tel.: 082 / 888 754, E-mail: rir@ami.uni-ruse.bg
Pr. Assist.. Prof. Sergey Antonov, PhD, Dept. of IIT, tel.:082 / 888 475; E-mail: santonov@ami.uni-ruse.bg
Abstract:
The course objective is students to gain practical skills on the theoretical knowledge introduced by the course "Computer Graphics". Students learn the operating principles of widespread software products for computer graphics and obtain practical skills for using these products. The focus is also laid on the main methods for graphical data exchange from different software products, as well as on the way of working both with vector and raster images.
Course content:
Destination and basic capacities of modern software products for computer graphics. Operating with texts in graphical systems. Basic graphical primitives, parameters, geometric transformations. Operating with curves – free-hand-drawing and Bezier curves. Organization of working with layers, possibilities, basic parameters of layers. Operating with raster images in systems for vector graphics. Obtaining raster images. TWAIN interface. Processing of raster images. Raster file formats. Practical aspects for choosing file format and compression coefficient; image quality.
Teaching and assessment:
The course is conducted through practice sessions. Students are involved in discussions regarding theoretical and practical aspects of the topic. The lessons are held in computer labs for practical application of theoretical knowledge that is commented in advance. The individual course assignment is a complex task requiring the usage of computer graphics products.

SB14911 Web server applications

ECTS credits: 6 **Weekly classes:2l+0sem+0labs+2pe+1cw**
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Tzvetomir Ivanov Vassilev, PhD, Dept. of IIT, tel. 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, PhD, Dept. of IIT,
tel. 082 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
The goal of the course is to introduce students to the functionality and principles of building modern web applications, consisting of a client module, created using the JavaScript programming language, and a server module, containing the business logic of the application, created based on microservices. Before the beginning of the course, students should be familiar with the topics covered in the following courses: "OOP", "Internet technologies" and "Web design and multimedia technologies".
Course content:
Basic concepts of SPA applications. Specifics of the syntax of SPA applications. Working with components. Event handling. Updating the status of the components. Navigation and SPA applications. Working with RESTful Web Services. Introducing the microservices. Creating microservices. Communication between microservices and databases. Communication between individual microservices. Some software templates, used in microservices.
Teaching and assessment:
The course teaching is organized using lectures, practical exercises, course work. Lectures also include a large number of appropriately selected examples. The lecturer explains the theoretical material using a multimedia projector and a computer. In the practical exercises, students solve different tasks, which aim to exercise the themes covered in the lectures. The professor assistant assists students, but does not solve their assigned tasks.
The continuous assessment is based on computer-based tests at the beginning of each exercise (take up to 15 minutes); the course work; two control works (on theoretical questions and tasks) according to a schedule. The results of the computer tests, the control works and the course work are evaluated by a point system and at the end of the semester, and they form the final course assessment.

SB14912 Cybersecurity and Data Protection

ECTS credits: 6 **Weekly classes:**2lec+0sem+0labs+2ws+ca
Assessment: continuous assessment **Type of exam:**
Responsible department: Informatics and Information Technologies, Faculty of Natural Sciences and Education
Lecturers:
Associate professor Rumen Ivanov Rusev, PhD, Dept. of IIT, tel.: 888 646, E-mail: rir@ami.uni-ruse.bg
Assist. Prof. Boyana Nedkova Ivanova, PhD, Dept. of IIT, tel. 082 888 326, E-mail: bivanova@ami.uni-ruse.bg

Summary: The security of computer systems is fast becoming a critical factor for the activities of companies, institutions and people's daily activities. Cybersecurity is a key factor in ensuring sustainable and trouble-free operation in all areas of modern life. One of the main tools in security systems is cryptography. Used to ensure data confidentiality, integrity and availability. It supports the authentication of data access rights and privacy protection.
This course addresses the main aspects of cybersecurity, policies and approaches to protect information systems and prevent unauthorized access and data loss. The main approaches in cryptography and their application in data protection and ensuring their integrity, certification of rights to access information resources and improving security in computer networks are considered.
The knowledge and skills acquired in the course Cybersecurity and Data Protection will be useful in building secure information systems, preventing failures and data loss, as well as in the use of modern methods of authentication, digital signing, ensuring data integrity and others.
The course is related to the disciplines studied Coding Theory, Databases, Computer Networks and Communications and the course Cloud Technologies from the same semester.

Course content: General principles of cyber security - computer security, information security, data security. Security management - coverage, models, roles and functions. Strategies and planning for cybersecurity. Security and control standards, certification. Risk management in information security - types of threats, strategies, risk assessment. The human factor in computer security. Training, certification and auditing. Network security - firewalls. Recognition and protection from malicious program code and attempts to compromise information systems. General principles in cryptography as an element for ensuring data security. Classical cryptographic methods. Symmetric cryptosystems - block and stream encryption. Standards for symmetric encryption - AES, DES, RC4, Stream ciphers. Asymmetric cryptosystems - encryption using a public key. Standards for asymmetric encryption - RSA, Elliptic curve cryptography (ECC), ElGamal. Hash functions. Encryption with one-way hash functions. Secure Hash Algorithm (SHA 3). Ensuring data integrity, message authentication - Message Authentication Codes (MAC). Digital signing. Electronic signature, qualified electronic signature, certification service providers. Cryptographic standards and network protocols. Identification and authentication. Security in Web - based systems. Secure VPNs.

Teaching and Learning Methods:
The teaching is organized in: lectures, workshops, course assignment. The lectures explain the theoretical fundamentals of the material and give suitable examples. The students should be able to work alone and develop simple applications during the workshops, which are held in computer labs. The course ends with an ongoing assessment. It is formed by current control (TC) from the assessments from the control works (CW1 and CW2), the assessment of the course task (CW) and the assessment from work during the practical exercises (PE): TC = 0.7 (CW1 + CW2 + CW) + 0,3PE

SB16332 Management of Software projects

ECTS credits: 5 **Weekly classes**: 3lec+3sem+0labs+0ps
Assessment: exam **Type of exam**:
Department involved:
Department of Business Development and Innovation
Faculty of Business and Management
Lecturers:
Assoc. Prof. Anton Nedyalkov, PhD, Dept. of Business Dev., tel: 888 520, e-mail: anedyalkov@uni-ruse.bg
Assoc. Prof. Daniela Yordanova, PhD, Dept. of Business Dev., tel: 888 520, e-mail: dyordanova@uni-ruse.bg

Abstract: The aim of the course is for students to gain knowledge and develop skills and competencies for the process of planning, managing and monitoring software projects under constraints of execution time, scope, quality and financial resources.

Course content:
What is a project? What is project management? Project life cycle and organization. Project management processes. Project launch and initiation. Detailed project planning (task work structure, time planning, resources and budget). Types of software processes – Waterfall, Rational Unified Process, Agile processes, Extreme Programming. Project execution management (leadership, team supervision, product development management, supply management). Evaluation of software projects. Monitoring, control and reporting of progress. Risk Management. Project management software systems.

Teaching and assessment:
Problem lectures are held on the discipline. Students should familiarize themselves with the prepared materials on the topic in advance. During the lectures, there is a discussion on the main points of the topic. The seminar exercises aim to deepen the knowledge gained from lectures and self-study. The following interactive methods are used: presentation, talk, discussion, independent work in small groups. Teaching aids are: multimedia, interactive board, computers. On-going control is conducted in the form of a talk, face-to-face questions, case studies, situational tasks, independent work in small groups, demonstration of acquired practical skills and habits. The theoretical exam grade is the arithmetic average of the two questions asked. If a "weak (2)" grade is obtained for one of them, the exam ends with a low pass.

S00907 Programming Mobile Devices

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: **practical**
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Valentin Petrov Velikov, MEng, PhD, Dept. of Informatics and Information Technologies,
tel.: 888 326, E-mail: val@ami.uni-ruse.bg

Abstract:
The course aims at giving the students knowledge and skills about types of mobile devices and their programming. Two programming approaches are addressed: Java/Android/Android Studio and in the Microsoft Visual Studio environment. The course steps on basic knowledge in maths, English, programming and depends on: Component oriented programming, Programming for Internet and Internet technologies. The acquired knowledge will be used in the diploma project and future practice of the graduates.
Course content:
Introduction. Types of mobile devices. Programming in Java/Android. Developing a simple application. User interface: Layouts, widgets, dialogs, menus. Views, activities, services and intents, broadcast receivers, content providers. Phone hardware using. Graphics, animations and multimedia. File system, flash memory. Threads and timers. Network programming. DataBases. OS Windows 10 and mobile possibilities. WPSilverlight and UWP.
Teaching and assessment:
The teaching is organised in lectures and practice sessions. The lectures explain the theoretical foundations of the material and give suitable examples. The students should be able to work alone and develop simple applications during the practice sessions, which are in computer labs. The course finishes with a continuous assessment grade. It is computed as a weighted sum of two control tasks (0.4) and the practice work (0.2).

S00906 Geographical Information Systems

ECTS credits: 4
Weekly classes: 2lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Georgi Krastev, DSc, Department of Computing
tel. 888 672, E-mail: gkrastev@ecs.uni-ruse.bg

Abstract:
The course objective is students to gain knowledge about geographical information systems, their basic applications and components. The course provides students with the possibility to experience operating with concrete software products and lays the foundations for professional growth in such a dynamically developing field.
Course content:
History of GIS, basic terminology, functionality, components and applications. Data base with geographically referenced information. Meta data. Main functions. Basic data formats. Operation with geographically refined data. Basic cartography principles. Creating maps. Layers and symbols, classification methods and styles. Labels and annotation. Geo-coding. GIS data base design. Main resources of geographically referenced data and methods of application. Validation of geographically referenced data. Data analysis in 3D. Cartographic algebra. Raster data base. Topographic analysis. Distances. Visualization techniques. Image processing. Perspectives of GIS design.
Teaching and assessment:
Lectures are 2 hours weekly. Practice sessions are 3-hours weekly. Each student gets a course work that has to be worked out as homework. Course works are defended and evaluated in the end of the course. Students do two test papers on theory and practice-oriented problems. The course ends with a continuous assessment mark. The final grade is formed as a sum of 0,7 of the test paper results, 0,1 of student's activities mark and 0,2 of course assessment mark.

S00905 Visual programming

ECTS credits:4 **Weekly workload**: 2lec+ 0sem + 0lab + 3 ws
Assessment: continuous assessment **Type of exam**:
Department involved: Department of Informatics and Information Technologies, Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlozar Tsankov, PhD, Dept. of IIT, tel. 888 645, E-mail: stsankov@uni-ruse.bg
Assoc. Prof. Desislava Baeva, PhD, Department of Informatics and Information Technologies, 888 214; e-mail: dbaeva@ami.uni-ruse.bg.
Annotation:
This course acquaints students with the possibilities, principles and approaches of modern programming, paying attention to established and constantly updated technological practices. It aims to provide students with complete code-based training for secure code writing in the Microsoft .NET environment, giving them the most general guidance on security in project development.
It focuses mainly on the C # language, the .NET Framework and ADO.NET and WPF technologies. The discipline's inputs are: Visual programming MS Office, CMO. The knowledge and skills gained in the discipline of Visual Programming are the basis for the development of course assignments, works and projects and can be successfully used in the graduate design and future work of the specialty.
Course content:
.NET Framework architecture. Introduction to C #. Validation and exception handling. Streams. Stream Flow Architecture .Net. Assistant classes. Graphical user interface with Windows Forms. ADO. NET and working with databases. XML schemas and XML Designer. Determining the life cycle of objects and controlling resources. Security in the .NET Framework.
Teaching and assessment:
During the practical exercises, the knowledge gained in lectures is strengthened, paying attention to typical logical and program constructions. Student knowledge is periodically checked during practical classes through tests and interviews. In the second half of the semester three computer tests are carried out during the practical sessions.

S00908 Computational Linguistics

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps+0ca
Assessment: Continuous assessment **Type of exam**: ongoing assessment
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Baeva, PhD, Dept. of IIT, tel. 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The discipline of Computational Linguistics aims to provide students with the basic theoretical knowledge behind the development of software systems with embedded linguistic processors, to build competencies for basic software for the basic principles of computer processing of texts, written in formal and natural languages acquainted with intelligent natural language interfaces for various purposes
Course content:
The formal grammar section deals with formal grammars, Chomsky's classification, context-free languages, grammars and recognizers, as well as linear languages, grammars and recognizers. The Translators section deals with the main stages of translating formal computer programs, their internal machine representation, and compiler building techniques. The Linguistic Processors (LP) section discusses the general structure of LPs, the principles of operation, and the modules of LPs.
Teaching and assessment:
The lectures deal with basic theoretical issues related to formal languages and grammars, translators and linguistic processors. Each group of lecture topics concludes with a summary of the material considered and the formulation of problematic questions.
Practical exercises discuss and analyze all the basic techniques for implementing the theoretical concepts introduced. Each practical exercise begins with an overview of the specific type of task and an analysis of the advantages and disadvantages of the tasks used to accomplish these tasks.
Mastering a course in Computational Linguistics involves the use of both traditional and innovative educational technologies. Traditional educational technologies include the use of such methods of work in the educational process as lectures, seminars, practical lessons and more. Innovative educational technologies determine the introduction of various forms of training such as business games, discussions, situation modeling and more.

SB14914 Social legal aspects of SE

ECTS credits: 3 **Weekly workload**: 2lec+ 2sem
Assessment: continuous assessment **Type of exam**:
Department involved: Department of Informatics and Information Technologies, Faculty of Natural Sciences and Education
Lecturers:
1. Assoc. Prof. Svetlozar Tsankov, PhD, Dept. of IIT, tel. 888 645, E-mail: stsankov@uni-ruse.bg
2. Assoc. Prof. Desislava Baeva, PhD, Dept. of IIT, tel. 888 214, E-mail: dbaeva@ami.uni-ruse.bg
Pr. Assist. Prof. Anna Nikolova Nikolova, Dept. of Private Law
tel.: 082 / 888 719, E-mail: anna_nn@abv.bg , anikolova@uni-ruse.bg

Abstract:
The course is included as an elective in the eighth semester for the specialty "Software Engineering". Within two modules, the course explores a wide range of practical and theoretical issues related to the development and use of computer technology in practice, in search of adequate technological, ethical, legal, socio-economic and socio-cognitive frameworks, guidelines and technological solutions. The aim of the course is to provide a comprehensive overview of the problems, while focusing on specific practical problems through the prism of different scenarios.
Course content:
I. Digital Society; Digital rights; privacy and data protection; Information management; Copyright in the electronic space.
II. Areas of influence of IT: e-government, e-justice, security, intelligent transport systems; Internet as a research tool.
Teaching and assessment:
The lectures are two hours long and are held once a week. During the lectures there is a discussion on the main points of the topic. The seminars mainly include students' independent work and consideration of specific cases
The course ends with an ongoing assessment, which is formed on the basis of pre-set criteria for students' work during seminars and online testing.

SB14915 Economics of Software Engineering

ECTS credits: 3 **Week curriculum:** 2 lectures + 2 seminar
Test form: continuous assessment **Form of examination:** written test
Methodical management: Department of Economics and international relations,
Faculty of Business and Management
Lecturers:
Assoc. Prof. Aleksandar Kosuliev, PhD, Dept. of Economics and international relations, Faculty: Business and Management, contacts: 00359 082 888 557, e-mail: akosuliev@uni-ruse.bg
Pr. Assist. Prof. Elizar Stanev, PhD, Dept. of Economics and international relations, Faculty: Business and Management, contacts: 00359 082 888 703, E-mail: eastanev@uni-ruse.bg

Annotation:
The goal of the course is for students to familiarize themselves with the basic economic principles and learn of ways to apply them when facing economic challenges in software development and sales of software products. The course opens with fundamental market principles, competition structures and profit maximization through marginal analysis, then focuses on exploring the application of various economic instruments in the realm of software engineering.
Contents of curriculum:
markets, supply and demand, price equilibrium, production and profit maximization, competition and market structure, capital and labor markets, public sector, externalities, standartization, economic specifics in open-source software, instruments for economic analysis
Educational technology:
The curriculum follows the usual split between lectures and seminars in equal proportions. Students familiarize themselves with the basic theory and methods during lectures, while the seminars focus on the practical application of the instruments, including through interactive team assignments (cases, quizzes, etc.). The final grade is formed by a mid-term and exit tests, plus a bonus for participation during the semester in a 80-20 proportion.

SB14916 Parallel programming

ECTS credits: 4 **Weekly classes:** 3lec+0sem+0lab+2ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
- Prof.Tzvetomir Vassilev, PhD, MEng, Deptartment of IIT, tel. 888 475, Email: tvassilev@ami.uni-ruse.bg

Abstract:
The course familiarises the students with the theory, technologies and architectures of parallel information processing systems. Hardware solutions of HPC systems are addressed as well as technologies for parallel programming. At the workshops the students work independently on developing specific software tasks.
Course content:
Introduction. Parallel computing and parallel computers. Flyn's taxonomy. Terminology. Memory architecture of parallel computers. Parallel programming – levels of parallelism, models. Developing parallel software. Parallel programming model with shared memory. OpenMP – Aim, history, components: compiler directives, library, environment variables. OpenMP compiler directives. OpenMP library functions and environment variables. Parallel algorithms – principles, design. Parallel algorithms for one dimensional array processing, reduction. Parallel algorithms for multiplication of a matrix and a vector, for solving linear systems of equations, for sorting and searching. Parallel programming model of the type message passing, MPI. Using the graphics processor (GPU) for parallel programming.
Teaching and assessment:
The students attend lectures and practical exercises (workshops). The workshops are conducted in sub-groups in computer labs with suitable software installed. The students solve problems independently connected with the material taught at the lectures. The solutions are implemented in a suitable IDE, like Visual Studio. The final grade is formed as an average of two tests during the semester.

SB14917 Software design patterns

ECTS credits: 6 **Weekly workload:** 3lec + 0sem+ 0labs+2ps + cw
Assessment: continuous assessment **Type of exam:** test
Department involved:
Department of Informatics and Information Technologies, Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlozar Tsankov, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, email: stsankov@uni-ruse.bg
Pr. Assit. Prof. Metodi Lyubchev Dimitrov, MEng, PhD, Department of Informatics and Information Technologies, tel.: 082 / 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
Course on Software Design Templates develops, deepens and summarizes the knowledge needed to solve common problems in object-oriented programming. Software design templates are independent of the programming language - they offer standard solutions for architectural and conceptual problems in computer programming. This concept includes not only different algorithms, but mostly approaches and architectural solutions for combining them with specific problems. Upon successful completion of the course, students should know: the main features of the more commonly used templates, when they are used and in what situations, how they can be modified, practically implement them, and work on projects built on certain templates.
Course content:
Basic principles of software templates for design, structure, categories. Brief description of UML language. Creation Patterns. Abstract Factory, Factory method, Builder, Singleton. Structural Patterns. Adapter, Bridge, Composite, Decorator / Wrapper, Facade, Flyweight, Proxy. Behavioral Patterns. Chain of Responsibility, Command, Interpreter, Iterator, Mediator, Observer, State, Strategy, Template method, Visitor (Visitor). Architectural Patterns. Model-View-Controller (Model-View-Controller or MVC).
Teaching and assessment:
The course is taught in the following forms: lectures (lecture combined with talk and lecture with elements of interactive and multimedia training, observation, demonstration, etc.); practical exercises (discussion, talk, individual work, work in pairs, group work, case study, tests, etc.); consultations; self-employment (work in a computer lab). Students receive a semester certification when attending lessons of not less than 70% of the hours of audience hours provided for in this program. At the end of the semester the theoretical knowledge of the students is checked by a test on the whole material. The final mark is determined by the scores of the primary test (50%) and the current assessment (50%).

SB14918 Big data processing

ECTS credits: 4
Weekly classes: 3lec+0labs+2ps
Assessment: continuous assessment
Type of exam:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Proff. Tzvetomir Vassilev, PhD – Deptartment of IIT, tel. 888 475, Email: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Metodi Lyubchev Dimitrov, Dept. of IIT, tel. 082 888 470, E-mail: mdimitrov@ami.uni-ruse.bg
Abstract:
The course is included as an elective in the eighth semester for the specialty "Software Engineering". The course aims to give students a basic understanding of working with large data sets. The course is aimed at learning about and using the basic strategies for manipulating large amounts of data and the prospects for their application in various marketing studies. As a result of the course, students will be able to apply components of the Hadoop ecosystem.
Course content:
The concept of "big data" - definition and taxonomy; historical development; elements; advantages and disadvantages of using them. Fundamentals of technologies for working with large data sets. Model "3Vs". Hadoop and its ecosystem: HDFS, MapReduce, Pig, YARN, Hive, HBase, Sqoop, Zookeeper, Flume, Oozie and others. Data processing using MapReduce. Testing and debugging applications using MapReduce. Introduction to Hive and HIVEQL. Use Hive to search for Hadoop files. Big Data & Machine learning. Machine learning tools - Spark & SparkML, H2O, Azure ML.
Teaching and assessment:
The lectures are three hours long and are held once a week. Problematic lectures are held on the course and a discussion is held on the main points of the topic. The practical exercises focus mainly on the independent work of the students. Tasks related to the construction and processing of large volumes of data are solved. The continuous assessment includes the marks from two tests. The final grade is formed on the basis of tests results and the assessment of the practice sessions work.

S01553 State Exam

ECTS credits: 10
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
All lecturers at the Department of Informatics and Information Technologies
Abstract:
The State Exam takes place before a State Examination Commission upon a preliminary approved syllabus which includes questions from the areas of: Iinformatics, Information Technology.
Course content:
The written state exam covers all major topics studied during the period of education and training in the areas: Iinformatics, Information Technology.
Teaching and assessment:
The students develop the topics from the studied areas and present them before the State Examination Commission.

S00083 Bachelor Thesis

ECTS credits: 10 **Weekly classes:** 0lec+0sem+0labs+0ps
Assessment: exam **Type of exam:** written

Departments involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education

Consultants:
All lecturers from the Department of Informatics and Information Technologies

Abstract:
The thesis is an independent creative task, which is carried out under the guidance of a scientific supervisor, and if necessary - also of a scientific (external) consultant. Its purpose is for students to demonstrate the knowledge and skills they have acquired during the course of study to achieve the goals and objectives of the thesis and to defend their work before an examination committee. Students with an overall GPA (up to 7 semesters inclusive) above 4.50 are allowed to develop a Diploma Project.

Course content:
The thesis contains: 1.- explanatory note - includes a description of the task/problem; all basic literature data, ideas, existing solutions; analyses, results, explanations, conclusions; system design and description of the technologies used; description of programs (for software projects); work manual; testing, main results and conclusions; 2.- graphic part - includes schematic diagrams; diagrams of basic algorithms; implemented interfaces; 3.- application with the program code of the development and/or model or device developed by the graduate, if this is part of the assignment; 4.- presentation of the thesis.

Teaching and assessment:
The Profiling Department "Informatics and Information Technologies" carries out: the organization of collection, approval and announcement of proposals for thesis topics; the distribution of students by topics and supervisors; conducting the pre-diploma practice; the guidance, review and defense of theses. A weekly consultation with the supervisor is planned for the students, during which the implementation of the assigned task is monitored. The graduate defends his thesis before the State Examination Commission.

POSTGRADUATE PROGRAMMES

POSTGRADUATE STUDIES IN PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

PROFESSIONAL STANDARDS

OF A MASTER IN PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

Degree Programme: **Pre-school and Primary School Education**
Educational Degree: **Master**
Professional Qualification: **Primary School Teacher, Kindergarten Teacher**
Term of education: **2,5 years (5 terms)**

The main target of this study program is to graduate highly qualified specialists, who have the competence effectively to manage educational process in kindergarten and primary school.

The professional intent of the master in Preschool and Primary School Pedagogy is: integral and widespread specialist - expert in child's development (3 – 11 years). Since this is an important stage in a child's life in terms of psychic development, the master in Preschool and Primary School Pedagogy is able to to organize and manage educational process in kindergarten and primary school, offering many valuable opportunities for children to develop their skills and personality. Master-graduates are capable of conducting research in the area of preschool and primary education.

Master-graduates of Preschool and Primary School Pedagogy are provided with high professional skills. The pedagogical, psychological and methodological preparation of the students is aimed at acquiring complete knowledge and skills in:

- Pedagogical and psychological disciplines, providing the opportunity for students to better understand the specialities of child's cognitive, emotional and physical development.
- Advanced teaching strategies and styles in kindergarten and primary school.
- Features and requirements of European educational programs and models.

The study program involves:

- **Basic pedagogical courses** in: preschool pedagogy, pedagogy and technology of play and games, Introduction to primary school education, theory of education, didactics, psychology, methods of education in kindergarten and primary school. Upon completion of the basic pedagogical courses, the individual is deemed to have the qualification to guide the pedagogical process in kindergarten and primary school on the basis of broad knowledge of scientific research in the area of pedagogy and psychology.
- **Basic knowledge** in: Contemporary educational technologies in kindergarten and primary school, Socio-pedagogical problems of family education. This provides solid knowledge and skills necessary for professional practice.
- **Specialized pedagogical** courses in: methodology of pedagogical research, diagnostics of readiness for school. Completion of this courses qualifies students for scientific research in the area of education.

Upon completion of the study program in Preschool and Primary School Pedagogy, graduates will have acquired the following learning dividends, defined as knowledge, skills and general competency:

Academic and pedagogical competency

- Apply professional tools, strategies and forms of teaching methods in kindergarten and primary school.
- Apply innovative and creative approach in research and in education.
- Apply innovative educational methods and forms that promote activity and autonomy in children.
- Incorporate educational technologies and theoretical studies in practical context.
- Can assess, stimulate and support different children's general development.
- Develop the necessary learning skills of children to search, collect and interpret information.
- Diagnose the outcomes of education and training.
- Promote and facilitate pupil's key competence for lifelog learning.
- Design and regulate learning spaces in the context of extracurricular activity.

- Accept that the exercise of the teaching function must be refined lifelong.
- Analyse and recognize ones own professional skills.

Communicative competence

- Master social skills in dealing and relating with colleagues and with different sectors of the education community and the social environment.
- Master social skills in dealing and relating with the family of each pupil.
- Design and regulate learning spaces in contexts of inclusive education.
- Plan activities for children with special needs, children in risk, children from ethnic minorities.

Administrative competence

- Take part and be implicated in the management and events at the educational institutions.
- Are familiar with national educational standards and are able to apply them.
- Regulate educational process by takin into account human rights and observe the values of Pedagogical ethics.

Successful completion of this master program qualifies students for work as: teacher in kindergarten/teacher in preparatory class, teacher in primary school, teacher in extracurricular activity.

CURRICULUM
OF THE DEGREE COURSE IN
PRE-SCHOOL AND PRIMARY SCHOOL EDUCATION

First year

Code	First term	ECTS	Code	Second term	ECTS
SM13103	Pedagogy and Technology of the Game	4	SM13111	Pre-school Pedagogy	4
SM13104	Methodology of Pedagogical Research	4	SM13112	Lesson Observation in the Kindergarten and Primary School	4
SM17002	Phonetics and Lexicology of Bulgarian Language	4	SM13113	General Linguistics	2
SM17003	Inclusive Education	2	SM13114	Introduction to Primary School Pedagogy	4
SM17004	Theory of Education	4	SM17005	Methodology of Teaching Musical Culture in the Kindergarten	4
SM17008	Didactics	4	SM17006	Methodology of Teaching Physical Culture at Kindergarten Level	4
SM13109	Psychology	5	SM17108	Methodology of Construction, Technologies and Child's Labour	4
SM15739	Mathematics	3	***Elective courses (students elect a course)***		
			SM17008	Family Interaction	2
			SM16996	Inclusive Education of Children and Pupils with Special Needs	2
			SM17009	Civic Education	2
			Elective courses (students elect a course)		
			SB16994	Health and Ecological Education	2
			SB17010	Leadership in Education	2
			SB17011	Managing Relationships in Learning Environments	2
			SB16992	Digital Competence and Digital Creativity	2
	Total for the term:	***30***		***Total for the term:***	***30***

Second year

Code	Third term	ECTS	Code	Fourth term	ECTS
SM17012	Methods of Teaching Elementary Mathematical Concepts	5	SM17030	Morphology and Syntax of Bulgarian Language	4
SM13131	Methodology of Teaching Bulgarian Language and Literature at Kindergarten Level	5	SM17109	Methodology of Teaching Art in Primary School	4
SM17013	Methodology of Teaching Nature Studies at Kindergarten Level	3	SM17025	Methodology of Teaching Music in Primary School	4
SM17014	Methodology of Teaching Art at Kindergarten Level	3	SM17026	Methodology of Primary School Physical Education	4
SM13134	Methodology of Teaching Mathematics in Primary School	5	SM17027	Methodology of Teaching Technologies and Entrepreneurship at Primary School	4

SM17015	Methodology of Teaching National Studies, Man, Society and Nature	5	SM17028	Methodology of Teaching Bulgarian Language and Literature in Primary School	4
Elective courses (students elect a course)			SM13148	Current Pedagogical Practice in the Kindergarten	2
SM17016	Organisation of the Wholeday Educational Process in the Primary School	2	***Elective courses (students elect a course)***		
SM17017	Extra-curricular Work in the Primary School	2	SM13364	Pedgogical Conflictology	2
SM17018	Non-formal Education	2	SM17031	Pedagogical Ethics	2
SM17019	Literature for Children	2	SM17032	Children's Folklore	2
Elective courses (students elect a course)			SM17033	Educational Work of the Class Teacher	2
SM17020	Professional and Career Development	2	SM17034	Literary Studies	2
SM17021	Group Education	2	***Elective courses (students elect a course)***		
SM17024	Project-based Education	2	SM17035	Management of Educational Institutions	2
SM17023	Development of Artistic Abilities of Pre-school and Primary School Learners	2	SM16993	Communication Skills in a Learning Environment	2
			SM16995	Pedagogical Interaction in a Multicultural Environment	2
			SM16997	E-learning Lesson Design	2
	Total for the term:	**30**		***Total for the term:***	**30**

Third year

Code	***Third term***	***ECTS***			
SM17036	Academic Writing	1			
SM13129	Comparative Education	2			
SM15202	Information and Communication Technologies in Education and Work in a Digital Environment	2			
SM15698	Teaching Practice in the Primary School	2			
SM15699	Pre-diploma Teaching Practice in the Kindergarten and in the Primary School	6			
SM13135	Conyemporary Educational Technologies in the Kindergarten and in the Primary School	2			
Graduation Procedure (Option 1)					
SM14622	State Board Practical Exam	5			
SM14623	Master Thesis Defense	10			
Graduation Procedure (Option 2)					
SM14622	State Board Practical Exam	5			
SM14623	State Written Exam	10			
	Total for the term:	**30**			

Total for the course of study: 150 ECTS credits

SM13103 Pedagogy and Technology of Play and Games

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is scientific clarification of psychological and pedagogical bases of technology of play interaction, discovering the place and role of the game in perspective to enrich children`s game culture.
Course content:
Emphasis is put on the essence of the game as a leading activity in pre – school age, its development and pedagogical functions, discovering of the quality of originality and purpose of the different kinds of games, centered usage of contemporary technologies of developing the game activity of the children and introducing of game-like forms in the pedagogical processes in kindergarten; on the methodological ability for diagnosis, planning and realisation of games. To ensure the practical competence of the students, the seminars are directed to analysing and mastering of specific games, as well as the algorithms for developing, modification and adoption of game models.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SM13104 Methodology of Pedagogical Research

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is providing specialized knowledge in the field of ;methodology and methods of pedagogical research in theoretical and empirical aspect.
Course content:
Emphasis is put on the essence features and functions of the methodology of pedagogical research; the technology of empirical research; processing and presentation of the results; observation; quest; experiment; projective methods; assessment scales; tests.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SM17002 Phonetics and Lexicology

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/888 437, E-mail: enedkova@uni-ruse.bg
Abstract:
The course aims at introducing students to:
1) the science of speech, which integrates knowledge about the physiological processes of the production and perception of speech, the acoustic and articulation features of verbal sounds and the super-segmental organisation of speech.
2) the science of the lexical system of the Bulgarian language - gnoseologic, semiological and semantic features of the lexical units, their use in the different styles of speech;
3) methods and means of phonetic and lexical analysis.
Course content:
Acoustic, articulation and functional aspects of sounds; Segment and super-segment system of the modern Bulgarian literary language; The word as a unit of the lexical system; Nature and particularities of the word as a language sign; Nature and structure of lexical meaning; Systematic relations; Structure, classification and stylistic features of set phrases.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. The final exam is in a written form.

SM17003 Inclusive education

ECTS credits: 2 **Weekly workload:** 2lec+0sem+0labs+0p
Assessment: continuous assessment **Type of exam:** written
Department Involved:
Department of Pedagogy
Faculty of Natural sciences and education
Lectur:
Prof. Yuliya Georgieva Doncheva, MA, DSc, Department of Pedagogy, tel: 082/ 888 544; E-mail: jdoncheva@uni-ruse.bg
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.

SM17004 Theory of Education

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska,MA, PhD, Department of Pedagogy, tel.: 082/ 888 268, E mail:dstoyanova@uni-ruse.bg
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel. 082/ 888 268, E mail:vvasileva@uni-ruse.bg
Abstract:
The lecture course orientates the students in the basic parameters, directions and contemporary psychological and pedagogical problems of education. The aim is to clarify the regularities, peculiarities and problems of the educational process, its main tasks and the appropriate pedagogical means, methods and forms for their realization. The seminars are aimed at enriching the students' knowledge about the methodology of educational interactions, the specific methods for diagnosing the state of the educational process, as well as the appropriate pedagogically appropriate means for overcoming the educational disturbances of adolescents**.**
Course content:
The content selection is aimed at the systematic presentation and scientific clarification of theoretical and methodological issues related to the basic parameters of the educational process and the nature of the main educational phenomena as part of the content of general pedagogy. Main topics: Theory of upbringing - humanism, wholeness and harmony of man - purpose of upbringing; Nature, structure and content of the educational process; Principles, methods, forms and means of education; Factors of education; Components of upbringing.
Teaching and assessment:
The training is conducted in the form of lectures and seminars. The following interactive methods are used: presentation, conversation, discussion, demonstration, independent work in small groups, case studies, situational tasks, role-playing games.

SM13108 Didactics

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy, tel.: 082/888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Dept. of Pedagogy, tel.: 082/888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
Didactics has a fundamental role for the professional development of students. The course aims at introducing students to the subject matter in a systematic way; revealing the most topical problems in the development of Didactics; analysing the procedural and functional character of education.
Course content:
Scientific status of Didactics; Character of the teaching process; Principles of teaching; Methods of Teaching; Systems of organizing the teaching process; Common teaching problems; Personalisation and differentiation of education; Tutoring; Work with poor and talented pupils.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. At seminars the dialogue is widely used; relevant articles on the topics included in the syllabus are discussed. Active participation is encouraged by awarding students additional points.

SM13109 Psychology

ECTS credits: 5 **Weekly classes: 2lec+2sem+labs+0ps**
Assessment: exam **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Proff. Krasimira Petrova, University of Veliko Turnovo "St. St, Kiril i Metodiy", k.petrova@ts.uni-vt.bg
Prof. Stoyko VanchevIvanov, MA, DSc, University of Sofia "St. Kliment Ohridski", E-mail: stoyko.v.ivanov@gmail.com
Petia Georgieva Cheshmedzhieva, MA, PhD, E-mail: pcheshmedzhieva@uni-ruse.bg
Abstract:
The aim of the course of General Psychology is to recognize students with contemporary trends in the science for development of human psychic.
Course content:
Subject and object, methods of psychology, historical review, contemporary issues of the science, psychological trends and conceptions, etc. The stress point is put onto personality and activity theory in psychology, structure of personality, self-regulative mechanisms, reflexion and interpersonal interactions. It reviews characteristics of the psychic processes, abilities and conditions; development of intellectual, emotional and will, motivational spheres on personality.
Teaching and assessment:
The teaching is based on traditional an ex cathedra method with chances for interactive discussions of some issues.

SM15739 Mathematics

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Mathematics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Angelova Velikova, MMath, PhD, Dept. of Mathematics, tel.: 082/ 888 848, E-mail: evelikova@uni-ruse.bg
Pr. Assist. Prof. Ralitsa Krasimirova Vasileva-Ivanova, MMath, PhD, Dept. of Mathematics, tel.: 082/ 888 848, E-mail: rivanova@uni-ruse.bg
Abstract:
The course aims to extend the knowledge, the mathematical practical skills, and the professional competences of the students with respect to the mathematical areas, studied in pre-school and primary school education.
Course content:
Sets. Mathematical logic. Numerical systems. Natural, Integer, Rational and Real numbers - operations, properties, recording, geometric interpretation, transitions, specific problems. Parallelism and perpendicularity in the Euclidean geometry. Geometric figures in the plane and in the space - elements, properties, algebraic representations. Measurement – types of units, transitions. Algebraic expressions, equations, inequalities and systems of linear equations - specific problems. Word problems - modeling of real situations by mathematical symbols. Application of mathematics in everyday life. Problem-solving for Olympiads and competitions.
Teaching and assessment:
The lectures include theoretical basics and many examples of problems, solutions and problem-solving of studied mathematical areas. The seminars include solving of many mathematical problem on different levels. One test is foreseen. The written exam includes problems from studied mathematical areas. The final mark is based on the student' result of the test and the written exam.

SM13111 Preschool Education

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail:gggeorgieva@uni-ruse.bg
Abstract:
The purpose of the training is to systematically present the main issues of this discipline, to outline the most current problems in its development, to analyze the procedural, substantive and organizational-functional nature of pre-school pedagogy**.**
Course content:
The theoretical and methodological bases related to the forms of work and conditions for the effectiveness of pre-school educational work are presented. Main topics: General problems of Preschool education; Upbringing and development in preschool age; Components of pre-school education; Game technologies in the field of pre-school education; Pre-school education theory; Forms of training in kindergarten; System, content and organization of pedagogical process in kindergarten - specificity.
Teaching and assessment:
The students' training allows the basic preparation to be realized in the course of the lecture course. The lecture material creates a problematic background with reference to landmarks that fill the content of the seminar exercises. Active methods are used throughout the training.

SM13112 Lesson Observation in the Kindergarten and Primary School

ECTS credits: 4
Weekly classes: 0lec+0sem+0labs+4ps
Assessment: continuous assessment
Type of exam: oral
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, E-mail: skstefanov@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, E-mail: gggeorgieva@uni-ruse.bg
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: enedkova@uni-ruse.bg
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Ivanova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Iliyan Ilchev, MA, PhD, Department of Physical Education and Sport, E-mail: iilchev@uni-ruse.bg
Pr. Assist. Prof. Kamen Simeonov, MA, PhD, Department of Physical Education and Sport, E-mail: ksimeonov@uni-ruse.bg
Abstract:
Observation aims at introducing students to the immediate learning environment of basic education, early stage, through direct observation of lessons, conducted by leading teachers.
Course content: There are various activities, pedagogical situations and children's games from the daily regimen of children in kindergarten - Bulgarian language and literature, mathematics, social and natural world, art, design, technical and household activities, physical education, music, game culture, different moments, as well as holidays and entertainment.
There are lessons in Bulgarian language and literature, mathematics, Man and society, Man and nature, Home and Technology, Physical Education and Time of class.
Teaching and assessment:
The observation is conducted by a pedagogue and methodologists who pre-assign students tasks after monitoring takes place conferring with mentors, led by the methodologist, allowing for questions, analysis and discussion on the methodological analysis of observed lessons and situations.

SM13113 General Linguistics

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature, History and Arts, tel.:082 / 88 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course aims at acquainting students with the main problems related to the nature of language, its form and functions, while at the same time it also highlights the theoretical platforms and methodological frameworks used by the different linguistic schools when defining and describing the different aspects of тhe language system and structure. The course covers topics related to the origin and the main stages of language development; the sign character of language, the relationship between language and speech, the relationship between language and thought and language and society; the system of language and the functions of each language element; classifications of languages; the link between language and the other non-linguistic systems.
Course content:
History of Linguistics; Nature and functions of language; Language and society; Language and thought and their correlation; Aspects and levels of study of language and speech; Processes and laws guiding language changes and development; Classification of languages: genealogical, morphological, etc; Balkan Languages; International natural and artificial languages; Intralinguistics: Phonetics, Lexicology, Morphology, Syntax, Text linguistics, Stylistics; Extra Linguistics: Sociolinguistics, Psycholinguistics, etc.
Teaching and assessment:
The course content is delivered in the form of lectures. Students sit a written exam on a syllabus covering all the course topics.

SM13114 Introduction to Primary School Education

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps+r
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, tel.: 082 888 752, E-mail: gggeorgieva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Dept. of Pedagogy, tel.: 082/888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The aim of the course is to build on the fundamental knowledge pedagogy students have acquired and specify and adapt it to the field of primary school education. The course seeks to reveal the particular place of Primary School Education in the general system of pedagogical sciences. Students should acquire knowledge about the nature and tasks of primary school education and gain appreciation of the practical demands within the vocation.
Course content:
Scientific status of pedagogy; Primary School Education in the system of pedagogical sciences; Methods of scientific and pedagogical research; Bulgarian system of education; History of the primary school education around the world and in Bulgaria; State and tendencies in the development of primary education.
Teaching and assessment:
The course is carried out mainly in lectures and seminars and includes trainings, groupwork, a research project, practical assignments, discussions and observation, as well as the use of technical and visual aids. Throughout the duration of the program students will be graded on tests and will be required to prepare a portfolio. The final grade is determined by a written exam at the end of the course.

SM17005 Methods of Musical Education in Preschool

ECTS credits: 4
Weekly classes: 1lec+2sem+0labs+ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Arts
Faculty of Natural Science and Education
Lecturers:
Pr. Assit. Prof. Petya Ivanova Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature and Art, tel.: 082/ 888 832, E-mail: pstefanova@uni-ruse.bg
Abstract:
The course presents the theoretical and methodological foundations of musical education, the pedagogical and psychological specificity of musical activities, the development of artistic habits and creativity in all musical activities included in the pre-primary school music classes. The course also includes the methodological foundations of the aesthetic and musical education in kindergarten and the specificity, methods, forms and means of musical education.
Course content:
The course content provides knowledge about the psychological foundations of music education, the theoretical basis and the characteristics of musical abilities and musical skills. The specific characteristics, meaning, basic tasks and methods of each music activity are presented and analyzed.
Teaching and assessment:
The course content is delivered in the form of lectures and seminars. The lectures present the theoretical knowledge on the basic topics covered in the course. The seminars are attended by all students. Students need to come prepared for the seminars. Best practices in music education in contemporary music education systems are discussed as well as innovative approaches. Students are offered coursework topics, after individual choice and readiness, they are submitted before the exam date

SM17006 Methods of Physical Education in Kindergarten

ECTS credits: 4
Weekly classes: 1lec+1sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Physical Education and Sport
Faculty of Transport
Lecturers:
Assoc. Prof. Iskra Stefanova Ilieva, MA, PhD, Dept. of Physical Education and Sports, tel.: 082/ 888 252, E-mail: isilieva@uni-ruse.bg
Abstract:
The course Teaching Sport and Physical Activity is intended for undergraduate students of Primary Education. Students should gain an understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.
Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary and primary school physical education; Diagnosis of the physical activity of children at a primary school age.
Teaching and assessment:
During the lectures and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education. Each student writes a paper on an assigned topic associated with the subject domain. The final grade is formed on the basis of the paper mark, written exam and the assessment of the practice sessions work.

SM13117 Methods of Design and Technology in the Kindergarten

ECTS credits: 4 **Weekly classes**: 1lec+2sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD, Dept. of Kinesitherapy, E-mail: dora@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 0 82 / 888 612, E-mail: vtradeva@uni-ruse.bg
Abstract:
This course is intended to give students specialised methodological knowledge and practical technical skills necessary for teaching Design and Technology in the kindergarten. The contents of the topics gives the students the necessary pedagogical and methodical knowledge to organise and manage successfully the design and technology activities in the kindergarten, to form in the students practical skills for using the specific forms, methods and purposes for organising and conducting the different kinds of labour and constructivetechnical activity in kindergartens.
The expected results of the overall training are relevant to the knowledge, skills and competences specified in Level 7 of the National Qualifications Framework of the Republic of Bulgaria.
Course content:
Purpose, system and contents of design and technology in kindergarten. Approaches and principles for selection and structuring of the curriculum. Varieties of the children's creative design work. Main methods and approaches to the activities in Design and Technology. Organisational forms for realisation of the activities in Design and Technology. Personal care housework, work in the open, manual labor. Materials etc.
Teaching and assessment:
In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. The seminars include the preparation of sample lesson plans which are discussed with the students. The final grade is formed mainly on the basis of the results of the exam which includes topics from the syllabus. When forming the final grade the course tutor takes into consideration also the participation of students in the seminars.

SM17008 Family Interaction

ECTS credits: 2 **Weekly workload:** 2l+0sem+0lab+0p
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy,tel. 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The content of the lecture course of the curriculum is oriented to acquaint students with the basic theoretical issues of education and socialization of adolescents within the family. The included topics help to expand their knowledge about the specific role of the family as a primary socializing environment and educational factor in modern conditions. Emphasis is placed on current issues of family interaction with educational institutions.
Course content:
The lecture course focuses on issues concerning the fundamental theoretical and applied aspects of the systematics and technology of family education. The content of the lecture course is focused on clarifying the current approaches, concepts and practical models for family interaction with educational institutions.
Main topics: Characteristics of the family as a cultural-historical phenomenon. Theoretical approaches to determining the nature and functions of the family unit. Categorical characteristics of the family. Historical and pedagogical approach to the study of the family, childhood and upbringing. Definitive markers of family education in the context of the pedagogical approach (essence, purpose, tasks, features, meaning). Coordination of the family and other agents of socialization / kindergarten, school /. Pedagogy of parents. Pedagogical models of interaction with the family.
Teaching and Assessment: Basic method of teaching - information-explanatory, illustrative (method of oral presentation). Additional methods (non-traditional): problem statement; stimulating heuristic method (partial research). The lectures use interactive methods and tools, multimedia presentations, schemes, tables, models, electronic educational platforms, aimed at synchronizing traditional and innovative approaches to the study of the discipline, as well as to present options for technological implementation of practical aspects of its subject. - interaction and work with families.

SM16996 Inclusive Education for Children with Special Educational Needs

ECTS credits: 2 **Weekly workload:** 2lec+0sem+0lab+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Science and Education;
Lectures:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Dept. of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
Abstract:
The aim of the discipline is to understand and understand the philosophy, the whole process, the steps, the participants, their roles, the effectiveness and the good examples of interaction.
Course content:
Inclusive education is access to school, quality learning and guaranteed participation of absolutely all children. In order for this to happen, it is necessary for the general education institutions to be able to accept and meet the needs of not only the child with special needs but also every difference and not difference. Because inclusion does not only concern the education of children with disabilities, but quality education for all children.
Teaching and assessment:
The lecture course includes modules divided by hours. Students receive theoretical knowledge of the topics as well as practical experience by observing and commenting on good practices. The expected results are in the continuum of reach between all stakeholders in the process of inclusion. Inclusion and development of innovative practices in inclusive education, building and strengthening the capacity of learning communities to create an inclusive environment. The vision of how to organize training and mentoring on topics related to inclusive education, global education, child protection and child participation, policymaking and strategic documents in the field of education, information campaigns and inclusive education studies.
different disorders. The assessment is based on the results of the student's presentation.

SM17009 Civic Education

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, MA, DPed., Dept. of Pedagogy
tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The discipline prepares students to master the organizational forms and methodological tools in conducting the educational process of acquiring knowledge about civic education in preschool and primary school age. It provides future teachers with methodical preparation for adequately conducting "student-environment" interactions in educational institutions from a psychological and educational point of view.
Course content:
The main content highlights are: Normative regulation; Principles for selecting and arranging program content; Forms of pedagogical interactions; Teaching methods; Skills in training; Content analysis of students' knowledge of the life areas of social environment.
Teaching and assessment:
The following means of teaching are used: 1. Lectures; 2. Activities related to the topics of the lectures; 3. Perception and analysis of video films; 4. Implementation of course tasks - descriptive, research, implementation; 5. Examination procedure – continuous assessment by test.

SM16994 Health and Ecological Education

ECTS credits: 2
Assessment: continuous assessment
Weekly classes:2lec+0sem+0labs+0ps
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082/888 219, E mail: bilieva@uni-ruse.bg.

Abstract:
The aim of the training is for students to acquire the necessary knowledge for the health education of adolescents. Certain thematic areas in the lecture course are focused on getting acquainted with the health and environmental components of the environment: natural air, water, soil, food and nutrition; and school: school yard and school building, school furniture and furnishings, microclimate, heating, lighting and harmful factors. Getting acquainted with the institutions involved in the implementation of health and environmental education and upbringing, etc.

Course content:
Nature, tasks and importance of health and environmental science; Physical development of students and morpho-physiological characteristics of school age; Personal hygiene of students; Medical care and health care for students; Microbiological causes and carriers of diseases in children and school age; Environmental problems and impact on natural resources, flora and fauna, etc.

Teaching and assessment:
The training is carried out through a lecture course, which acquaints students with the main theoretical and current practical - applied aspects of environmental education and health education.

SM17010 Leadership in Education

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 2lec+0sem+0labs+0ps
Type of exam: written

Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihajlova Radoslavova, MA. PhD, Dept. of Pedagogy,te.: 082/ 888 219, E-mail: lradoslavova@uni-ruse.bg

Abstract:
The aim of the course Leadership in Education is to provide students with a comprehensive understanding and knowledge of aspects and approaches to leadership and management in the education sector, to expand their critical understanding in the field of leadership in education, based on analytical commitment to current educational theory, research, policy and practice. The module in the discipline is conducive to the acquisition of the full range of theoretical and practical knowledge, skills and competencies corresponding to the subject area.

Course content:
Contains topics dealing with innovative educational technologies, business communication skills, negotiation and conflict resolution; organizational culture and management of educational resources; philosophy of leadership in education, theories of leadership styles.

Teaching and assessment:
The main methods of teaching are information-explanatory, illustrative and problematic exposition, bringing to the fore the scientific logic of knowledge. Interactive methods are used to test certain views of students for decision making, formulation of conclusions, formation of communication and organizational skills: discussions, brainstorming, business games and more. A 60-minute test is conducted on the course. It includes questions from the proposed synopsis. The student, at his request, is given the publicity of the assessment.

SM17011 Relationship Management in an Educational Environment

ECTS credits:2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy, Psychology and History
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to provide knowledge about the elements of the educational environment and the various forms of relationships in it. The main factors and the current forms of interaction between the subjects in the educational environment are analyzed.
Course content:
The concept of an educational environment. Organizational culture and leadership of the teacher. Social interaction in the educational environment. The role of the teacher in the successful management of relationships. Discipline through cooperation. Relationship management in an inclusive educational environment. Relationship management in a digital environment. Aspects of interaction between the participants in education - teachers, parents, institutions.
Teaching and assessment:
The training is realized through lectures, and active forms and methods are utilized. The final grade is formed based on the results of a written test and participation in the discussions.

SM16992 Digital Competence and Digital Creativity

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0lab+0ps
Assessment: continuous assessment
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies, tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the dimensions of digital competence and digital creativity.
Expected results: will know and be able to apply the concepts of digital competence and digital creativity.
Course content:
Competence. Basic concepts. Competences and competence approach for teaching and learning. Framework for defining digital competences. Professional development and digital competence of teachers. The qualification and professional development of teachers as a key element of the quality of Bulgarian school education. Creativity in learning - basic concepts and concepts. Scientific and theoretical foundations of creativity. The essence of creative activity. Models for analysing creativity. Creativity in the context of learning. Digital creativity. Digital creative skills. Components of digital creative pedagogical practices.
Teaching and assessment:
The learning process is realized based on lectures. During the course students learn about the competencies and competence approach to teaching and learning, creativity with its basic concepts and concepts, digital creativity, and digital creative skills. Students receive a certificate in the discipline if they have attended lectures and practical exercises according to the Rules for the organization of educational work at the University of Ruse. The training in the discipline ends with an ongoing assessment.

SM17012 Methods of Teaching Math in Kindergarten

ECTS credits: 5 **Weekly classes**: 2lec+2sem+0labs+1ps+1ca
Assessment: exam **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082 888 268, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, tel. 082/ 888 219, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about methods of teaching math in kindergarten.
Course content:
Emphasis is put on the teaching concept about numbers, space, time, shapes, , text tasks. diagnostics.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SM13131 Methodology of teaching Bulgarian language and literature in kindergarten

ECTS credits: 5 **Weekly workload:** 2 l + 2 s; 0 le + 1 pe + ca
Assessment: exam **Type of exam: written**
Department involved:
Department of Bulgarian Language, Literature, History and Arts,
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, department of Bulgarian Language, Literature, History and Arts, tel. 082/888 437, E-mail: doneva_v@uni-ruse.bg,
Course description:
The work on speech development in kindergarten is a daily activity with a great importance. By developing children' speech abilities, the teacher develops their their mental abilities. The course examines the main means and methods by which the complex linguistical matter becomes easy and interesting for the children to acquire and the work with literature provokes children's involvement and emotional response to the studied texts . The main objectivel of the subject is to stimulate the communicative abilities of the children at nursery school age.
Course contents;
The main themes are: sound culture, gramatically correct speech, semantization, work with literature texts, sorts of coloqued speech, work with the process of of teaching of read and write and diagnostics of children's speech. Every one of them is build by subthemes, representing different sides of the corresponding speech activity.
Teaching and Assessment:
The lectures have the following structure: short historical review, basic terms, specifics of children's speech and children's verbal behaviour, basical themes in traditional and innovational plan, gramatical and speech skills- methods, principles and means for their structuralization.
The exercises follow the lecture contents, transforming the theoretical knowledge into practical skills. The students work on plans for different type of intentional situations- playful, practical, and educating, make an investigation with diagnosticaim with children from different age groups and the results and conclusions from them.

SM17013 Methodology of Getting Acquainted with the Surrounding World in Kindergarten

ECTS credits: 3
Assessment: exam
Weekly classes: 1lec+1sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy,tel.: 082 / 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Dept. of Pedagogy, tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course familiarizes the students with the organisational forms and methodological tools for conducting the educational process involving acquiring knowledge about the natural and social environment in kindergartens. The subject forms creative abilities and skills for determining the contents of knowledge and using the routines and social life in kindergartens.
Course content:
Basic accents of the contents are: Introduction to the methods; Structure; Principles for natural selection and arranging the program contents; The excursion, activities by interests, knowledge as a form of pedagogical interaction; Methods for educational work; Analysis of the contents for children's knowledge about the areas of social and natural environment.
Teaching and assessment:
The following means for teaching the subject are used:

1. Lectures;
2. Seminars, connected with the topics in the lectures;
3. Analysis of moves that illustrate the educational processes in kindergartens;
4. Doing course assignments - description, exploration creativity;
5. Testing procedure-exam in a written form on a theoretical questions (written test).

SM17014 Methods of Teaching Art in the Kindergarten

ECTS credits: 3
Assessment: exam
Weekly classes: 1lec+1sem+0labs+0ps
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Doychinov, PhD, Dept. of Industrial Design, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: +359 82 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:

- The aim of the course is to provide students with a rich spectrum of knowledge on the goals and main tasks of introducing children to fine arts in the pre-primary stage of the Bulgarian educational system. Students are also introduced to the expected results of the training at each age group, as well as to the importance of the development of artistic abilities of children at the pre-primary period. Students are acquainted with the approaches of pedagogical interaction and teaching methodology in the kindergarten, with the specifics of the forms of pictorial activity and other essential aspects of the teaching of art in the pre-primary stage.

The expected results of the overall training are relevant to the knowledge, skills and competences specified in Level 7 of the National Qualifications Framework of the Republic of Bulgaria.
Course content:

- The course of lectures focuses on: the objectives, the main tasks, the specifics and the new trends of art education in the kindergarten; the specificity of the methods and techniques; the forms of pictorial activity in the kindergarten, etc. The seminars allow the students to develop skills in implementing the rich scope of fine arts materials, techniques, art types and genres suitable for the kindergarten.

Teaching and assessment:

- In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. During the seminars the students are mainly assigned fine art tasks which involve individual work rather than creative group work projects.

SM13134 Methodology of Teaching Mathematics in Primary School

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps+ca
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 211 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The objective of the course is to introduce students to the principles of mathematical education at the start of primary school and to form abilities for presenting, practising and systematizing mathematical information and knowledge. Students master basic planning skills for mathematics lessons.
Course content:
Subject, goals and tasks. Didactic foundations. Principles and methods. Methods for teaching notions about one-digit, two-digit, three- digit and poly-digit numbers and operations with them. Mathematical problems with text conditions. Ways for fast verbal arithmetic. Geometrical knowledge. Units of measurement and operations with them.
Teaching and assessment:
The course is taught through a combination of lectures and seminars. Seminars are designed to complement and reinforce the notions introduced at lectures; class work involves discussions, doing tests, devising lesson plans, analysing and discussing lessons, analysis of school documentation, creating didactic and other materials for curricular and extracurricular work in mathematics.

SM17015 Methods of Instruction Man, Society and Nature

ECTS credits:6
Weekly classes: 2lec+1sem+0labs+0ps+cw
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, tel.: 082/ 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, PhD, Dept. of Pedagogy, tel.: 082/ 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The course takes into consideration the unique conditions in the personal development of children with their specific experience and stage of accepting and processing the information about objective reality, as well as their orientation in natural and social events. Through his/her pedagogical interactions with the subject, the teacher is obliged to take out the experience of the children from their condition of pre-school and pre – theoretical disunion and lack of a system to the cognitive and intellectual ability for absorbing the social sciences in upper grades.
Course content:
Goals and Assignments of the educational work in the subjects Man and Society and Man and Nature; Program contents in primary school; The Lesson; The Excursion; Contents and Characteristics of the subjects Man and Society and Man and Nature; Social areas.
Teaching and assessment:
The educational process goes through lectures and seminars. The students have to achieve a certain number of skills for unaided solving of creative tasks in the area of programming and conducting the forms of educational work in Man and Society and in Man and Nature.

SM17016 Whole-Day Organization of the Educational Process in Primary School

ECTS credits: 2 **Weekly classes**: 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, tel.: 082/ 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, PhD, Dept. of Pedagogy, tel.: 082/ 888 219, E-mail: eivanova@uni-ruse.bg
Abstract:
The purpose of the discipline is to outline the main aspects of the all-day organization of the educational process in kindergarten and primary school. To analyze the normative base and the changes in the Law for preschool and school education. To consider options for planning the educational process, conducting a variety of activities in full-time education in kindergarten and primary school.
Course content:
Pedagogical and didactic projections of the teacher-educator-child/pupils relationship in the all-day organization of the educational process in kindergarten and primary school. Normative base, determining the all-day organization of the educational process in the primary school. Implementation of the framework program for the whole-day organization of the learning process. Good practices and guidelines for activities of organized recreation and physical activity. Didactic requirements for the implementation of self-preparation activities. Planning, preparation, and implementation of activities of interest in primary school. Forms for the realization of active learning in a whole-day organization of the learning process. Methodical solutions for the use of ICT-based activities in the pedagogical process in the all-day organization of training. Realization of the ideas of civic and intercultural education in the all-day organization of the educational process. Pedagogical interaction is aimed at socializing students in semi-boarding groups, through the application of interactive methods - group discussion and brainstorming. Application of interactive visualization methods with a poster and a "mind map" in all-day training. The interactive puzzle and "expert group" methods and their application in the all-day organization of the learning process. Vocational guidance as part of the activities of interest in the all-day organization of the educational process. Game activities in the all-day organization of the learning process. Art and sports in the all-day organization of the learning process.
Teaching and assessment:
The methodology of conducting the seminar exercises is organized on the basis of a logical and substantive connection of the problems on the main topics included in the curriculum. Interactive methods are used to test certain views of students on decision-making, formulating conclusions, and forming organizational skills: discussions, brainstorming, case studies, etc.

SM17017 Extracurricular Work in Primary School

ECTS credits: 2 **classes:** 0lec+2sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education,
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract: The aim of the course is to supplement the theoretical preparation of students with regard to the nature, purpose, specifics and the educational potential of extracurricular teaching of pupils, organized based on their interests and abilities. Emphasis is placed on the main subject areas where extracurricular teaching is practiced.
Course content: Main topics: Rational utilization of the free time of pupils; Theoretical problems with interests-based work with primary school pupils; Main areas of extracurricular work; Symbols, rituals and holidays in Bulgarian schools; Planning extracurricular activities.
Teaching and assessment: Lectures cover problems in the field and have practical value and application. They use example models of extracurricular work. The final grade is formed on the basis of the results from the development of those models.

SM17018 Informal Education

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy,,tel.:082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The main aim of the course is the students should be informed on the needed degree with the with the basic theoretical and actual problems of the non-formal education, namely: specifics of his philosophical and legislative bases, his place in the context of lifelong learning, differentiation strategies for continuing education of adults, children and young people and the corresponding specific forms, types, models and units for realization of informal education.
Course content:
In the course of the Informal Education discipline are first included topics about the occurrence, philosophical and legislative bases / national and European regulation framework / about the concept of informal education. Much space is given to the conceptual and practical dimensions of informal learning and lifelong learning, as well as specifics of the realization of informal education in both key target groups of subjects- youth activities as informal educational practices and informal education in the education of adults. There are also types, forms and units of informal education relative to the corresponding "user groups".
Main topics: Philosophical bases of the informal education; National priorities in the sphere of informal education; Principles of European policy and regulation in education; Grounds for of lifelong learning as an educational paradigm; National priorities and programs for informal education of children and youth; European clubs in extracurricular activities with students; Informal education for children with behavioral disorders; Informal education in the education of adults.
Teaching and Assessment:
The teaching of students allow to realize the basic preparing in the process of the lecture course.

SM17019 Children's Literature

ECTS credits: 2 **Weekly classes:** 2l+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Department of Bulgarian Language, Literature, History and Art, tel.: 082 /888 437, E-mail: enedkova@uni-ruse.bg
Assist. Prof. Petia Nikolova Abrasheva, MA, PhD, Department of Bulgarian Language, Literature and Art, tel.: 082/ 888 612, E-mail pabrasheva@uni-ruse.bg
Abstract:
The course aims at introducing students to the classical literary works for children by Bulgarian and foreign authors. The course in Literary Theory is a prerequisite for Children Literature. The subject assists the acquisition of knowledge and skills, necessary for the literature classes (reading) in the primary school.
Course content:
The World of the Child in the Children Literature and the Children Literature in the World of the Child;
Arabian Nights; Charles Perrault, The Grimm Brothers, Wilhelm Hauff, Hans Christian Andersen,
Pushkin, Mark Twain, Lewis Carroll, Astrid Lindgren, Jannie Roddary, Petko R. Slaveikov, Ivan Vazov , Uncle Stoyan, Grandfather Blago, Elin Pelin, Ran Bosilek, Angel Karaliichev, Asen Raztsvetnikov, Kalina Malina, Dora Gabe, Elisaveta Bagryana, Emiliyan Stanev, Valery Petrov, Jordan Radichkov,etc.
Teaching and assessment:
Lectures are designed to provide students with knowledge about the richness and diversity of children literature in Bulgaria and worldwide. At lectures, students are offered different directions and possibilities of interpretation of literary texts. Seminars are designed to practice and complement the material introduces at lectures. The semester is validated only if the classes have been attended regularly. The exam is in a written form and involves answering two theoretical questions: one on foreign literature and one on Bulgarian literature for children.

SM17020 Professional and Career Development

ECTS credits: 2
Assessment: continuous assessment
Weekly classes:0lec+2sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva,MA, PhD, Dept. of Pedagogy, tel: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The purpose of training in the discipline is, on the one hand, to acquaint students with the essence, planning, development and management of careers; to clarify the essence of the competitive personality and introduce them to technologies for its development - workshops, professional counseling, psychological diagnostics, technologies forming a positive self-attitude, readiness for changes and the ability to see alternatives, taking responsibility, free choice and with the possibilities of professional and career development of pedagogical specialists in the field of education. On the other hand, with a view to their future professional realization in the education system, the purpose of the lecture course is to form knowledge, skills and competencies in the future pedagogical specialists, related to the implementation of professional guidance and counseling of children and students.
Course content:
Professional Development. Professional orientation. Nature and development of the career. Stages in career development. Organizational systems for career management. Development of career plans. Status and career development of pedagogical specialists. Introductory and continuing qualification of pedagogical specialists. Certification of pedagogical specialists. Professional profile of the pedagogical specialist. Professional pedagogical portfolio. Development of an individual career plan. Competitiveness. Competitive personality. Self-development of the culture for business communication. Self-development of the culture of conflict resolution and controversy management Professional guidance in general education. Career guidance program. Vocational guidance of primary school students. Professional guidance in class time and in interest activities.
Teaching and assessment:
The following forms and methods are used to implement the learning content: lecture, conversations-discussions, solving cases. Modern information technologies are used for visualization and interactions.
During the training, practical tasks are assigned, aimed at helping the students regarding their realization as pedagogical specialists. Topics are offered in the field of career guidance - developing an interview, developing career plans, preparing and presenting an interview, and self-development tests for communication and conflict resolution.

SM17021 Group Training

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Lora Mihaylova Radoslavova, MA, PhD, Dept. of Pedagogy, tel.:082/ 888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
This course aims at acquainting the students with the basic models and strategies of pedagogical interaction and setting up an ability for communication at certain levels of pedagogical work.
Course content:
Information-psychological aspects of communication in pedagogical process. Characteristics. Pedagogical content of communicative instruments. Speech and communicative behaviour. Dimensions of teacher's profession. Characteristics and interactive education. Techniques for organization of the interaction in class.
Approaches of setting up personal and social skills in students. Basic social skills.
Teaching and assessment:
Students get acquainted with the theoretical and practical foundations for developing social and personal skills characteristic of the teacher's profession. Students work in groups. Interactive methods are used to set up ideas and skills for productive pedagogical interaction. The course ends with the submission of a paper (based on one of the topics given above).

SM17024 Project-based learning

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0p
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc. Prof. Galina Georgieva Georgieva,MA, PhD, Dept. of Pedagogy, tel: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The purpose of the course training is to acquaint students with the theoretical and applied aspects of project-based learning. Emphasis is placed on the possibilities for integrating the project method in the educational process. Students are introduced to the technological model of planning and implementation of project work in elementary school age, as well as the criteria for evaluating the project presentation and project product.
Course content:
The course covers: theoretical foundations of project-based training; reformist pedagogy and the ideas of John Dewey, Ellen Parkhurst, Roger Cousinet and others; group activity as a major component of project-based training; project-based training in a multi-age classroom organization; learning through collaboration; prospects for realization of project-based training as an educational technology in modern conditions; "Project Method" and project-based training; technological model of planning and realization of the project work; classification of project types; managing project activities and the role of the teacher. Criteria for evaluating project work.
Teaching and assessment:
The learning process is conducted through seminars. Interactive methods and tools, multimedia presentations, diagrams, tables, models are used.

SM170123 Development of Creative Abilities in Pre-school and Primary School Age

ECTS credits: 2
Assessment: continuous assessment
Weekly classes: 0lec+2sem+0labs+0ps
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
This course's goal is to acquaint the students with the basics of creative education in pre – school and in primary school age on the basis of actual scientific research and methodological works. The theoretical accents in this course of education are extracted on the basis of practical application with an eye on acquisition of skills for competent managing the creative processes and stimulating the creative abilities of growing up children.

Course content:
The topics included are directed towards revealing the techniques for stimulating creative abilities in a variety of creative activities during the different moments of life in kindergarten and forms of work in school.
Main topics: Subject, Goal and Assignments of creative pedagogy; Essence of creativity and different creative activities; Creative potential of the child, specifics of children `s art; Approaches, orientations and technologies for stimulating the creative abilities; Diagnostics of creative abilities.
Teaching and assessment:
Presentation of theoretical knowledge is accomplished in informational – explanatory, problem-oriented and illustrative form, while at the same time opportunities for studying through discovering, constructing, proving hypotheses, problematic aspects of certain questions are given. The final grade is formed on the basis of a test.

SM17030 Morphology and Syntax of Bulgarian Language

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Емилиъа Димитрова Недкова, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 437, E-mail: enedkova@uni-ruse.bg
Pr. Asst. Prof. Nia Atanasova Peneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 664, E-mail: ndoneva@uni-ruse.bg
Abstract:
Grammar, with its two branches - Morphology and Syntax, is the science about language. Morphology studies the structure and grammatical meaning of words. Syntax is the science about the structure of coherent speech. There is a special emphasis on the significance of syntax for the mastering of punctuation. Its connection with intonation helps students develop correct, accurate and expressive speech.

Course content:
Definition of the term “word” as the subject of morphology; Parts of speech. Subject matter of Syntax; Combination of words, Classification of simple sentences; Main parts of the simple sentence; Subject; Predicate; Secondary parts of two-compounded sentences; Object; Adverbial modifiers; Definition; Apposition; The attribute; Syntactic realisations of the parts of speech; Parenthetical syntax units; Complex sentences; Complex composed sentence - types; Complex compound sentences - types; Multicomponent complex sentences.

Teaching and assessment:
The course is taught through a combination of lectures and seminars. At the end of the semester there is a written exam, which includes also a practical part.

SM17109 Methods of Teaching Art in the Primary School

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+1ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yordan Doychinov, PhD, Dept. of Industrial Design, E-mail: doichinov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: +359 82 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract: The aim of the course is to provide students with a rich spectrum of knowledge on the goals and main tasks of introducing children to fine arts in the primary stage of the Bulgarian educational system. Students are also introduced to the expected results of the training at each age group, as well as to the importance of the development of artistic abilities of children at the primary school period. Students are acquainted with the approaches of pedagogical interaction and teaching methodology in the kindergarten, with the specifics of the forms of pictorial activity and other essential aspects of the teaching of art in the primary stage.

The expected results of the overall training are relevant to the knowledge, skills and competences specified in Level 7 of the National Qualifications Framework of the Republic of Bulgaria.

Course content: The course of lectures focuses on: the objectives, the main tasks, the specifics and the new trends of art education in the kindergarten; the specificity of the methods and techniques; the forms of pictorial activity in the kindergarten, etc. The practice focus on the specifics of colour combinations, painting, graphics and sculpture creation and their implementation in the arts education in the primary school. Special emphasis is placed on the specific of the decorative applied arts as well as on the problems of drawing shapes, the specifics of the teamwork, group work and the project activities.

Teaching and assessment: In the lectures the course tutor uses the whole-class interaction pattern and visualizes a variety of accessible didactic materials. During the seminars the students demonstrate their skills for presenting their artistic ideas through the means of fine art and they also demonstrate the level to which they have acquired the relative fine art material and technique. The final grade is formed on the basis of a positive result on the exam and it also takes into account the overall results on the seminars and the level of mastery on the individually prepared course work.

SM17025 Methods of Music Education In Primary School

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+1ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr. Kristina Yapova, BAS.
Pr. Assist. Prof. Petya Ivanova Stefanova,PhD, MA, Dept. of Bulgarian Language, History, Literature and Art, tel.: + 359 896 820470, E-mail: pstefanova@uni-ruse.bg
Abstract:
Discipline *Methods of music education in primary school* aims to build students' theoretical knowledge, teachers in methodology of teaching music in elementary school. The practical exercises allow approbation of the acquired theoretical knowledge and perspective of a creative and professional appearance when dealing with children
Course content:
Methodology of music in elementary school follows modern methods and systems for music education, and build on the Bulgarian research and achievements of European music educators in the field. Provided a more detailed introduction to the musical material of perception and reproduction in primary school. Attention is drawn to innovative methods and forms of work in music in formal and informal settings.
Teaching and assessment:
Lectures and practical exercises are designed to build on the theoretical knowledge and practical training of student teachers in the discipline of music Methodology in elementory school, which ends with a written exam.

SM17026 Methodology of Primary School Physical Education

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Physical Education and Sports,
Faculty of Transport
Lecturers:
Assist. Prof. Kamen Simeonov, PhD, Dept. of Physical Education and Sports, tel.: 082/ 888 225, E-mail:, ksimeonov@uni-ruse.bg
Assoc. Prof. Iskra Ilieva, MA, PhD, Dept. of Physical Education and Sports, tel.: 082/ 888 252, E-mail: isilieva@uni-ruse.bg

Abstract:
The course Teaching Sport and Physical Activity is intended for undergraduate students of Primary Education. Students should gain an understanding of the range of knowledge and skills underpinning sports activities and development. The course covers topics that should reveal the basic principles, means and methods of managing the educational process during the PE classes in kindergartens. It also focuses on the range of activities and forms of PE education.

Course content:
Introduction and subject matter of the course; General classification of the means and forms of PE; Initiatives for developing physical abilities of children; Motional habits; Physical abilities; Didactic principles; Curriculum for pre-elementary and primary school physical education; Diagnosis of the physical activity of children at a primary school age.

Teaching and assessment:
During the lectures and practical classes, it is easy to acquire the knowledge about the basic issues in the theory of physical education.

SM17027 Methods of Teaching Technology and Entrepreneurship in the Primary School

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Todorka Zhekova Stefanova, MSc, PhD, Dept. of Health Care, E-mail: dora@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: +359 82 / 888 832, E-mail: vtradeva@uni-ruse.bg
Abstract:
This course aims to give students specialised methodological knowledge and practical technical skills necessary for the teaching of Technology and Entrepreneurship subject at the primary school level. The topics covered in the course complies with the state educational requirements included in the national Technology and Entrepreneurship curriculum for the primary school level, as well as with the other subjects comprising the Technology and Entrepreneurship Sphere in the approved state curriculum.
The expected results of the overall training are relevant to the knowledge, skills and competences specified in Level 7 of the National Qualifications Framework of the Republic of Bulgaria.
Course content:
Technology and Entrepreneurship as a subject (primary school level from 1st to 4th grade), didactic technologies in the system of technology training, content of lessons, didactic principles, methods of teaching, forms of organization, natural materials, paper and cardboard, materials from metal, machine elements, mechanisms, plastic materials, textile, leather, electricity, domestic labour and service labour, technical modelling and constructing, work in the open.
Teaching and assessment:
The course tutor uses the whole-class interaction pattern during the lectures and visualizes a variety of accessible didactic materials. Students work individually or in groups during the seminars. Their individual or group work is preceded by a revision of the theoretical knowledge on the problem. The final grade is formed on the basis of a positive result on the exam but it also reflects the overall performance of the students during the seminars and the level of overall successful completion of the course work.

SM17028 Methods of Instruction in Bulgarian Language and Literature in Primaru School

ECTS credits: 4 **Weekly classes**: 2lec+1sem+0labs+0ps+
Assessment: exam **Type of exam**: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturere:
Assoc. Prof. Emiliya Dimitrova Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 437, E-mail: enedkova@uni-ruse.bg
Abstract:
The course aims at giving students theoretical and practical knowledge about the nature and specific features of teaching and acquiring the native language in the primary school age. It focuses on the problems of native-language and literary education in the primary school with regard to new concepts and recent developments in the field.

Course content:
Specifics of the subject Bulgarian Language and Literature in the primary school. A system of teaching elementary literacy. Language acquisition; Development of coherent speech and written speech abilities in the elementary school class; The connection of the work for developing speech abilities with the literary and language education.

Teaching and assessment:
The module is taught through a combination of lectures and seminars classes. The lectures and seminars consider a selection of theoretical problems and perspectives on teaching and learning languages and literature, and relate these to different practical solutions and examples.

SM13148 Pre-school Current Pedagogical Practice

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: continuous assessment
Type of exam: practical
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Velislava Doneva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Ivanova, MA, PhD, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, E-mail: gggeorgieva@uni-ruse.bg
Pr. Assist. Prof. Ilian Ilchev, MA, PhD, Dept. of Physical Education and Sports, E-mail: iilchev@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature, History and Art, E-mail: pstefanova@uni-ruse.bg
Abstract: Current pedagogical practice in kindergarten is a stage of the practical education of Preschool and Primary School Pedagogy students. The aim of the course is for every student to acquire practical skills, develop professional qualities for individual organisation and carrying out pedagogical situations and regime moments in kindergarten.
Course content: Students plan and carry out pedagogical situations on the following subjects: Bulgarian language and literature, Mathematics, Social and natural world, Art, Construction and technologies, Physical education, Music; game culture, additional forms of pedagogical interaction. They are divided into different age groups and according to the thematic division of leading teachers.
Teaching and assessment: Current Pedagogical Practice is taught by a pedagogue and methodologist teachers. Students are assigned to a lead teacher and prepare pedagogical situations on curriculum subjects in grades one through four. The leading teacher and a methodologist from the University of Ruse consult on the organization, methodology, content and resources for achieving the educational goals and ensuring students are ready to carry out the assignment. Students are then observed during the pedagogical situation by a methodologist, a leading teacher and the other students after which the situation undergoes discussion and methodological analysis. The pedagogue forms the final grade as an average of the grades given by the methodologists.

SM13364Pedagogical Conflictology

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continiuos assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assos. Prof. Valentina Nikolova Vasileva, MA, PhD Department of Pedagogy, tel.: 082/ 888 268: E-mail: vvasileva@uni-ruse.bg
Abstract: The purpose of the course is to provide students with the basic knowledge and skills and competences in the field of conflictology necessary for the organization of an effective pedagogical process. Discipline plays an important role in the general system for psychological and pedagogical preparation of social pedagogues. enables students to be guided in the specifics of work in different conflict situations; to master the nature of the conflicts, contradictions and crises experienced by the human being; they are one of the sources of personality development, they determine their constructive or destructive scenario.
Course content: Basic knowledge related to the historical conditions for the emergence of conflictology is provided. Object and tasks of conflictology. Emphasis is placed on the structural model and elements of the conflict; signals for the emergence of conflict. The characteristics of the structural elements of the conflict are examined; conflict as a social phenomenon; functions and typology of conflict. Particular attention is paid to the causes of the conflict; participants and dynamics of the conflict. The types of conflict personalities and strategies of behavior in the conflict are discussed. Basic knowledge of interpersonal conflict, interpersonal and group conflicts, organizational conflict, etc. is mastered. Cases for conflict prediction, prevention and resolution are being addressed.
Teaching and assessment: The training in the discipline "Pedagogical Conflictology" is done through lectures and seminar exercises. The lectures are conducted frontally with the whole group. Lectures use videos and active learning methods. Combining individual and group modes of work makes it possible to master the intended material.

SM17031Pedagogical Ethics

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Dept. of Pedagogy, tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Dept. of Pedagogy, tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract: The aim of the course is to introduce students to the fundamental principles of pedagogy – helping formulate the ethical and temperamental standards of behaviour when executing their professional tasks, when communicating with different subjects under various conditions and affirm positivity and an assertive disposition.
Course content: Ethics as the science of morality. Applied and professional ethics. Pedagogical ethics – subject, tasks, origins and evolution, categorization. Nature and functions of professional morality. Professional and personal codes of ethics. Ethics and education – the moral actions of teachers. The moral aspects of the relationship between teachers and the parents of students.
Teaching and assessment: The fundamentals are covered throughout the duration of the course and are complemented with self-preparation. The course is comprised of topics and activities which are intended to allow student to reach a deeper understanding of the nature of ethical moral norms and their importance regarding ethical conflict avoidance or resolution. Activities and methods include lectures, discussions, work with various sources, working individually or in a group, tests, cases, etc. The final grade is based on test results during the semester, participation in discussions and the creation of a portfolio on the discipline.

SM17032 Folklore for Children

ECTS credits: 2 **Weekly workload: 2lec+0sem+0labs**
Assessment: continuous assessment **Type of exam: oral**
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc.prof. Velislava Vladimirova Doneva, MA. PhD, Dept. of Bulgarian Language, Literature, History and Art, tel.: 082/ 888 437, E-mail: doneva_v@uni-ruse.bg
Course description: Seminars in the *Children Folklore* discipline is intended for the undergraduate students in the "Pimary school pedagogy with foreign language" programme. The course aims at providing the future teachers with the necessary knowledge about the specific features of Bulgarian folklore. The course introduces students to the foundations of Bulgarian culture and its spiritual aspects. The course focuses on the problems, aims and tasks of Folklore studies, the prominent figures in the field and its relations to other sciences – e.g. Literature, Social and Cultural Anthropology, Didactics, Sociology, etc. It examines all branches of Bulgarian children folklore, the resources and their interpretation. The course also traces back the development of Children's Folklore in the process of national self-awareness and tackles its present-day implications. It explores children's folklore genres and provides an opportunity for their field research.
Course content: Bulgarian Mythology. Myth and History. Myth, Legend, Saga. Myth and Folklore. Contemporary Problems of Bulgarian Children Folklore. Raising Children's Awareness of the Folklore Traditions. Origin and Development of the Folklore Studies. Folklore Schools from the 19th century. Historic Sources of Bulgarian Folklore. General Characteristics and Poetic Features of Folklore. Classification Systems. The Bulgarian Folklore Studies in the Period of the Revival – the Contribution of Venelin, Rakovski, Bratia Miladinovi. The Bulgarian Folklore after the Liberation.
Folklore Calendar. Folklore Traditions and Celebrations. Family Traditions – Beliefs, Child Birth and Upbringing Rituals. Children Folklore – Genres, Origin, Development and Classification. Christmas Rituals. Participation of Children in the Rituals. Spring Festivities – Rituals, Songs. Omens, Proverbs and Riddles and Anecdotes. Stories. Characteristic Features of the Genre. Games for Children. Field Research Methods. Family Tree.
Teaching and assessment: The lectures includes discussions or talks. Students have to note down or record folk tales, songs, etc. from their home region. This rich collection of their recordings will allow for the development of a detailed children folklore map of Ruse and the region. The final mark is formed on the basis of students' active participation in the classroom during the discussions, the quality of the produced assignments.

SM17033 Educative Work of Class Teachers

ECTS credits:2
Weekly classes: 0lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy,tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assist. Prof. Zhivka Zhanova Ilieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: zhilieva@uni-ruse.bg
Abstract:
The topics include organisation of activities, realisation of the aims and tasks of today's school work. There is particular stress on the technology of planning and diagnostics of the activities so that educational content of the course is carried out.
Course content:
Technology of the educative work of class teachers. Basic principles of carrying out educative work in the elementary school. Educative work as a kind of pedagogical technology. Theoretical and legislative foundations. Content of the work with the school class. Major tendencies. Educative work of the class teacher carried out through different types of activities. Essence, specific character and educative functions. Specificity, tendencies and organisation of extracurricular activities.
Teaching and assessment:
During the lecture course students get acquainted with the theoretical and also practical foundations for organisation of the educative work of class teachers. Interactive methods are used for analysing pedagogical situations in the work of class teachers. The course ends with the submission of a paper (based on one of the topics given above).

SM17033 Literature Science

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: continuouns assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature, History and Art
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velislava Vladimirova Doneva, MA, PhD, Dept. of Bulgarian Language, Literature and Art, tel.: 082/ 888 437, E-mail: doneva_v@uni-ruse.bg
Abstract:
The course acquaints students with the methodological problems of literary theory. It presents the theoretical bases of the different literary schools and approaches and motivates students to develop an active and positive attitude towards literature as a narrative art and specific social system.
Course content:
Literature as narrative art. Character, subject of study, branches and tasks of literary theory. Classification of style patterns. Poetical phonetics. Poetic imagery. Myth – folklore – literature. Literary forms and styles. Features of the lyrical work. Strategies for analysis and approaches to interpretation.
Teaching and assessment:
The course is delivered in the form of lectures.
The course includes three control tests on the material taught. At the end there is a written exam.

SM17035 Management of Educational Institutions

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps+0r
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof., Valentina Nikolova Vasileva MA, PhD, Dept. of Pedagogy
tel.:082/ 888268, E-mail: vvasileva@uni-ruse.bg
Abstract: The purpose of training is for students to gain additional knowledge about the school as an educational organization - a professional field, management in nature, pedagogical in nature; requiring knowledge and competencies in economics, law, political science, healthcare and other social fields. The topics defined in the curriculum also affect certain areas of the basic prerequisite for mastering the knowledge of the discipline are the knowledge of students obtained in the disciplines of the pedagogical-psychological cycle. Emphasis is placed on the latest current trends for expanding school autonomy and decentralization in terms of administrative management and delegated powers; on the favorable opportunities for stimulating the creativity and initiative of both teachers and students themselves.
Course content: School legislation in Bulgaria. Periods. Current school laws determining the functioning of the Bulgarian educational system. Law on Preschool and School Education. Methodological basis of the management of education and school. Basic approaches to school management. The school as an organization. Modern organizational models. Effective and innovative schools. Human resource Management. Administrative bodies and services in the Bulgarian school. Main functions of the director and deputy director. The director as a manager and leader. Diagnosis and evaluation of teachers' classroom activities. Basic state documents for the functioning of educational institutions. Modern prerequisites for expanding the autonomy of the school. More important parameters for the realization of school autonomy in Bulgaria. School funding. Financial autonomy in terms of delegated budgets. The activity of the pedagogical councils - technological variants.
Teaching and assessment: The training in the discipline Education Management is carried out through lectures.The methods used in the training are discussion, solving cases, working with documentation and others.

SM16993 Communication Skills in an Educational Environment

ECTS credits: 2 **Weekly classes:** 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva,MA, PhD, Department of Pedagogy, tel.: 082/ 888268, e-mail: vvasileva@uni-ruse.bg;
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Department of Pedagogy, tel.: 082/ 888209, e-mail: eivanova@uni-ruse.bg;
Abstract: The course aims to acquaint students, and future teachers, with basic models, strategies, and techniques in pedagogical interaction, to form their ability to communicate at certain levels of the educational process. Attention is paid to the practical options for developing and applying interactive techniques to realize the main goals and objectives in the work of the primary school teacher..
Course content: Communication - essence and characteristics, stages and elements; Interpersonal communication. Barriers to communication; Techniques and skills for acquaintance and acquaintance; Speech communication; Models of communication. Formation of skills for transmission and reception of information; Hearing and contact; Planning, organizing and conducting speech communication with communication partners; Conversation skills. Research and ask questions; Dialogue: etymology, meaning, types. Conducting dialogue; The art of presenting - one of the important communication skills of our time; The social-communicative competence of the teacher; Formation of skills for non-verbal communication; Approaches and methods for the formation of personal and social skills in pupils; Formation of skills for adequate and non-aggressive behavior in school; Communication of the partnership between teachers and parents, teachers and other pedagogical professionals, teachers and pupils.
Teaching and assessment: The basic preparation is realized by acquainting the students with the theoretical and practical bases for the formation of social and personal skills, characteristic for the profession of primary school teacher in accordance with the age of the pupils. The specified topics envisage reaching the students to a deeper awareness of the essence and formation of attitudes and skills for productive pedagogical interaction. The planned activities and methods are visuals, didactic materials, technical and information tools, discussion, work with different sources, group and individual work, solving tests, cases and more.

SM16995 Pedagogical Interaction in Multiculture Enviroment

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps+0cw
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Abstract:
The main goal of this course is to provide students with knowledge about educational process in multicultural environment.
Course content:
Globalization and intercultural education; goals, content and methods of intercultural education.
Teaching and assessment:
The basic methods of teaching are: informative – explanatory, illustrative and problem-based presentation, using predominantly the scientific logic of knowledge.

SM16997 Development of Lessons for Learning in an Electronic Environment

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, tel.: 082/ 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: skstefanov@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the peculiarities of the electronic environment and the possibilities for developing lessons, so as to build effective relationships for quality education.
Course contents:
Features of teaching and learning in modern digital environment. Electronic resources in education. Types of e-learning. Structuring a lesson in an electronic environment - strategies for planning, preparation. Materials, methods and models of distance learning. Development and presentation of lessons for synchronous learning in a virtual classroom.
Teaching and Assessment:
The course is conducted using interactive forms and methods and the active involvement of students. Sample developments are discussed, students work individually and in groups on projects to create lessons in an electronic environment.

SM17036 Academic Writing

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. prof Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Ekaterina Emilova Ivanova, MA, PhD, Dept. of Pedagogy, tel.: 082 / 888 219, E-mail: eivanova@uni-ruse.bg
Abstract: The purpose of training in the discipline is preparation for the successful application of the various genres of academic writing by future educators in the presentation and shaping of the results of their research work both during their studies and in their professional careers.
Course content: Scientific research is the basis of scientific creativity. Stylistic markers of scientific style; bibliography in scientific texts. Scientific integrity and author ethics. Manuscript formatting and editing. Student scientific creativity - essay, term paper, academic essay, thesis. Mini-genres in academic writing - abstract and summary, annotation, keywords, the introduction of the author, poster. Traditional genres of participation in scientific forums – scientific announcement, scientific report, and scientific article. Formats for participation in scientific forums - scientific conferences, scientific congresses and scientific symposiums, seminars, round tables, poster sessions. Presentation and scientific public speaking. Quality of information sources; periodical scientific publications in the field of pedagogy.
Teaching and assessment: The main teaching methods are informative, illustrative, and problem presentation, with the scientific logic of knowledge being brought to the fore. During the training, tasks are set to discuss, analyze, edit, and present scientific texts.

SM13129 Comparative Education

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: gggeorgieva@uni-ruse.bg
Abstract:
The course aims at familiarizing students with the history of Comparative education as a scientific direction with a great practical significance; it also explores issues about the European dimensions of education.

Course content:

History of comparative education in Bulgaria; Theory and methodology of comparative education; Structure and contents of comparative education; Educational systems in Bulgaria, the USA, Canada, France, Germany and others; Comparison of the aims, finance, management, structural patterns of the educational systems and the teacher training programs in different countries;

Teaching and assessment:
The course is taught through lectures designed to reveal the comparative patterns in the structures of the different educational systems. One of the learning outcomes of the course is to develop in students an ability to put theory into practice; therefore, students are given individual course assignments for a comparative study of the general educational systems of at least two countries. The assignments are assessed and a written test is administered at the end of the semester. The final grade is an average of the grade from the written test and the result from the assignment.

SM15202 Information and Communication Technologies in Education and Working in Digital Environment

ECTS credits: 2
Weekly classes: 1l+0sem+0lab+1ps
Assessment: exam
Types of exam: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Valentina Nikolaeva Voinohovska, MEng, DSc, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: voinohovska@ami.uni-ruse.bg
Assoc. Prof, Desislava Tsoneva Baeva,MEng, PhD, Dept. of Informatics and Information Technologies
tel.: 082 / 888 645, E-mail: dbaeva@ami.uni-ruse.bg
Abstract:
The aim of the discipline is to familiarize the students with the tools used for audiovisual presentations in school. Particular attention is paid to school extracurricular electronic media, computer methods and programmed education. In order to achieve good results at the time of attending this discipline, the students should have studied General Pedagogy and Didactics prior to the course.
Course content:
Educational technologies. Basic concepts and definitions. The media in the educational process. Models of training. Planning an active and interactive learning process using media in learning. Visual tools for advanced training. Methodological guidelines for the integration of information and communication technologies in the educational process. Methodical guidelines for using multimedia projectors. Technical devices of sound (audio) type. Interactive Whiteboard. Basic principles when using an interactive whiteboard.
Teaching and assessment:
For the workshop session students study in advance pre-set specific problems. Each student makes a presentation at the assigned time of the workshop and gets relevant evaluation in compliance with the pre-set criteria. Students know the criteria requirements in advance. The final grade is formed on the basis of student's results during the semester, the presentation mark.

SM15698 Current pedagogical practice in primary school

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+3ps
Assessment: continuous assessment
Type of exam: practical
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Doncheva, DSc, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Kamen Simeonov, MA, PhD, Dept. of Physical Education and Sports, E-mail: ksimeonov@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature History and Art, E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Stefanova, MA, PhD, Dept. Bulgarian Language, Literature History and Art, E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, E-mail: skstefanov@uni-ruse.bg
Assoc. Prof. Emilia Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature History and Art, E-mail: enedkova@uni-ruse.bg
Abstract: The current pedagogical practice in primary school is a stage of the practical education of Preschool and Primary School Pedagogy students. The aim of the course is for every student to acquire practical skills, develop professional qualities for individual organisation and carrying out lessons on different subjects in primary school.
Course content: Students plan and carry out lessons on curriculum subjects: Bulgarian language and literature, mathematics, Man and society, Man and nature, music, art, technologies and entrepreneurship, physical education and sport, time of the class. They are divided into different classes of the primary stage and according to the thematic division of leading teachers.
Teaching and assessment:
Current Pedagogical Practice is taught by a pedagogue and methodologist teachers. Students are assigned to a lead teacher and prepare lessons on curriculum subjects in grades one through four. The leading teacher and a methodologist from the University of Ruse consult on the organization, methodology, content and resources for achieving the educational goals and ensuring students are ready to carry out the lesson. Students are then observed during the lesson by a methodologist, a leading teacher and the other students after which the lesson undergoes discussion and methodological analysis. The pedagogue forms the final grade as an average of the grades given by the methodologists.
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SM15699 Pre-diplomaPractice in Preschool and Primary school

ECTS credits: 6 **Weekly classes**: 0lec+0sem+0labs+9ps
Assessment: continuous assessment **Type of exam**: practical
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Yuliya Georgieva Doncheva, DSc, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg
Pr. Assist. Prof. Stefan Krumov Stefanov, MA, PhD, Dept. of Pedagogy, E-mail: skstefanov@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, E-mail: gggeorgieva@uni-ruse.bg
Assoc. Prof. Emilia Nedkova, MA, PhD, Dept. of Bulgarian Language, Literature History and Art, E-mail: enedkova@uni-ruse.bg
Assoc. Prof. Velislava Doneva, MA, PhD, Dept. of Bulgarian Language, Literature History and Art, E-mail: doneva_v@uni-ruse.bg
Pr. Assist. Prof. Valentina Todorova Radeva, MA, PhD, Dept. of Bulgarian Language, Literature History and Art E-mail: vtradeva@uni-ruse.bg
Pr. Assist. Prof. Petya Stefanova, MA, PhD, Dept. of Bulgarian Language, Literature History and Art E-mail: pstefanova@uni-ruse.bg
Pr. Assist. Prof. Ilian Ilchev, MA, PhD, Dept. of Physical Education and Sports, E-mail: iilchev@uni-ruse.bg
Abstract: Internship practice in a kindergarten and primary school is the final stage of the practical training of the students to acquire the "teacher" qualification. The purpose of the course is for students to improve their practical skills and professional qualities for organizing and conducting various pedagogical situations and regime moments in the kindergarten and for the implementation of the educational process in the school, as well as to familiarize themselves with the functioning of the school and the kindergarten as institutions.
Course content: During the internship practice, the students independently participate in the educational process according to individual plans prepared together with the teachers-mentors for the implementation of various activities for the formation of skills for work in a real environment. They observe, record and analyze pedagogical situations or lessons and other organizational forms conducted by the teacher-mentor. Students plan, develop, consult with the teacher-mentor options for lessons or pedagogical situations, observing the relevant school curriculum or the program system. They independently conduct lessons and pedagogical situations in various subjects and educational areas. Students get to know the functions of a class teacher and a group teacher.
Teaching and assessment: Trainee-teachers carry out the practical training under the direct supervision and guidance of the teacher-mentor from the kindergarten or school and a teacher from the university. Together with the teacher-mentor, an individual schedule plan is prepared, ensuring the total number of hours and the employment of each student, as well as providing activities for the formation of skills for work in a real environment. The main forms and methods are: observation, training, discussion, planning and conducting a lesson and pedagogical situation, keeping a diary.

SM13135 Contemporary Educational Technologies in Kindergarten and Primary school

ECTS credits: 2 **Weekly classes**: 2lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy,,tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract: The aim of the training is to form in students skills for differentiation, construction and application of different approaches and program technologies for working with children in real situations related to the implementation of formal and informal educational practices; to organize the professional activity in accordance with the modern requirements of the pedagogical environment; to highlight general trends and specific cases; to correlate the acquired knowledge with the practice; for orientation in the mechanisms and regularities of the work with the children in the different directions of the educational process in the kindergarten and the primary school.
Course content: The content of the lecture course is aimed at acquainting students with the basic and current theoretical issues concerning the conceptual and theoretical understanding of modern educational technologies, as well as with approaches to practical application of technological aspects of education in preschool and primary school age.
Teaching and Assessment: The teaching of students allow to realize the basic preparing in the process of the lecture course. Some topics include problem questions that provoke students' independent thinking (additional teaching methods - problem statement and heuristic method).

SM14622 State Board Practical Examination

ECTS credits: 5 **Weekly classes**: 0lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: spoken

Consultants:

Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg

Abstract:

The state practical exam is one of the final procedures in the education of students in the specialty Pre-school and Primary School Pedagogy. It enables students who are completing the master's course to present their practical knowledge to children in kindergarten and to students in primary school. The student is assessed by the appropriate methodology from the methodologies included and studied in the syllabus during semester training.

Course content:

The state exam is held in base kindergartens and primary schools under the guidance of teacher-mentors. Students are trainee teachers. Methodology assessment puts the student after he observed in pedagogical situation in kindergarten and removed from the student lesson in elementary school.

Teaching and assessment:

Each methodologist grades the student from kindergarten and primary school. The final score is the average of all estimates.

SM14623 Thesis

ECTS credits: 10 **Weekly classes**: 0lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: oral defense

Department involved:

Department of Pedagogy
Faculty of Natural Sciences and Education

Consultants:

All academic lecturers participating in the Master's degree program. From the "Department of Pedagogy, Psychology and History", "Bulgarian Language and Literature" and "Physical Education and Sports".

Abstract: The diploma thesis for awarding the Master's degree is developed independently by the students under the guidance of a teacher (supervisor). Its purpose is to enable the students to demonstrate the acquired knowledge and skills during their studies in the developed diploma work and to present their creative development successfully to the state examination committee.

Course content: Thesis involves a topic or area of taught during training in the Master's degree compulsory subjects.

Teaching and assessment: The Department of Pedagogy, Psychology and History provides:

- organizing the collection, validation and disclosure of proposals for master's thesis topics;
- assigning topics to students and selecting their scientific advisors;
- guidance, preparation of reviews and presentation of the thesis.

On a weekly basis, the scientific advisers consult with the students, observing the process of accomplishing the assigned tasks. The final year students submit their diploma thesis to the State Examination Committee.

SM14623 State Written Examination in Pedagogy, Psychology and Methodology

ECTS credits: 10 **Weekly classes**: 0lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: written

Consultants:

Prof. Julia Georgieva Doncheva, MA, DSc, Dept. of Pedagogy, E-mail: jdoncheva@uni-ruse.bg
Assoc. Prof. Asya Simeonova Veleva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, E-mail: aveleva@uni-ruse.bg

Abstract:

The state exam is the final procedure for the education of students in the specialty Preschool and Primary School Pedagogy. It enables students completing the master's course to present their knowledge of the disciplines of the pedagogical and psychological spectrum, as well as of the methodologies included in the curriculum during semester training. It develops three questions from the syllabus for the state exam. The aim is for students to present what they have learned during their studies and to express their own opinion regarding the optimization of work in kindergarten and primary school.

Course content:

The state exam contains a synopsis of the subject in the field of Pedagogy, Psychology and Methodology in kindergarten and primary school, summarizing the subjects of the master's course.

Teaching and assessment:

Students take the state examination before a state examination commission appointed by order.

POSTGRADUATE STUDIES IN SOCIAL AND PEDAGOGICAL WORK WITH CHILDREN AND FAMILIES

PROFESSIONAL STANDARDS

OF A MASTER IN SOCIAL AND PEDAGOGICAL WORK WITH CHILDREN AND FAMILIES

Degree Programme: Social and Pedagogical Work with Children and Families
Educational Degree: Master
Professional Qualification: Social Pedagogue
Term of education: 1 year (2 terms)

The main goal of the training in the master's course "Social-pedagogical work with children and families" is to prepare qualified specialists who have in-depth and up-to-date theoretical and practical training in the field of social-pedagogical support of children and families, management, control and methodology of social-preventive activities in a school environment and in the community.

The training in the master's program "Social-pedagogical work with children and families" is based on educational-qualification parameters that enable the full realization of future social pedagogues in the social, social-educational, educational, integrating, social-supportive, (re) socializing, research and organizational environment with specific socio-pedagogical problems, as well as for work in the system of support, social and supporting activities in the state, municipal and non-governmental sectors.

The master's program "Social-Pedagogical Work with Children and Families" can teach bachelors and masters who have obtained a higher education in the professional field of "Pedagogy" and "Psychology".

The professional purpose of the master's degree in "Social-Pedagogical Work with Children and Families" is to provide pedagogical, expert, consulting and organizational assistance to children, adults and old people with socio-pedagogical problems and to carry out educational and organizational activities in school and extra-curricular environments.

The training is built on the basis of:

Fundamental training: The training of future social pedagogues creates an opportunity to acquire knowledge of professional training in the field of social pedagogy, institutional functions, education of children and families with risky behavior, prevention of social risks and social-educational practices. Basic knowledge in the field of psychological-pedagogical disciplines: Social-pedagogical work with children and families, Social and legal of the child and family, Management of social services, Psychotherapeutic techniques for working with children and families, Information technologies in the social-pedagogical sphere, and etc.

Special methodical training carried out through the study of social work technology, social-pedagogical counseling and counseling, psychology of child-adolescent development, interaction between the family and the educational institution, etc. The specialized training of the future masters - social pedagogues includes a pre-diploma internship, which takes place in socio-pedagogical organizations and educational institutions. Thus, equality is achieved between the theoretical and practical training of the students.

The requirements regarding the training of the social pedagogue as a highly qualified, mobile and adaptable specialist in the field of social security and social protection are aimed at the theoretical and practical preparation of students for work in a multidisciplinary team, acquisition of professional and personal qualities and competences for work in social sphere of preventive, mediation, advisory, specialized, support and research nature; building professional and personal qualities, abilities and striving for continuous self-improvement, self-education and self-regulation.

Modern criteria for the quality of higher education require students - future social pedagogues to acquire skills for analyzing and interpreting theoretical information in the field of social work and its implementation in practice.

The master's training in "Social-pedagogical work with children and families" is aimed at acquiring the following knowledge, skills and attitudes:

- Academic and pedagogical competence;
- Communicative competence;
- Administrative competence;
- Organizational competence;

The Master of Social Pedagogy has the following opportunities for professional realization:

• Graduates of the master's program can work:

In the municipal administration:

• expert and management position in the municipal department "Humanitarian Activities"; in municipal committees to combat anti-social behavior of minors;

• manager, educator, social worker, social pedagogue, etc. in social services in the community, such as: Center for community manifestation, day and hourly centers, residential-type social services (family-type accommodation center; temporary accommodation center; crisis center; shelter; etc.), mental health centers , homes for individuals; centers for socially disadvantaged persons; and other institutions for children and individuals.

• consultant and organizer of socio-cultural activities in different age, ethnic and professional communities, in non-governmental and charitable organizations in centers for activities of interest, for the organization of free time; in centers working on health programs for sexual and mental health, etc., in the system of continuous education;

• consulting work with parents, children, educators when social problems arise, with families, children and youth at risk, etc.;

• specialized organizational, diagnostic and control activity in the areas of support, rehabilitation, resocialization and integration of children and families at risk and with behavioral problems;

In the system of the Ministry of Education and Science:

• pedagogical adviser in schools;

• educator and social pedagogue in educational institutions schools, Center for supporting the personal development of children, Center for special educational support;

• consultant, expert and organizer of socio-pedagogical activities in non-governmental organizations with a charitable and humanitarian purpose;

• expert at regional education offices on issues related to specific educational needs, risks and children's rights;

• consultant and expert in socio-pedagogical centers and offices, in socio-therapeutic institutions;

In the system of the Ministry of Internal Affairs:

• inspector in children's pedagogical rooms;

• social pedagogue in homes for temporary accommodation of minors;

• social pedagogue and public educator at commissions and centers for combating anti-social behavior of minors; in places of deprivation of liberty and in probation services for persons;

In the system of the Ministry of Labor and Social Policy (Social Assistance Agency, Employment Agency) as:

• experts and employees of the Regional Directorate for Social Assistance, "Social Assistance" directorates;

• expert in the labor bureaus and their territorial subdivisions; NOI, the regional administration;

In the system of the State Agency for Child Protection,

• experts and employees of the Main Directorate "Control of Children's Rights", which includes territorial departments in regional centers and the Directorate ''Policies and Programs for the Child, Strategic Development and Coordination'';

The master's degree is acquired after two semesters in total for the course of study: 90 ECTS credits), according to the curriculum.

The education of the students in the Master's College ends with the successful passing of a written State exam in the specialty or with the defense of a Diploma Thesis.

CURRICULUM

OF THE DEGREE COURSE IN

SOCIAL AND PEDAGOGICAL WORK WITH CHILDREN AND FAMILIES

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
SM14854	Management of Social Services	3	SM15722	Social and Pedgogical Work with Children	2
SM15704	Management of Social and Educational Projects	4	SM15723	Child Psychotherapeutic Techniques	1
SM15705	Psychology of Development of Children and Young Adults	5	SM13198	Social Work with Groups and Communities	2
SM15724	Methodology of Social and Pedagogical Research	4	SM15714	Social and Pedagogical Counselling	3
SM13193	Technology of Social Work with Children and Families	5	SM15715	Pre-diploma Practice	3
SM15707	Digital Skills for Working with Children and Families	4	SM15716	Social Protection and Children's Rights	2
SM15708	Family Relations and Parenting Strategies	4			
	Elective courses (students elect a course)			***Elective courses (students elect a course)***	
SM15725	Social and Psychological Training	1	SM14861	Integration of Disadvantaged Children in Educational Institutions	1
SM15709	Social and Pedagogical Work in a Digital Environment	1	SM15717	Role Training	1
SM15710	Innovations in the Social and Pedagogical Sphere	1	SM15718	Quality Management of Social and Pedagogical Work	1
				Elective courses (students elect a course)	
			SM15719	Social Work with Minority Children	1
			SM15720	Interaction between Children and Educational Institutions	1
			SM15721	Communication Skills and Team Work Skills	1
				Graduation Procedure (Option 1)	
			SM14622	State Board Practical Exam	5
			SM14623	Master Thesis Defense	10
				Graduation Procedure (Option 2)	
			SM14622	State Board Practical Exam	5
			SM14623	State Written Exam	10
	Total for the term:	***30***		***Total for the term:***	***30***

Total for the course of study: 60 ECTS credits

SM14854 Management of Social Services

ECTS credits: 3 **Weekly classes**:3lec+0sem+0labs+0ps

Assessment: exam **Type of exam**: - written

Departments involved:
Department of Pedagogy
Lecturers:
Assoc.Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel. 082/ 888 219, E mail: bilieva@uni-ruse.bg
Abstract:
The aim of the course and the content of the lecture course in the curriculum is aimed at acquainting students with the main issues of socio-pedagogical work with children, families and individuals regarding the disclosure and use of social services in the community and in the specialized institutions.
Course content
In the course "Interaction between Family and Educational Institutions", the essence of social services, social services planning, a package of social services with equal access and status of services for children and adults in the period from the start of the 20th century to the present.
Teaching and Assessment:
Student training allows basic preparation to be realized in the course of the lecture course. The learning material creates a problematic background with a landmark designation that fills with the practical parameters of the training. Active methods are used in the course of the training.

SM15704 Management of Social-Educational Projects

ECTS credits:2 **Weekly classes**: 2lec+0sem+0labs+1p+0cw
Assessment: current assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Galina Georgieva Georgieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 752, E-mail: vvasileva@uni-ruse.bg
Abstract:
The main objective of the course is to introduce to the students, on the necessary level, the basic knowledge of scientific theory and the associated practical skills in the field of project development on social pedagogy, that have practical application, as well as to form skills necessary for the professional utilization of the right type of competition in their professional work as social pedagogues, educator, social workers.
Course content:
In the course on Educational Discipline “Management of social-educational projects” the steps in planning, developing, monitoring and finalizing of the project are discussed in detail.
The main themes include not only the design and the system but some exemplary project models as well.
Teaching and assessment:
The students’ education allows their basic training to be realized in the course of the academic term. The lecture material causes problems with the indication of reference points, which are filled with practical exercises after working with the exemplary models using models of real practical projects.

SM15705 Psychology of Development in Childhood and Adolescence

ECTS credits: 5 **Weekly classes: 3**lec+1sem+0labs+0ps+ca
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof.Krasimira Mineva-Petrova,Msc.PhD ,University of V.Tarnovo, E-mail: kraska_vt@abv.bg
Annotation:
Developmental psychology in childhood and adolescence is an emphatic theoretical discipline that encompasses knowledge about the development of the personality of children and teenagers from birth to the completion of their school years.
Course content:
The core content of the discipline includes basic theories of personal development, periodization and stages in this development, as well as the main characteristics of a particular age period.
Teaching and assessment:
The lectures are streamed and the seminars are grouped. In the course of the exercises active methods of training are used - comparative analyzes, conducting discussions, discussions during presentation of presentations. The final grade is formed from the students' presentation.

SM15724 Methodology of Socio-Educational Research

ECTS credits: 4 **Weekly classes:**2lec+1sem+0labs+0ps
Assessment: continuous assesment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstract:
The course on Methodology of socio-educational research is intended for students of degree Master.. Its main objective is to form basic skills in planning, organizing and conducting empirical research, as well as an ability to analyze and process its results.
On completion of this course students will have acquired an understanding of practical skills for developing an adequate research strategy, its planning, realization and assessment; an ability to select, adjust and create personal research methods and tools, relevant to the research objectives; skills for combining different research methods in order to accomplish the research and eventually test the scientific hypotheses; an ability to present empirical data in academic and scientific texts such as scientific statements, reports, thesis papers, etc.
Course content:
The course contents include the following topics: Typology of pedagogical research; Planning, organizing and conducting empirical pedagogic research; Analysis and presentation of the results from empirical pedagogic research projects; Methods of pedagogic research: observation, polling, didactic tests, projective methods, socio-metric methods, techniques of repertory grids, methods of expert evaluation, content analysis; biographical method and analysis of a specific case; writing a thesis paper.
Teaching and assessment:
Classes are taught using a combination of lectures and seminars. Attendance and active class participation are mandatory. The course completion is evaluated through a written test on the main topics in the syllabus.

SM13193 Technology social work with children

ECTS credits: 5
Weekly classes: 3lec+0sem+0labs+1ps
Assessment:
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc.Prof. Bagriana Rashkova Ilieva, PhD, Department of Pedagogy,tel.: 082/ 888 219, E mail: bilieva@uni-ruse.bg
Abstract:
The course concerns problems of scientific reasoning and formation, professional and practical use of technologies and methods of social work in social activities. Educational content is an important element in preparing students and a significant contribution to enhancing their professional training and culture.
Course content:
Classification methods. Basic procedural approaches in contemporary social work, counseling and mediation, interview and talk as social work methods, classical methods of social work - social work with individuals, social work with groups, social work in the community.
Teaching and assessment:
Educational content is based on an analytical approach. Meaningful and specific features of technology and methods of social work, formed in the process of its development in modern conditions are derived. During the semester students work on independent research task (coursework) on a given / chosen topic. Teaching Course ends with a written exam, as the final grade includes different weighting components - overall score of presentations during the seminar exercises - 10%; of continuous assessment - 15%; assessment of course work - 25 %; assessment of written exam - 50%.

SM15707 Digital skills for working with children and families

ECTS credits: 4
Weekly classes: 1lec+0sem+1ps
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 269, E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Galina Evgenieva Atanasova, MEng, PhD, Department of Informatics and Information Technologies
tel.: 082 / 888 386, E-mail: gatanasova@uni-ruse.bg
Abstract:
Providing students with basic knowledge about the possibilities of modern software tools and forming digital skills for work in social activities.
Course content:
The curriculum contains the necessary number of topics and is maximally aligned with the goals of the course, namely to keep students with the modern possibilities of using digital resources when working with children and families. Main topics are aimed at enriching knowledge regarding innovative approaches in building digital content.
Teaching and assessment:
The training of students takes place in the form of lectures, all topics are illustrated and various interactive forms are used: presentations, group discussion, etc. In the course of their implementation, problematic issues related to the peculiarities of digital skills for working with children and families are also discussed. The final assessment of the discipline is formed through practical work and an exam.

SM15708 Family interactions and parents strategies

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written and oral
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy,tel. 082/ 888 268, E mail: vvasileva@uni-ruse.bg
Abstract:
The objective of the course is to familiarize students with the psycho-social aspects of family upbringing in view of children's personality development. Emphasis is placed on the following topics: theories and problem areas in the analysis of family environment, psycho-social analysis of the child upbringing potential of a family, structure of the family role in child's upbringing and the mechanisms for developing a child's personality. The course enriches students' knowledge in Family Psychology and attracts their research interests to specific problems of the Pedagogy of family upbringing.
Course content:
Theories of family analysis. Problem areas in family analysis. The family as a universal upbringing system – psycho-social analysis of its child raising potential and of the role of parents in child rearing. Psycho-social mechanisms of child personality development in the family. Influence of lifestyle and personal qualities of parents on child's personality.

Teaching and assessment:
The lecture course offers informative and explanatory style of exposition and case study. Assessment: implying answering a question from the test.

SM15735 Social-Psychological Training

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Department of Pedagogy, tel. : 082/ 888 544, E-mail: jdoncheva@gmail.com
Pr. Assist. Prof. Vanya Markova Dineva, Department of Pedagogy, tel. : 082/ 888 544, E-mail: vdineva@gmail.com
Abstract:
The purpose of training on this subject is to be obtained knowledge about the nature of social-psychological training (SPT) as form of study and personal development in the academic education, in professional qualifications and as group social-pedagogical service for development of key competences at children and adults. The course is held according program for training skills for increase of communicative competence of social pedagogues – the professional reflection, professional observance, professional listening, assertiveness, empathiveness.
Course content:
In the offered course „Social Psychological Training" are considered issues from the history of group forms of impact in the psychotherapy, psychology and pedagogy, for the group SPT as form of influence and training, for methodical and organizational aspects, for the stages of group dynamics at its implementation, for the results of its application, for the conflicts and the personal behavior strategies relevant to them.
Teaching and assessment:
In the course of seminars are used active training methods – mini-lectures, games, solving cases; discussions, analysis of results of tests, projective drawing, demonstration of models of distinguished behavior, individual consulting, psychical relief, autogenic training, mental gymnastics, brain attack, self-training, self-reporting. The combining of individual and group working methods makes possible the mastering of the provided subjects in view of adoption of knowledge and acquisition of professional competences. The current grade is formed by the active participation in seminars and written self-report.

SM15709 Social-Pedagogical Work in a Digital Environment

ECTS credits: 1
Weekly classes: 1lec+0sem+0ps
Assessment: current assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 269, E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Desislava Stojanova Atanasova,MEng, PhD, Department of Informatics and Information Technologies, tel.: 082 / 888 386, E-mail: datanasova@uni-ruse.bg
Abstract:
Providing students with basic knowledge about the possibilities of modern software tools and forming digital skills for work in social activities.
Course content:
The curriculum contains the necessary number of topics and is maximally aligned with the goals of the course, namely to keep students with the modern possibilities of using digital resources when working with children and families. Main topics are aimed at enriching knowledge regarding innovative approaches in building digital content.
Teaching and assessment:
The training of students takes place in the form of lectures, all topics are illustrated and various interactive forms are used: presentations, group discussion, etc. In the course of their implementation, problematic issues related to the peculiarities of digital skills for working with children and families are also discussed. The final assessment of the discipline is formed through practical work and an current assessment.

SM15710 Innovations in the Socio-Pedagogical Sphere

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: current assessment
Type of exam: written
Department involved:
Department of Pedagogy,
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 269, E-mail: bilieva@uni-ruse.bg
Abstract:
In modern society, the discipline is extremely important theoretical and practical importance for the preparation and implementation of students as social educators, as changing social issues require innovative approaches and services. The aim is to enrich the training of future specialists in the field of orientation in the innovations that enter and are used in the socio-pedagogical sphere, as well as to form skills for their effective use.
Course content:
The study material includes basic theoretical knowledge of innovations in the socio-pedagogical field; contains thematic blocks focused on innovative strategies and approaches to improve socio-pedagogical communication. Thematically, the emphasis is on issues aimed at sectors and models of social innovation, as well as their management.
Teaching and assessment:
The training in the discipline is organized through lectures. The lectures use interactive methods and tools, multimedia presentations and models that aim to present innovative approaches in the study of the discipline, as well as options for technological implementation of practical aspects of the subject - the use of innovations in socio-pedagogical communication.

SM13194 Sociology and Demography of Family

ECTS credits: 1 **Weekly classes**:2lec+0sem+0labs+0ps

Assessment: continuous assessment **Type of exam**: - written

Departments involved:
Department of Pedagogy
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska,MA, PhD, Department of Pedagogy, tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract:
The main aim of the course is the students should be informed on the needed degree with the fundamental demographic and sociological concepts, current state of the demographic situation in Bulgaria and worldwide dnd with the perspectives and current trends in the development of family forms of cohabitation from the perspective of sociology.
Course content:
Topics included help to expand students' knowledge about the nature, types, structure, function and historical development of the family as a social unit. Some topics are focused on knowledge about the dynamics of the content of the concepts in the context of change in social norms governing family relationships. Main topics: Nature, evolution, functions of the family. Theories of the family- historical critical analysis. Theoretical approaches to family. Family life and its diversity. Role of family structure. Family Gender Education. Family and children in the scale of modern values. The family as an environment for socialization. Family upbringing and lifestyle. Educational styles of family educational goals of the family. The pedagogical power of the parent. Communication in the family. Errors in family education.
Teaching and Assessment:
Training of students takes place in the form of lectures. The main themes are illustrated by recent statistics from sociological and demographic studies to be analyzed and discussed. During the lectures and discuss issues related to the nature of family education, and trends and dynamics of the family as a kind of social unity.

SM15711 Social-pedagogical Support for Children Victims of Violence and Trafficking

ECTS credits: 1 **Weekly classes:** 1lec+0sem+0labs+0ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA,PhD, Department of Pedagogy,tel.082/888 219,E-mail:bilieva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy,tel.082/888 752,E-mail: dspasova@uni-ruse.bg
Abstract:
This lecture course is necessary for students as it forms the theoretical basis and specific requirements of social and pedagogical support for children victims of violence and trafficking. The aim of the lecture course is to provide students with specific training, including primarily the acquisition of basic knowledge of the Legal and Policy Framework for Child Protection; types of violence and its consequences; personal, family, community or state-level causes of violence; the phenomenon of Child Trafficking; mechanisms for victim support and protection; case management, etc..
Course content:
Legal and policy framework; types of violence and consequences of violence; the phenomenon of child trafficking; support and protection mechanisms for victims; case management.
The lecture course is conducted using modern teaching and learning methods, such as multimedia presentations, videos, role-plays, case development, student debates, etc. Examples from the long-standing social practice of the holder of the discipline are used in the teaching. Practical exercises aim to broaden and enrich students' knowledge through independent research of literature sources, solving case studies, training skills for working with children victims of violence and trafficking.
Teaching and assessment:
The technology of training is traditional, lecture-based, with attempts to achieve problem-oriented and discussion-based treatment of some problems. The lecture course is conducted with the help of modern teaching and learning methods, such as multimedia presentations, video films, role-playing games, development of case studies, student debates, etc. Examples from the long-term social practice of the holder of the discipline are used in the teaching. The student must express his/her personal attitude and evaluation on the chosen topic.

SM15712 Work with Documentation in the Socio-Pedagogical Sphere

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc. Prof. Bagryana Rashkova Ilieva, MA,PhD, Department of Pedagogy,tel.082/888 219,E-mail: bilieva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy,tel.082/888 752,E-mail: dspasova@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the mandatory documentation and forms in socio-pedagogical work with children and families at risk.
Course content:
The emphasis in the course is on preparing a set of documents necessary for using a social service and completing the necessary documentation as a user of a social service; preparation of documents for the implementation of child protection measures and for the provision of financial aid and/or assistance, etc. activities for the protection of children and families at risk.
Main topics:
Ensuring the protection and care of the child necessary for his well-being by preparing the necessary legislative and administrative measures and mandatory documentation; Opening a file for a child/persons and applying the information, documents and forms collected in the case; Effective methods and approaches for collecting information and filling in documents and forms to identify children at risk and assist in taking timely protection measures, etc.
Teaching and assessment:
The assessment procedure is an ongoing assessment. The final grade is formed according to the individual results of the submitted coursework prepared during the semester.

SM15722 Socio-pedagogical Work with Children

ECTS credits: 2
Weekly classes: 2lec+0sem+0labs+1ps
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy,tel. 082/ 888 268, E mail: dstoyanova@uni-ruse.bg
Abstract: The study material in the program includes basic theoretical knowledge about the structure and functions of various state institutions and public organizations involved in the socialization and resocialization of children, as well as the specifics of socio-pedagogical work with them. The practical exercises in the course are aimed at forming in students the skills to know and assess the applicability of various strategies and models for working with children and youth at risk in the real situations of educational practice in our country; to organize their professional activity in accordance with the modern requirements of education; to highlight general trends and specific cases; to correlate the acquired knowledge with the practice. These competencies are basically necessary for future social pedagogues for their quality theoretical and practical training.
Course content: Thematically, the emphasis is on issues aimed at acquainting students with classical and current methods, forms, concepts, strategies and programs for working with adolescents.
Main topics: Nature and features of the child as a specific subject of socio-pedagogical interaction; Determinants for the occurrence of risk in children; Institutions working with children at risk; Methodology of socio-pedagogical work with children; Basic parameters of social work with children - socialization and resocialization; Aspects of the professional psychological and pedagogical training of the specialist for working with clients in childhood.
Teaching and assessment:
The training is carried out through a lecture course and practical exercises that introduce students to the main theoretical and current practical - applied aspects of socio-pedagogical work with children.

SM14857 Psychotherapeutic Techniques for Working with Children and Families

ECTS credits: 1 **Weekly classes: 1lec+0sem+0labs+1ps**
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Department of Pedagogy, tel. : 082/ 888 544, E-mail: jdoncheva@gmail.com
Pr. Assist. Prof. Vanya Markova Dineva, Department of Pedagogy, tel. : 082/ 888 544, E-mail: vdineva@gmail.com
Abstract:
The aim of the course raising the level of theoretical and practical knowledge in the field of psychotherapeutic work with children and families; raising the level of professional competence in the application of specific techniques in working with children and families.
Course content:
The program includes a lecture course on topics - general information about the family system, principles and approaches in working with children and families, techniques to work with family history, structured and game techniques using fantasy and imagery, techniques to work with the family structure, behavioral techniques in working with children and families, structured techniques to work with family rules, psychodramatic techniques in working with children and families, artistic techniques for artistic expression, gaming techniques using dolls and objects
Teaching and assessment:
The training is done through lectures and practical exercises.
Requirement - 80% lecture attendance.
Appraisement - according to current student activity and course work

SM13198 Social Work with groups and Communitis

ECTS credits: 2 **Weekly classes:** 2л+0су+0лу+1пу
Assessment: continuous assessment **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Department of Pedagogy, tel. : 082/ 888 544, E-mail: jdoncheva@gmail.com
Pr. Assist. Prof. Vanya Markova Dineva, Department of Pedagogy, tel. : 082/ 888 544, E-mail: vdineva@gmail.com
Abstract:
The purpose of the training in the discipline "Social work with groups" is to provide students with the knowledge, skills and competences to work with the group as a way to achieve a positive change in each member. Group social work is a practical method of social work that helps individuals improve their social functioning and through targeted action helps to more effectively deal with individual, group or microsocial problems.
Course content:
The topics included help to broaden students' knowledge of group communication, group characterization, small group structure, group goals and norms; social and emotional development of the group; leadership styles in the group; types of behavior in a group - roles; forming a decision in a group; power and influence in a group; sociometry as a method for studying group dynamics; crises and crisis intervention in a group.
Teaching and assessment:
The course is taught through lectures and practical exercises according to the syllabus. Students are introduced to the content of the course on an empirical basis, mainly by participating in solving specific selected practical problems. Visual models, simulated situations and business games are used to illustrate and empirically work

SM15714 Social-Pedagogical Counseling

ECTS credits: 3
Weekly classes: 2л+0су+0лу+2пу
Assessment: exam
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Neli Ilieva Boyadzhieva, MA, DSc. Social pedagogy and social work, SU "Kl. Ohridski", E-mail:nelybo@abv.bg Social pedagogy and social work, SU "Kl. Ohridski", E-mail:nelybo@abv.bg
Abstract:
The purpose of the course is for students to acquire knowledge on theoretical foundations and orientation in the methodology of types and forms of psychological counseling and counseling. Special attention is given to the structure and process of counseling.
Course content:
The topics included concern counseling work in its aspects, connections characterizing basic and psychological knowledge. One of the main tasks is to acquaint students with the basics and methods of counseling and counseling. It is also necessary to consider the issues of preparation, training of the consultant, his qualification.
Teaching and assessment:
Lecture teaching is in a traditional academic style supplemented with applied counseling and counseling techniques that are actually applicable in pedagogical practice. The exam is on questions from the outline.

SM15715 Pre-diploma Practice

ECTS credits: 3
Weekly classes: 2л+0су+0лу+5пу
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA,PhD, Department of Pedagogy,tel.082/888 219,E-mail:bilieva@uni-ruse.bg
Abstract:
The purpose of the training in the discipline Pre-graduate internship is to introduce the students of the master's program SOCIAL-PEDAGOGICAL WORK WITH CHILDREN AND FAMILIES to the specific social-pedagogical activity, characteristic of the various institutional social and educational environments and non-governmental sector; to increase their practical training for working with children and adults and to be directly involved in the social helping process.
Course content:
The training is carried out through practical exercises in social services and organizations from the system of the Ministry of Education and Culture, the Ministry of Education, the Ministry of the Interior, the Ministry of Justice, the DAPS and their divisions at the municipal level.
The included topics contribute to the enrichment of the students' social horizons, as well as will provoke discussion on the content, scope and evolution in the social sphere.
Main topics: Basic competences in the practice of social pedagogy. Social services for children and persons /art. 36 of the Regulations for the Implementation of the Law on Social Assistance/. Acquaintance with the regulations and organization of the activity of the monitored social services and institutions.
Teaching and assessment:
In order to receive a certificate in the discipline Pre-graduate internship in socio-pedagogical institutions, the student is required to attend 100% of the practical exercises in the specified institution for social services. The verification of the students' knowledge is carried out by the teacher by filling out a Portfolio by the student and providing the base manager of the practice with an opinion on the acquired knowledge, skills and experience; display of responsible attitude; compliance with internal rules and others.

SM15714 Social Protection of the Child and Family

ECTS credits : 2 **Weekly workload: 2l+0se+0 le+1 pe**
Assessment: continuous assessment **Type of exam: written**
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Dept. of Pedagogy, tel.: 082/ 888 219, E-mail:bilieva@uni-ruse.bg
Abstract:
The objectives of this course are related to the provision of basic knowledge of students on the measures for protection; administrative order for a child outside the family; nature, goals and objectives of the reform of the childcare system; State policy in the provision of social services; nature and level of preventive and reintegration activities and more
Course content:
The curriculum includes required swarm themes and to the maximum extent consistent with the objectives of the course, namely zapaznae students with contemporary problems of persons and children at risk. The main topics are aimed at increasing knowledge regarding the different legal base- Family Code, the Law on Child Protection and the regulations thereto, the Social Assistance Act and the regulations thereto, regulations and strategies.
Teaching and assessment:
Teaching is in the form of lectures, all topics are illustrated and use various interactive forms, presentations, solving katsusi, group discussion and others. In the course of conducting their controversial issues related to the characteristics of the rearing of children and address the fundamental and specific needs. The final grade is based on the result of the test.

SM14861 Integration of disadvantaged children into educational institutions

ECTS credits: 1 **Weekly classes**: 1lec+0sem+0labs+0ps
Assessment: exam **Type of exam**: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel.: 082/ 888 268, E mail:dstoyanova@uni-ruse.bg
Abstract:
The course aims to introduce students to the pedagogical aspects of the re-socialization of children with deviant behavior, and to prepare future teachers to work with disadvantaged children in the direction of their socialization and integration.
Course content:
The course contains topics related to the clarification of the main determinants of behavioral deviations among disadvantaged children and related with overcoming them current strategies and approaches..
The material includes basic theory and knowledge of the structure of the various institutions of socialization and re-socialization of the respective groups of disadvantaged children and specifics in psychological and pedagogical work with them.
Teaching and assessment:
The training of basic training allows students to realize in the course of lectures. Basic methods of teaching are information-explanatory and illustrative. To individual topics include problematic issues provoking independent thinking of students (additional teaching methods - Problem statement and heuristic).
By introducing problematic and debatable character when considering the specifics of pedagogical work with disadvantaged children, the aim is to build students' personal and professional qualities as a culture of pedagogical communication, tolerance, skills for applying the most up-to-date approaches, principles, methods and techniques for diagnosis and correction of disorders in the cognitive and social development of different groups of children.

SM15717 Role training

ECTS credits: 1
Weekly classes: 10lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Prof. Stoyko Ivanov, MA, DSc, tel.: 0884798669, E-mail: stoyko.v.ivanov@gmail.com
Petya Cheshmedzhieva, MA, PhD, A part-time lecturer, Department of Pedagogy,tel.: 0887923413, E-mail: petia.cheshmezhieva@gmail.com
Abstract:
The purpose of the training on this subject is the students to obtain basic knowledge with references to the practice for research and identification of social issues and skills for their control, for the formation of necessary competences for understanding emotional experiences and psychical conditions resulting of the role relations between people and for planning forms for their adjustment in the social – psychological work with children and families.
Course content:
In the offered course of "Role Training" are combined issues having fundamental psychological theories, advanced researches, knowledge of different subjects for the role analysis and role-play games in individual and group forms for personal growth, for prevention, adjustment and prophylaxis of psychical difficulties and for support of social adaptation.
Teaching and assessment:
The training of students affords the preparation to be realized during the lecture course with problematic background by combining presentations, analyses on schemes and interactive studying by discussion of individual cases, debating, role-play games, individual and group working methods, in view of adoption of knowledge and acquisition of professional competences. The current grade is formed by active participation in the lectures and written work on role analyses.

SM15718 Quality Management of Socio-pedagogical Work

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturer:
Assoc. Prof. Bagriana Rashkova Ilieva, MA, PhD, Department of Pedagogy, Tel. 082-888-219, E-mail: bilieva@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the standards, principles and procedures for control and monitoring by social service providers, the municipality, the Agency for the Quality of Social Services.
Course content:
The emphasis in the course is on the theoretical and practical importance of informing students with the organized activities for developing quality social services from a provider, but also with services, the order of control, monitoring and evaluation of the quality and effectiveness of social services.
Main topics:
Quality of social services - the criteria for the implementation of quality standards and the basic principles for development by social service providers; Development of programs for the development of the quality of social services; Procedure for control and monitoring by social service providers, the municipality, the Agency for the Quality of Social Services, etc.
Teaching and assessment:
The assessment procedure is an ongoing assessment. The final grade is formed according to the individual results of the submitted individual assignment prepared during the semester.

SM15719 Social Work with Minority Children

ECTS credits: 1
Weekly classes: 1л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA,PhD, Department of Pedagogy,tel.082/888 219,E-mail: bilieva@uni-ruse.bg
Assist. Prof. Dima Stefanova Spasova, Department of Pedagogy,tel.082/888 752,E-mail: dspasova@uni-ruse.bg **Abstract:**
The purpose of the training in the discipline "Social work with children from minorities" is to acquire students theoretical knowledge of different ethnicities, the specifics of the multi-ethnic environment, as well as developing competencies for practical work in such an environment. This is an integrative discipline. It is optional in the preparation of social educators. The course deals with the main problems, concepts and patterns of working with minority children. Also included are questions regarding the impact of the wider social environment on the issue.
Course content:
Socio-psychological problems - general characteristics, characteristics of ethnic groups and multiculturalism. General pedagogical and methodological features of working with children from minorities - theoretical and practical guidelines for work. The Meaning of Inclusion Work and Identification - Problems and Projections. Methods and principles. Forms and means. Competencies for work. Cultural traditions and pedagogical work - interaction with other organizations, people and groups. The meaning of working on the problems of multiculturalism in the process of global globalization. Work programs.
Teaching and assessment:
The training in the discipline "Social work with minority children" is delivered through lectures. The lectures are held in front of the whole group. During the lectures, video materials and active teaching methods are used. The combination of individual and group ways of working makes it possible to master the intended material.

SM15720 Interaction Between Family and Educational Institutions

ECTS credits: 1
Weekly classes:2lec+0sem+0labs+0ps
Assessment: continue assessment
Type of exam: - written
Departments involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel.: 082/ 888 268, E mail:dstoyanova@uni-ruse.bg
Abstract:
The main objective of the course is to acquaint students at the necessary level of basic scientific knowledge in the field of social and educational work in the sphere of coordination betwwen the family and educational institutions and to form in them skills to use relevant and effective approaches, methods and strategies in their future professional activity.
Course content:
In the course of "Interaction between family and educational institutions" are considered first the parameters of convergence and differentiation between family and institutionalized educational systems, the essence, component structure, directions, goals, objectives of coordinating activities between the two social institute. Main topics: Essence, specificity and importance of collaboration and synchronization of pedagogical goals between family and educational institutions; Purpose, functions and areas of cooperation between family and public educational institutions; Forms of interaction of the family with educational institutions;
Teaching and Assessment:
The teaching of students allow to realize the basic preparing in the process of the lectures. The material creates the problematical background with the orientation that is full of content on the practical learning. In the process of the lectures are used the active forms of educating.

SM15721 Communicative Skills and Teamwork

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Departments involved:
Department of Pedagogy
Faculty of Natural Science and Education
Lecturers:
Prof. Julia Georgieva Doncheva, MA, DSc, Department of Pedagogy, tel. : 082/ 888 544, E-mail: jdoncheva@uni-ruse.bg
Pr. Assist. Prof. Vanya Markova Dineva, Department of Pedagogy, tel. : 082/ 888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The aim of the course raising the level of theoretical and practical knowledge in the area of key competences for working life.
Course content:
The program includes a lecture course on topics – nature and team characteristics, teamwork basics, team and group differences, types of teams, factors and criteria for effective team work, team leadership, basic aspects of teamwork communication, conflicts and communication, key communication skills.
Teaching and assessment:
The training is done through lectures and practical examples.
Requirement - 80% lecture attendance.
Appraisement - according to current student activity and an academic essay.

SM13162 Thesis/ State written exam

ECTS credits: 15
Weekly classes: 0л+0су+0лу+0пу
Assessment: exam
Type of exam: written/ oral
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department of Pedagogy, Psychology and History and experts in the field of Pedagogy and pedagogical prevention.
Abstract:
Students choose from two options at the final stage of the master's degree: to take a written state exam on a pre-set outline or to develop and defend a thesis. In the written state exam option, students develop two topics from the synopsis within four astronomy hours. In the diploma works, students show their capabilities and skills to develop diploma theses in the field of prevention and probation. During the defense of the thesis, the students demonstrate their knowledge and professional competences. The thesis in the master's degree is an individual development under the guidance of a teacher, a research supervisor, and, if necessary, a consultant. Their task is to give the graduate the opportunity to show his professional skills acquired during the training.
Course content:
Students submit applications with the stated thesis topic. The department draws up a list of students and announces reviewers for the relevant theses.
Teaching and assessment:
he department of "Pedagogy" is responsible for the conduct of the state exam or thesis defense. A state examination commission evaluates the written works, as well as the developed theses and their defense.

SM14622 State (Practical) Exam

ECTS credits: 5 **Weekly classes:** 0л+0су+0лу+0пу
Assessment: exam **Type of exam: written/spoken**
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
At least three qualified teachers in Profesional direction 1.2. Pedagogy, participating in lecture courses in the master's program and included in the State Examination Commission, approved by order of the Rector of the RU.
Abstract:
The state (practical) exam consists of: presentation of a presentation developed by the student on a topic from a predetermined outline; an additional examination task that the state examination board may set for students.
The assessment is carried out by the state examination commission, and the overall assessment is formed by the assessment of the presented presentation and the assessment of the developed additional examination task.
Teaching and assessment:
The "Pedagogy" department is responsible for conducting the state practical-applied exam. A state examination commission evaluates the developed presentations and their defense.

POSTGRADUATE STUDIES IN PEDAGOGICAL PREVENTION OF CRIME AND PROBATION PRACTICES

PROFESSIONAL STANDARDS

OF A MASTER IN PEDAGOGICAL PREVENTION OF CRIME AND PROBATION PRACTICES

Degree Programme: **Social and Pedagogical Work with Children and Families**
Educational Degree: **Master**
Professional Qualification: **Social Pedagogue**
Term of education: **1,5 year (3 terms)**

The main goal of the master's course "Pedagogical Crime Prevention and Probation Practices" is to prepare qualified specialists with in-depth and up-to-date theoretical and practical training in the field of management, control and methodology of social-preventive, correctional-resocialization and probation activities.

The training in the master's program "Pedagogical Crime Prevention and Probation Practices" is based on educational and qualification parameters that enable the full realization of future social pedagogues in an educational, integrating, socially supportive, (re)socializing, research and organizational environment with specific socio-pedagogical problems, as well as for work in the support system, social and probationary activities in the state and non-governmental sectors.

The master's program "Pedagogical Crime Prevention and Probation Practices" can teach bachelors and masters who have obtained a higher education in the professional field of "Pedagogy" and "Psychology".

The professional purpose of the master's degree in "Pedagogical Crime Prevention and Probation Practices" is to provide pedagogical, expert, consulting and organizational assistance to children, adults and old people with socio-pedagogical problems and to carry out educational and organizational activities in school and out-of-school environments.
The training is built on the basis of:

Fundamental training: The training of future social pedagogues creates an opportunity to acquire knowledge of professional training in the field of criminal law, institutional functions, education of children and adults with deviant behavior, prevention of social risks and probation practices.

Basic knowledge in the field of psychological and pedagogical disciplines: Basics of preventive and probationary activity, Criminal law, Criminal process, Applied social psychology, Institutions for prevention and resocialization of children and adults, Penitentiary pedagogy.

Special methodical training carried out by studying Methods of preventive and probationary activity, Social-pedagogical counseling and counseling, Psychology of aggressive behavior, Prevention and control of crime, Prevention and management of social conflicts, Communication and visual psychodiagnostics, etc.

The specialized training of the future masters - social pedagogues includes a scientific-research practicum in social-pedagogical and resocialization facilities and institutions. Thus, equality is achieved between the theoretical and practical training of the students.

The master's training in "Pedagogical Crime Prevention and Probation Practices" is aimed at acquiring the following knowledge, skills and attitudes:
- Academic and pedagogical competence;
- Communicative competence;
- Administrative competence;
- Organizational competence.

The Master of Social Pedagogy has the following opportunities for professional realization:

In the system of the Ministry of Education and Science:
• educator and social pedagogue in primary and secondary schools, socio-pedagogical boarding schools, Center for supporting the personal development of children, Center for special educational support, in children's villages, in out-of-school institutions, educational boarding schools (VUI);
• pedagogical adviser in schools;
• an expert at regional education administrations on issues related to specific educational needs and behavioral deviations of children;
• expert in the municipal department "Education";
• consultant and expert in socio-pedagogical centers and offices, in socio-therapeutic institutions,

• consultant and organizer of socio-cultural activities in different age, ethnic and professional communities, in non-governmental and charitable organizations in centers for activities of interest, for the organization of free time; in centers working on health programs for sexual and mental health, etc., in the system of continuous education;
• consulting work with parents, children, teachers, educators when social problems arise, with families, children and youth at risk, etc.; in municipal committees to combat anti-social behavior of minors;
• specialized organizational, diagnostic and control activity in the areas of support, rehabilitation, resocialization and integration of children and families at risk and with behavioral problems;
• non-governmental organizations with a charitable and humanitarian purpose
• analytical specialist in education as a researcher in the field of social pedagogy.

In the system of the Ministry of Internal Affairs:

• inspector in children's pedagogical rooms;
• social pedagogue in homes for temporary accommodation of minors;
• social pedagogue and public educator at commissions and centers for combating anti-social behavior of minors; in various state structures with socializing and resocializing functions, with adults included in probation activity programs; in places of deprivation of liberty and in probation services for persons with deviant and delinquent behavior;

n the system of the Ministry of Justice:

• educator and social pedagogue in penitentiary institutions;
• educator and social pedagogue in probation centers.

In the system of the Ministry of Labor and Social Policy as:

• expert in the municipal committees for child protection, in the child protection departments of the "Social Assistance" municipal directorates.
• expert in the "Social Protection" departments at the town halls, social patronage, the labor offices, the Employment Agency and its territorial subdivisions; NSI, Ministry of Health, the regional administration - directorates and departments at the municipal level, homes for the elderly; centers for socially disadvantaged persons; mental health centers, etc.

In the system of the State Agency for Social Assistance as experts.

The master's degree is acquired after three semesters in total for the study course: 90 ECTS credits), according to the curriculum.
The education of the students in the Master's College ends with the successful passing of a written State exam in the specialty or with the defense of a Diploma Thesis.

CURRICULUM

OF THE DEGREE COURSE IN

PEDAGOGICAL PREVENTION OF CRIME AND PROBATION PRACTICES

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
SM13271	Foundations of Preventive and Probation Activity	5	SM13277	Prevention and Probation Methods	6
SM17374	Criminal Law	5	SM13278	Social and Pedagogical Counselling and Advising	6
SM17375	Criminal Executive Law	5	SM13279	Psychology of Aggressive Behaviour	5
SM13274	Applied Social Psychology	7	SM13280	Prevention and Management of Social Conflicts	5
SM13275	Institutions for Prevention and Resocialization of Children and Adults	4	SM13281	Crime Prevention and Control	4
SM14627	Correctional Pedagogy	4	***Elective courses (students elect a course)***		
			SM13282	Human Rights and European Practices	4
			SM13283	Communication Skills and Team Work Skills	4
			SM13284	Social and Psychological Training	4
			SM14628	Psychology of Risk Groups	4
	Total for the term:	***30***		***Total for the term:***	***30***

Second year

Code	*Third term*	*ECTS*
SM14629	Communication and Visual Psychodiagnostics	4
SM15741	Social and Pedagogical Work with Children and Adolescents in Risk	4
SM13287	Research Practicum in Social and Pedagogical Resocialisation Institutions	5
Elective courses (students elect a course)		
SM14631	Investments and Innovations in Preventive and Probation Social Work	2
SM14632	Leisure Time Pedagogy	2
SM14633	Pedagogical Diagnostics	2
SM14634	Problems of the Deviant Behavior	2
Graduation Procedure (Option 1)		
SM14622	State Board Practical Exam	5
SM14623	Master Thesis Defense	10
Graduation Procedure (Option 2)		
SM14622	State Board Practical Exam	5
SM14623	State Board Written Exam	10
	Total for the term:	

Total for the course of study: 90 ECTS credits

SM13271 Bases of Preventive and Probation Activity

ECTS credits: 5 **Weekly classes:** 3л+0су+0лу+0пу
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy, tel.: 082/888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The course teaches students about the essential characteristics of prevention and probation and provides knowledge of the factors that determine the specifics of correctional and educational effects related to perpetrators of anti-social acts and crimes. Upon successful completion of the course, students are expected to know the basics of the preventive-probation process, the organizational approaches to corrective-educational influence and the peculiarities of the activity of the various law enforcement, re-socialization and probation institutions.
Course content:
The topics included help to expand the criminological, penological and ethopedic outlook of the student-pedagogues, give an idea of the most rational preventive-pedagogical ideas, theories, forms, means and systems for the prevention and correction of anti-social behavior and protection of citizens against harm.
Teaching and assessment:
The training in the basics of preventive and probation activity is delivered through lectures. The lectures are held in front of the whole group. During the lectures, video materials and active teaching methods are used. The combination of individual and group ways of working makes it possible to master the intended material. In the course of training, active methods of teaching and learning are used - presentations, discussions, discussion of situation

SM14626 Criminal Law

ECTS credits: 5 **Weekly classes:** 2л+1су+0лу+0пу
Assessment: exam **Type of exam:** written
Department involved:
Department of Public Law
Faculty of Law Studies
Lecturers:
Assoc. Prof. Svetlin Petkov Antonov, MA, PhD, Department of Public Law, E-mail: spantonov@uni-ruse.bg
Abstract:
The purpose of criminal law training is to provide basic knowledge of the types of crimes and the penalties provided for. Criminal law is a voluminous and difficult to adopt legal discipline. At the same time, it is fundamental in combating crime. Therefore, its importance for the formation of the necessary knowledge and skills in students is extremely important. Studying and acquiring knowledge of criminal law is a necessary prerequisite for successful preparation in the discipline - criminal process.
Course content:
The topics covered cover in detail the general and the special part of the criminal law. The general part of criminal law introduces students to the basic concepts and principles of criminal law. The special section deals with the different types of criminal groups and the sanctions provided for them.
Teaching and assessment:
The teaching process is performed through lectures and seminar sessions. They elucidate the basic terminology meanings and institutional organisations as referred to in the general part of the criminal law procedure. For the final assessment students sit for a written examination including the development of two issues related to the general and the specialised part of the criminal law procedure.

SM13273 Criminal Law Procedure

ECTS credits: 5
Weekly classes: 2л+1су+0лу+0пу
Assessment: exam
Type of exam: written
Department involved:
Department of Public Law
Faculty of Law Studies
Lecturers:
Assoc. Prof. Svetlin Petkov Antonov, MA, PhD, Department of Public Law, E-mail: spantonov@uni-ruse.bg
Abstract:
The discipline "Criminal Procedure" is a basic criminal law discipline, which is inextricably linked to the discipline "Criminal Law". The purpose of the course is to familiarize students with the subject and tasks of the criminal process, namely the detection and proving of a crime in accordance with the procedure stipulated in the Code of Criminal Procedure.
Course content:
The included lecture topics cover in detail the general and the special part of the criminal process. The general part deals with the system of the basic beginnings of the criminal process, the concept of subjects of the process. The special part deals with the organization and tasks of the different procedural phases and stages. In the course of training with students they conduct seminars in which practical cases are solved.
Teaching and assessment:
Criminal process training is provided through lectures and seminars. The lectures explain the concepts and institutions of the common part of the criminal process. The final examination of the knowledge acquired in the course is in the form of an examination, which consists in the written development of one question from the general and the specific part of the criminal process.

SM13274 Applied Social Psychology

ECTS credits: 7
Weekly classes: 3л+1су+0лу+0пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Vanya Markova Dineva, MA, PhD, Department of Pedagogy, tel.: 082/888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
The course objective is to acquaint students with the leading social psychological statements, applied and research practices.
Course content:
Subject and development of the social psychology in scientific and practical aspect; Social group, group rules, functions of a social group; Interpersonal relations in a group – attracting and repelling, sympathy and antipathy, love and hatred, psychological compatibility; Leadership as a social phenomenon, charisma, leader and chief, style, roles, leader's functions, leader types ; Suggestion, propaganda, fashion, imitation as public psychic phenomena; Public behavior in social disaster - panic; Gossips and public behavior, anti-gossip campaign; Social movements – crowds and incidental groups; Aggression, aggressive behavior, aggressiveness – frustration and social learning, aggressive behavior and motives, aggression management.
Teaching and assessment:
The lectures and seminar sessions are carried out with a group. Characteristic of the seminar classes is the teamwork and lecturing face-to-face. Students are assigned individual tasks for individual study related to analysis of results from test research and questionnaires.

SM13275 Institutions for Prevention and Re-socialisation of Children and Adults

ECTS credits: 4 **Weekly classes:** 2л+0су+0лу+0пу
Assessment: continuous assessment **Type of exam: written**
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstact:
Introducing students to the nature, functions and role of prevention and re-socialization institutions for children and adults, focusing also on the social and educational / upbringing / impact on people in situations of risk / need /.
Course content:
The course will provide students with theoretical knowledge of the specialized institutions in the country and in Europe, the specific features, characteristics and conditions of life and activity in them. Students will gain knowledge of the methods, techniques and technologies of providing social and pedagogical assistance and support, as well as of the mechanisms for socialization and re-socialization of those housed in the institutions. Familiarize yourself with the existing social services in specialized institutions and in the community and the ways of their provision.
Given the interdisciplinary nature of the scientific field, an attitude for interinstitutional dialogue and social work is formed in the social assistance system.
Teaching and assessment:
The training is mainly conducted in a lecture format, which is combined with practical classes - in-stream. During the training, the following methods are applied: judgments, group discussions, case studies, small group work, conversation. Individual and group forms of work are used, which allows more successful mastering of the study material.

SM14627 Penitentiary Pedagogy

ECTS credits: 4 **Weekly classes:** 2л+0су+0лу+0пу
Assessment: continuous assessment **Type of exam: written**
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The aim of the course is to provide students with basic knowledge and skills in the field of penitentiary pedagogy necessary for the organization of an effective pedagogical process in prisons - prisons, prison dormitories, boarding schools and social-pedagogical schools. Discipline plays an important role in the general system for psychological and pedagogical preparation of social pedagogues. enables students to orient themselves in the specifics of work in the various institutions for the upbringing, training and education of children and persons located in these institutions.
Course content:
Basic knowledge related to concepts such as penitentiary pedagogy, principles, forms, methods and means of penitentiary treatment is emphasized. until the preparation for her departure; organizing and implementing the upbringing, training, vocational training, activities of interest and life of the convicted children or persons.
Teaching and assessment:
Penitentiary Pedagogy is taught through lectures. The lectures are held in front of the whole group. During the lectures, video materials and active teaching methods are used.

SM13277 Methods of Preventive and Probation Activities

ECTS credits: 6
Weekly classes: 3л+1су+0лу+0пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy, tel.: 082/888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The aim of the course is to acquaint students with the methodological bases of preventive and probation activity and to help them to acquire the professional role of the probation officer and to gain orientation in the practical approaches and methodology of crime prevention and protection of citizens from criminal attacks. Upon successful completion of the course, students should acquire a thorough knowledge of the specificities of applying traditional and interactive methods for positive personal change and re-socialization of persons with antisocial behavior.
Course content:
The topics included contribute to the extension of the methodological training of pedagogical students in the field of general criminological, penological and ethopedic policies and practices. They suggest the acquisition of the most rational preventive-pedagogical forms. methods and technologies for the prevention and correction of anti-social behavior and the protection of citizens from criminal attacks. The content of the taught material is arranged in two separate theoretical sections.
Teaching and assessment:
The lectures are held in front of the whole group. During the lectures, video materials and active teaching methods are used. In the course of training, active methods of teaching and learning are used - presentations. discussions, small group work, case studies, diagnosis and assessment of individual risk behavior, development of individual and group programs for prevention and correction of risk behavior.

SM13278 Social-pedagogical Consulting and Counseling

ECTS credits: 6
Weekly classes: 3л+1су+0лу+0пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education”
Lecturers:
Pr. Assist. Prof. Vanya Markova Dineva, MA, PhD, Department of Pedagogy, tel..: 082/888 544, E-mail: vdineva@uni-ruse.bg
Abstract:
Pedagogical counseling for children and families is a compulsory discipline. The course content is intended to provide basic knowledge in counseling. In the context of contemporary practical psychology, the course is of particular relevance. This is the reason for the precision in dealing with issues such as: consultation as a process, elements of consultation, phases of consultation and others. The discipline is based on integrative relationships with others, related to it - personality psychology, upbringing theory, methods of social work.
Course content:
The training content is detailed and detailed and provides basic training on counseling issues. Main topics are covered that discuss the nature of counseling, its relation to other scientific fields and disciplines, its diversity and the forms with which it is realized.
Teaching and assessment:
The work is carried out in a group where basic knowledge is initially given in relation to basic training. Training is also provided to test good practices related to competition, in which students live with the forms, methods, features of counseling as an atypical but necessary activity for Bulgarian conditions.The form of examination is the exam.

SM13279 Psychology of Aggressive Behavior

ECTS credits: 5
Weekly classes: 2л+1су+0лу+0пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstract:
Introducing students to the basic theoretical schools and directions, concerning the nature and manifestations of aggressive behavior, the factors and conditions that provoke it, the ways of its diagnosis, prognosis and its limitation.
Course content:
The content of the thematic block includes theoretical knowledge about the nature of aggression, its directions of origin, the distinction between forms and types of aggression. Main topics: The essence of aggressive behavior; Forms and types of aggressive behavior; Psychological theories of the origin and explanation of aggression as a social phenomenon; Diagnosis of aggressive manifestations; Factors and conditions for aggression; Methods and techniques for reducing aggressive behavior; Predicting aggressive behaviors in individuals, communities and groups.
Teaching and assessment:
The training is carried out in the form of lectures, and the seminars are organized in a group, which allows the combination of a lecture with a seminar form of work and is a prerequisite for the effective mastery of the intended study material. The presentations in the lecture course are complemented by the variety of active methods of working in the seminars - simulation games, small and large group work, case studies, use of tests and questionnaires, group discussions and discussions.

SM13280 Social Conflicts Prevention and Management

ECTS credits: 5
Weekly classes: 2л+0су+0лу+1пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Raskova Ilieva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 219, E-mail: bilieva@uni-ruse.bg
Abstact:
The main goals of the course are students to acquire and enrich their knowledge of the nature of conflicts - approaches, strategies and tools in conflict management, by acquiring leading theories in the field of conflictology, organizational culture and to acquire skills in conflict resolution in the workplace, skills for analyzing social conflict; negotiation skills to resolve a particular case or conflict; teamwork and decision-making skills to resolve a particular dispute or conflict.
Course content:
Topics such as: Characterization of conflict as a social phenomenon are included: Nature of conflict and its structure; Definition of the basic structural elements of the conflict; Classification of the conflict - causes and dynamics; Functions of conflict; Theories about the mechanisms of conflict emergence: Technology of conflict prevention and management: Conflict management and resolution and conflict prevention; Prerequisites for the prevention of conflicts in the work environment; Theories and basic models for personality behavior in conflict.
Teaching and assessment:
Discussions, presentations, role-playing and simulation games are included during the lectures in order to better illustrate the nature of conflicts, to analyze various conflict cases and to look for effective tools for overcoming and preventing them. Interactive learning approaches are used to help students acquire advisory and practical skills in analyzing, resolving and managing social conflicts during the dialogue process.

SM13281 Crime Prevention and Control

ECTS credits: 4
Weekly classes: 2л+1су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Public Law
Faculty of Law
Lecturers:
Assoc. Prof. Svetlin Petkov Antonov, MA, PhD, Department of Public Law, E-mail: spantonov@uni-ruse.bg
Abstract:
The course " Crime Prevention and Control" aims to introduce students to the basic concepts of criminology - crime, characteristics and trends of crime, prevention and control of crime, as well as to link to specific national criminological studies and specific issues of prevention and crime control in the country. The second big goal is to look at punishment probation from a criminological point of view.
Course content:
General Crime Exercise - A common characteristic of crime, crime and crime, types of crime; Criminological characteristics of crime - quantitative and qualitative features; major factors influencing crime characteristics; Crime in modern Bulgaria - trends; Crime in modern Bulgaria - factors and forecasts; General Exercise on the Offender's Personality. Individual criminal behavior. Investigation of crime and criminal behavior - common problems, specialized criminological services, types of criminological investigations. State system for crime prevention and control, public crime prevention; Probation - punishment and impact measure - characteristic of the Penal Code and the Law on Execution of Punishments.
Teaching and assessment:
Lectures and individual work on practical questions.

SM13282 Human Rights and the European Practice

ECTS credits: 4
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education"
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.:082/888219, E-mail: bilieva@uni-ruse.bg
Abstract
The course aims to introduce students to the interdisciplinary issues of human rights. It aims at broad awareness and the ability to independently implement human rights protection mechanisms. These mechanisms are of interest to specialists in various fields as well as to every citizen of the Republic of Bulgaria.
Course content:
Human rights ideas that are constantly evolving will be presented. That is why it will start with the historical development of ideas for the protection of human rights and fundamental rights and obligations of citizens. Particular attention has been paid to the legal framework for protection in the European system and the case law of the European Court of Human Rights. The question is raised about human rights and the membership of the Republic of Bulgaria in the EU. The regular reports of the European Commission on the progress of the Republic of Bulgaria in their part concerning human rights are discussed. They are introduced to the European system for the protection of human rights established within the Council of Europe: the European Convention on Human Rights and Fundamental Freedoms and its additional protocols. The problems of European citizenship are presented.
Teaching and assessment:
The students' education takes the form of lectures that are analyzed and discussed. During the lectures, issues related to the state, attitudes and current issues of human rights and EU practice are discussed and discussed.

SM13283 Communicative Skills and Teamwork

ECTS credits: 4
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The foreseen issues deepen students' knowledge of communication skills and their refinement in human interaction. Emphasis is placed on teamwork and collaboration in a professional group setting. Students are introduced to effective communication and information communication techniques and technologies. The possibilities for regulating the contacts in the conditions of team work, for optimizing the activities in fulfilling the team goals and tasks are considered.
Course content:
The main topics covered in the course are: Contemporary aspects of communication in social groups. Communicative skill and communicative quality. Factors and conditions for increasing the effectiveness of team collaboration. Means and methods. Specificity of communication skills according to the nature of the activity. Communication skills and communication cooperation. Formation and functioning of the team in organizations and institutions. Means and methods.
Teaching and assessment:
The lecture course focuses on the theoretical aspects of modern human communication. Tests are envisaged to establish the students' communication skills. The written exam is conducted on preliminary questions.

SM13284 Social Psychological Training

ECTS credits: 4
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Vanya Markova Dineva, MA, PhD, Department of Pedagogy, tel..: 082/888 544, E-mail: vdineva@uni-ruse.bg

Abstract:
Pedagogical training is complementary training to enhance students' socio-communicative competence. One of its major goals is to offer models, options and options for enriching and diversifying traditional interactions with children in the classroom with innovative, educational and didactic technologies. Enriched with interactive techniques, the course acquires an empirical focus with the potential to optimize interpersonal relationships between students, in a team setting, or to solve tasks by co-workers who increase their emotional sensitivity and subdue conflict resolution techniques in and out of the classroom.
Course content:
The content of the included topics at the first level introduces the students to the training as a type of interaction in terms of its organization and nature. Following is the clarification of the training opportunities as a type of organization and technology in the framework of interpersonal communication, the requirements for it in order to effectively guide it.
Teaching and assessment:
The work is carried out in a group of atypical lecture course work. The logic of this type of organization is defined by its nature and goals. The guidance is dictated mainly by the principle of discretion and is implemented in terms of cooperation. Interactive work techniques and active training methods take precedence.The form of check a is a colloquium. It is based on ongoing assessments that address the quality of student involvement in daily work.

SM14628 Psychology of Risk Groups

ECTS credits: 4
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Vanya Markova Dineva, MA, PhD, Department of Pedagogy, tel.: 082/888 544, E-mail: vdineva@uni-ruse.bg
Abstact:
The main objective of the course is to integrate students' knowledge of developmental psychology, psychology of aggressive behavior, applied social psychology, social work with children and families at risk. the basics and methods of social work. The psychological features of existing and emerging groups with risky behavior, support and treatment of persons with deviant behavior are considered. Students' knowledge of group dynamics issues, factors that demotivate social-positive behavior, and specific risky actions of children and adults in groups with asocial orientation are expanded and deepened. The knowledge about group dynamics is expanded and deepened, and the skills for monitoring and analyzing the decision-making and prevention process of working with such groups are improved.
Course content:
The main topics covered in the course are: Psychological characteristics of the risk group. Nature and types of risk groups. The group as a system of social deactivation. Methods and techniques for solving problems in risk group conditions. Group dynamics. Analysis and monitoring of the communication process in the risk group. Activities of the educator and social worker to provide social assistance.
Teaching and assessment:
The course aims to introduce students to the peculiarities of the activities of the teacher and the social worker when working in a risk group. Activated methods for examining and describing individual cases are provided on separate topics. The exam is a syllabus that addresses the major issues of the discipline.

SM14629 Communication and Visual Psychodiagnosis

ECTS credits: 4
Weekly classes: 3л+0су+0лу+1пу
Assessment: exam
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Absract:
The main objective of the course is to expand students' knowledge and skills in dealing with the specifics of communication and diagnosis of non-verbal behavior. Issues related to the conditions and factors for risky behavior among adolescents and social groups in society are clarified. Emphasis is placed on examining the methods of visual diagnostics in human behavior, the criminal contingent.
Course content:
The social nature of communication. Manage communication. Interaction in communication. Development of communicative competence. Determination of communication risk. Preparation and regulation of risk. Subject of visual psychodiagnosis. Areas for studying non-verbal communication and human habits.
Teaching and assessment:
The lecture course follows the traditional teaching methodology. Practical exercises use tests to absorb knowledge and to develop communication skills in the various forms of communication between people.

SM15741 Social and Pedagogical Work with Children and Young People at Risk

ECTS credits: 4 **Weekly classes:** 3л+0су+0лу+1пу
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education"
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstract:
The training material in the program includes basic theoretical knowledge of the structure and functions of the various state institutions and public organizations involved in the socialization and re-socialization of children and young people at risk, as well as the specifics in the socio-pedagogical work with them. The practical exercises in the discipline are aimed at forming in students the skills to know and evaluate the applicability of different strategies and models for working with children and young people at risk in the real situations of educational practice in our country;
Course content:
The nature and characteristics of the child at risk as a specific subject of social-pedagogical interaction; Characteristics of the types of groups of children and young people at risk; Determinants of occurrence of risk in children; Conditions for occurrence of socio-pedagogical risk; Institutions working with children and young people at risk; Methodology of social and pedagogical work with children and young people at risk; Forms, principles and methods of social-pedagogical work with risk groups; The main parameters of social work with children and young people at risk - socialization and re-socialization;
Teaching and assessment:
The training is provided through a lecture course and practical exercises that familiarize students with the basic theoretical and current practical - applied aspects of social and pedagogical work with children and young people at risk.

SM13287 Scientific Research Workshop in Social-pedagogical and Resocialization Homes and Institutions

ECTS credits: 5 **Weekly classes:** 1л+0су+0лу+4пу
Assessment: exam **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.:082/888219, E-mail: bilieva@uni-ruse.bg
Assoc. Prof. Svetlin Petkov Antonov, MA, PhD, Department of Public Law, E-mail: spantonov@uni-ruse.bg
Abstract:
The discipline is practically applied. It focuses on two organizational points. The first one is related to lecturing on the problems of methodology and methodology of socio-pedagogical research. The second one is applied - organization of practical activity in institutions.
Course content:
Planning, organizing and conducting socio-pedagogical studies. Presentation and analysis of results. Methods of socio-pedagogical research. Development and design of a thesis. The foreseen practical exercises are carried out under the conditions of institutions for prevention, socialization and re-socialization and Probation services.
Teaching and assessment:
The lecture course envisages the combination of an information and explanatory form with the individual development of a concept for a specific socio-pedagogical research. Practical classes are implemented in the mentioned institutions for socialization and re-socialization of children and adults. The written examination is conducted in two stages: a pre-created test on the technology of socio-pedagogical research and protection of the educational, preventive, probation activity performed on the basis of a completed portfolio by the student during practice in the institutions.

SM14631 Investments and Innovations in the Preventive Probation and Social Activities

ECTS credits: 2 **Weekly classes: 2**л+0су+0лу+0пу
Assessment: continuous assessment **Type of exam: written**
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education"
Lecturers:
Assoc. Prof. Bagryana Rashkova Ilieva, MA, PhD, Department of Pedagogy, tel.:082/888 219, E-mail: bilieva@uni-ruse.bg
Abstract:
Introducing the students to the opportunities, conditions and ways of introducing innovative technologies in the prevention and probation activity, which are enshrined in the strategies of the Council of Ministers, European practices and local governance structures.
Course content:
The topics included help broaden students' perspectives on prevention and probation, both in European countries and in global practice. will gain knowledge of the specifics of the application of probation measures in different countries. They will acquire the skills to compare Bulgarian and European legislation in the field of probation and to analyze the programs for the prevention of criminal offenses. Main topics: The essence of investment and innovation in prevention and probation; Comparative analysis of the legislative systems in Europe and Bulgaria; Methods of punishment probation - comparative analysis; Special rules and procedures for the treatment of juvenile offenders; Risk prevention and management strategies; The project approach in prevention and probation.
Teaching and assessment:
The learning process involves mainly a lecture course delivered before the stream. In addition to presentations by the lecturer, there are also practical orientated classes that include the following methods of work: Small group work; Work and discussion in large groups; Case work; teamwork, conversations. The variety of active methods of interaction with students increases their engagement and contributes to more effective learning of the study material.

SM14632 Pedagogy of the Free Time

ECTS credits: 2 **Weekly classes:** 2л+0су+0лу+0пу
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Assoc. Prof. Lora Mihailova Radoslavova, MA, PhD, Department of Pedagogy, tel.: 082/888 219, E-mail: lradoslavova@uni-ruse.bg
Abstract:
The purpose of leisure pedagogy training is to reveal different aspects of the problem of leisure, and above all, its rational use.
Course content:
The program includes topics that look at calendar forms of leisure - secular and religious holidays, festivals, carnivals, sports, annual vacations, trips and daily forms manifesting in "time after work" - communication with family, with friends, in random communities; visit to leisure institutions (museums, theaters, cinema, community center, sports, etc.).
Teaching and assessment:
Teaching technology includes both a monologue presentation and opportunities to share knowledge and skills directly relevant to the students' experience. Conditions are created for dialogue, discussions, discussions, sharing experiences, games, working in groups.

SM14633 Pedagogical Diagnostics

ECTS credits: 2
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education"
Lecturers:
Assoc. Prof. Desislava Vasileva Belomorska, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: dstoyanova@uni-ruse.bg
Abstract:
The main objective of the course is to acquaint the students with the basic scientific knowledge in the field of diagnostics, which are fundamental, and to form in them basic skills for professional use of diagnostic methods in their professional activity as social pedagogues, educators , social workers.
Content of the curriculum program:
The course on Pedagogical Diagnostics covers the origin and historical development of Diagnostics and its main areas (diagnostics). This broad basis presents the theoretical and methodological foundations, the essence of the diagnostic process in social fields. A broad place is given to the approach (methodology) in the preparation and conduct of pedagogical research with diagnostic character, formulation and presentation of results. The main methods of pedagogical research with diagnostic character (research and practical) are presented.
Teaching and assessment:
The students' training allows the basic preparation to be realized in the course of the lecture course. The lecture material creates a problematic background through the use of active teaching methods.

SM14634 Problems of Deviant Behavior

ECTS credits: 2
Weekly classes: 2л+0су+0лу+0пу
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Valentina Nikolova Vasileva, MA, PhD, Department of Pedagogy, tel.: 082 / 888 268, E-mail: vvasileva@uni-ruse.bg
Abstract:
The purpose of the training on "Problems of deviant behavior" is to highlight the scientific status of the discipline in theoretical knowledge and practical field of realization. Basic knowledge related to concepts such as deviant and delinquent behavior is given, the reasons for deviant behavior are explained - biological, psychological and social; for research methods with pedagogical focus.
Course content:
Through the course of the course "Deviant Behavior Problems" the students are enriched with the theoretical and practical and applied knowledge and skills of students to work with specific vulnerable groups with deviant and delinquent behavior. Students acquire theoretical and practical knowledge, skills and competences for complex educational and preventative and corrective activities through the use of methods for the diagnosis of behavioral asocial manifestations in society and social groups. Emphasis is placed on mastering conceptual designs and building customer support skills in a risky situation.
Teaching and assessment:
The lecture course provides for the information to be provided to the students in an informative form. The on-going evaluation is carried out on a pre-designed test covering the topics covered.

SM14622 State (Practical) Exam

ECTS credits: 5 **Weekly classes:** 0л+0су+0лу+0пу
Assessment: exam **Type of exam: written/spoken**
Department involved:
Department of Pedagogy
Faculty of Natural Sciences and Education
Consultants:
At least three qualified teachers in Profesional direction 1.2. Pedagogy, participating in lecture courses in the master's program and included in the State Examination Commission, approved by order of the Rector of the RU.
Abstract:
The state (practical) exam consists of: presentation of a presentation developed by the student on a topic from a predetermined outline; an additional examination task that the state examination board may set for students.
The assessment is carried out by the state examination commission, and the overall assessment is formed by the assessment of the presented presentation and the assessment of the developed additional examination task.
Teaching and assessment:
The "Pedagogy" department is responsible for conducting the state practical-applied exam. A state examination commission evaluates the developed presentations and their defense.

SM14623 Thesis/ State written exam

ECTS credits: 10 **Weekly classes:** 0л+0су+0лу+0пу
Assessment: exam **Type of exam: written**
Department involved:
Department of Pedagog
Faculty of Natural Sciences and Education
Consultants:
All lecturers participating in lecture courses in the master's program participate as scientific supervisors.
Abstract:
Students choose from two options at the final stage of the master's degree: to take a state written exam on a predetermined outline or to develop and defend a thesis. In the written state exam option, students develop two topics from the synopsis within four astronomy hours. In the diploma works, students show their capabilities and skills to develop diploma theses in the field of prevention and probation. During the defense of the thesis, the students demonstrate their knowledge and professional competences. The thesis in the master's degree is an individual development under the guidance of a teacher, a research supervisor, and, if necessary, a consultant. Their task is to give the graduate the opportunity to show his professional skills acquired during the training.
Course content:
Students submit applications with the stated thesis topic. The department draws up a list of students and announces reviewers for the relevant theses.
Teaching and assessment:
The "Pedagogy" department is responsible for conducting the state written exam or thesis defense. A state examination commission evaluates the written works, as well as the developed theses and their defens.

POSTGRADUATE STUDIES IN LINGUISTICS AND DIDACTICS FOR PRIMARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

PROFESSIONAL STANDARDS
OF A MASTER IN

LINGUISTICS AND DIDACTICS FOR PRIMARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

Degree Programme: **Linguistics and Didactics for Primary School Teachers (English Language)**
Educational Degree: **Master**
Professional qualification: **Primary School Teacher of English**

I. STRATEGIC OBJECTIVE AND TARGET GROUPS

The Master level program is aimed at preparing highly qualified specialists in the field of young learner foreign language education. The training in the Master's programme is particularly relevant and necessary in view of both the new realities in Europe and on global level that require the implementation of the teaching of foreign languages at an early age and the harmonization of standards and methodological formulations for teaching a foreign language to children.

The mastery of foreign languages is of primary importance nowadays when intensive integration processes take place in all spheres of the social, economic and cultural life in Europe and around the world. These current trends demand that young people in Bulgaria possess the necessary knowledge and skills to develop individually, to communicate successfully in a multi-cultural environment and to participate actively in joint projects with members of other cultures and linguistic communities. In view of that the **primary school foreign (English) language teacher** plays a key role not only in the development of the foreign language knowledge and skills of young learners but also in the development of their communicative competence.

The preliminary survey of the opinion of BA students from the University of Ruse, of foreign language specialists from universities in Bulgaria, of foreign language experts from the Regional Inspectorates of Education and school directors shows that the MA programme targets the following groups of students:

1. BA level students from the “Pedagogy” professional field from the undergraduate programmes:
    - Primary school pedagogy with a foreign (English) language;
    - Primary school pedagogy;
    - Pre-primary school pedagogy with English language;
    - Pre-primary school pedagogy;
    - Primary and pre-primary school pedagogy;
    - Pedagogy;
    - Special pedagogy.
2. BA level students from the “Pedagogy of teaching in …” professional field from the undergraduate programmes:
    - Bulgarian Language and History;
    - Bulgarian Language and English Language;
    - Bulgarian Language and German Language;
    - Bulgarian Language and French Language;
    - Mathematics and Informatics:
3. MA level students from the “Pedagogy” professional field from the postgraduate programmes:
    - Primary school pedagogy with a foreign (English) language;
    - Primary school pedagogy;
    - Pre-primary school pedagogy with English language;
    - Pre-primary school pedagogy;
    - Primary and pre-primary school pedagogy;
    - Pedagogy;
    - Special pedagogy.
4. MA level students from the “Pedagogy of teaching in …” professional field from the postgraduate programmes:
    - Bulgarian Language and History;

- Bulgarian Language and English Language;
- Bulgarian Language and German Language;
- Bulgarian Language and French Language;
- Mathematics and Informatics.

II. REQUIREMENTS FOR THE TRAINING OF STUDENTS

The "Linguistics and Didactics for Primary School Teachers (English Language)" MA Programme includes bot lectures and seminars that lead to the development of solid foreign language knowledge and skills of the students along with broad professional training in the areas of linguistics, methods of teaching English and English literature to young learners, cultural studies and didactics.

Upon graduation the MA level students obtain the professional qualification *primary school teacher of English* and have to possess the following specific knowledge and competences:

1. **Solid knowledge in the area of linguistics, cultural studies and methods of teaching English and English literature which include an ability to:**
   - implement the prominent linguistic methods and theories in the teaching of English to primary school pupils;
   - plan English language lessons to young learners;
   - develop the four language skills in the young learner English language classroom;
   - use interactive methods of teaching English as a foreign language;
   - creative ise of a variety of teaching methods and techniques;
   - design their own teaching materials suitable for young learners;
   - apply the principles of teaching of literary texts and intercultural education to primary school pupils;
   - implement literary texts in the intercultural and multicultural aspects of English language education of primary school pupils;

2. **Knowledge about the structure and organization of Modern English (Phonetics, Lexicology, Morphology and Syntax);**

3. **Knowledge about the linguistic aspects of acquisition of English by primary school children and an ability to:**
   - evaluate the progress of learners;
   - identify potential problems in the acquisition of English by young learners and offer the best possible solution to these problems;
   - work successfully with children with different learning styles, level of mastery of the English language, educational needs and motivation;
   - apply the principles for evaluation of students' progress in the acquisition of English language;

4. **Fluency in the foreign language.**

5. **Special knowledge and skills in the area of computer sciences** – skills and competences in using the modern interactive and multimedia technologies in the teaching of English to primary school pupils;

6. **Planning, managing and monitoring of educational projects:**
   - planning, organizing and implementing educational projects under different sectora programmes from the Lifelong learning programme, Erasmus + or other programmes for transnational cooperation;
   - selecting a suitable form for the management of project activities, selection of project members, team-building skills and conflict management;

- coordinating and managing the development of project activities with subcontractors, risk management etc.;
- financial management of the project;
- monitoring, evaluation, dissemination and exploitation of the project results;

7. **Skills and strategies for lifelong learning:**
   - critical self-reflection;
   - analytical skills for offering concrete solutions to identifies problems in the teaching of English to young learners;

8. **Ability to plan, organize and carry out scientific pedagogical research in the area of foreign language teaching (L2) to young learners and implementation of the research results in the L2 classroom.**

9. **Skills and strategies for multiplication of the acquired knowledge and pedagogical competences in the area of L2 teaching in the teaching process**

III. POSSIBLE CAREER OPPORTUNITIES

The Master level students graduating the *Linguistics and Didactics for Primary School Teachers (English Language)* programme can work as primary school teachers of English or educators. They can also work as primary school teachers of English to children at state and private schools, in private language schools and in all institutions which offer foreign language education to young learners.

CURRICULUM

of the Master's degree course in

LINGUISTICS AND DIDACTICS FOR PRIMARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
2491	Modern Linguistic Theories	1	2500	English Morphology and Syntax	4
2492	English Phonetics and Lexicology	3	2501	English and American Children's Literature	4
2493	Area Studies of Britain and the USA	3	2502	Methods of Intercultural Education at Primary School Level	3
2494	Methods of Instruction of English to Primary School Pupils	5	2503	Practical English Language – Part 2	13
2495	Speech Etiquette and Protocole	3	2504	Teaching Practice in English Language	2
2496	Lesson Observation	2			
	Elective courses (students elect a course)			***Elective courses (students elect a course)***	
2497	Practical English Language – Part 1 (for students with either B1 or B2 level of English)	2	2505	Management of Educational Projects	4
2499	Practical English Language – Part 1 (for students with either A1 or A2 level of English)	2	2506	Methodology and Methods of Scientific Research	4
	Total for the term:	**30**		**Total for the term:**	**30**

Second year

Code	*Third term*	*ECTS*
2507	Linguistic Aspects of Acquisition of English by Primary School Pupils	2
2508	Interactive and Multimedia Technologies in the Teaching of English to Primary School Pupils	2
2509	Practical English Language – Part 3	7
2510	Pre-diploma Pedagogical Practice in English Language	2
	Elective courses (students elect a course)	
2511	Diagnosis of Foreign Language Knowledge and Skills of Primary School Pupils	2
2512	Pedagogical rhethoric	2
	Graduation	
2513	State Exam in the Foreign Language	15
2514	Master Thesis Defense	15
	Total for the term:	**30**
Total for the course of study: 90 ECTS credits		

2491 Modern Linguistic Theories

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Rusi Dimitrov Rusev, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 082 / 841 609, ext. 209; 888 612, E-mail: rrusev@uni-ruse.bg
Abstract:
The **Modern Linguistic Theories** course has a general educational character. It presents to students the change of paradigm in contemporary linguistics in the transition from the 20th to the 21st century and gives a general overview of the modern linguistic theories that have a specific link to the professional profile of the students. Students' attention is focused on the combination of the types of knowledge that form the scientific basis of the specific theory, the aims, approaches and methodology used by researchers in the analytical procedures. The course gives students the opportunity to follow the developmental dynamics of people's knowledge of the language, to develop their understanding of the complex linguistic facts and phenomena.
Course content:
1. The new paradigm of linguistic knowledge at the end of the 20th and the beginning of the 21st century. 2. The Cognitive theory about language. 3. Language as a cultural phenomenon. Linguo-cultural concepts. 4. The theory of the linguistic personality. 5. The mental lexicon theory. 6. Basic principles of the contemporary psycholinguistic theory.
Teaching and assessment:
The course content is delivered in the form of lectures and controlled individual work outside the classroom. The method of oral presentation, problem approach, commentary and discussion are the main means of contact forms.

2492 English Phonetics and Lexicology

ECTS credits: 3
Weekly classes: 1lec+0sem+0labs+1ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course *English Phonetics and Lexicology* helps students to acquire two of the basic structural levels of the English language – Phonetics and Lexicology. The course topics are in accordance with the overall training of the students and their future professional career as primary school teachers of English.
Course content:
The course content provides both theoretical knowledge and practical skills. The students get acquainted with the nature and specific characteristics of English pronunciation on the segment and suprasegmental level, the articulatory and acoustic features of the vocal and consonants system of English, the phonotactics and its application in the determination of the syllable, stress, intonation and speech frames. Special attention is given to the basic lexical relations of words (e.g. synonymy, antonymy, polysemy, homonymy, paronymy), the origin of the English words, the word formation patterns, phraseological units and fixed phrases, etymological sources in contemporary English language, sources for enrichment of the phraseological fund.
Teaching and assessment:
The course content is delivered in the form of lectures and seminars. The seminars are pro-actively oriented as they allow the students to participate in the structuring of the discussions and the development of practical skills. Students' skills for self-directed learning are developed through their work with literary texts in the area of English phonetics, phonology ad lexicology on topics discussed during the course.

2493 Area Studies of Britain and the USA

ECTS credits: 3 **Weekly classes:** 1lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written
Department involved:
Department of European Studies
Faculty of Business and Management
Lecturers:
Assoc. Prof. Roumyana Petrova, MA, PhD, Dept. of European Studies and Multi-level Management
tel.: 082 / 888 811, E-mail: roumyana.petrova@yahoo.com
Abstract:
Because Area Studies of Britain and the USA aims to develop the students' English linguocultural competence, it is conducted in English, if the students' English language competence allows this.
Course content:
Area Studies of Britain and the USA presents in a systematic way the most basic knowledge about Britain and the USA. Among the topics included are the geography, the political and administrative map and regional distribution of these countries, their social structure and cultural norms and their role in the globalization process.
Teaching and assessment:
The lectures and workshops are conducted in English provided learners demonstrate a good grasp of the foreign language, with a preference of the interactive forms of teaching. Students are encouraged to make oral presentations and take part in discussions. There is a written final exam.

At the end of the semester the students get the course leader's signature on two conditions: full attendance at the workshops and lectures (with less than 50% officially excused absences from lectures) and the delivery of at least one presentation. Assessment is based on a maximum of 100 points (not counting the bonuses) earned by the student in the course of the whole semester. Of them, 20 p. are given for in-class participation, 20 p. for the presentation(s), and 60 p. for the written two-part exam (questions and a composition). The term mark is based on quality criteria, but generally follows a scale in which 100–91p. = 6.00, 90–71p.= 5.00, 70–51p.= 4.00, 50–1p.= 3.00, and 0 p.=2.00. **The correction exam** has the same format and is evaluated as follows: 60 p. (maximum) to 51 p. is equal to Excellent (6.00), 50 – 41 p. to Very Good (5.00), 40 – 31 p. to Good (4.00), 30 – 20 p. to Fair (3.00) and 20 – 0 p. to Poor (2.00).

2494 Methods of Instruction of English to Primary School Pupils

ECTS credits: 5 **Weekly classes:** 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course content is in compliance with the current developments in the field of foreign language teaching in Europe and the world which introduce new methodological approaches for teaching and learning a foreign language. The content focuses on the development of students' theoretical knowledge and practical skills for teaching English as a foreign language to primary school pupils (grades 1 to 4).
Course content:
Specific Characteristics, Scope and Tasks of the discipline "Methods of Instruction of English". Approaches to teaching a foreign language – a historical overview. Profile of the young learner, psychological characteristics and specific features of the foreign language young learner lesson. Factors affecting the acquisition of a foreign language by children. Lesson planning. Introducing new vocabulary. Introducing new grammar to children. Development of the skills for listening and speaking. Integrating songs in the young learner foreign language lesson. The role of games in teaching English as a foreign language to children. Integrating stories in the English language lesson. Mixed ability learners. Learning styles. Language and culture teaching in the young learner English language classroom. Error correction. Grading and assessment of young learners' English language knowledge and skills.
Teaching and assessment:
The course content is delivered in the form of lectures and practical seminars. The lectures present the main theoretical issues, while the seminars contribute to the development of students' practical skills for planning young learner English language lessons, for development of primary school pupils' foreign language knowledge and skills as well as for creation of teaching materials. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars.

2495 Speech Etiquette and Protocole

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturer:
Prof. Dimitrina Ignatova Tsoneva, MA, PhD, Dept. of Bulgarian Language, Literature and Art,
tel.: 082/888 738; E-mail: dtzoneva@uni-ruse.bg
Abstract:
The course is designed to help students improve their written and oral speech by acquiring the norms of Modern Bulgarian and the speech etiquette; to learn how and be able to write business letters and documents; to gain an insight on the different type of genre models, standards and requirements for writing scientific reports, articles, scientific announcements, treatises, etc.
Course content:
Culture of speech and society. Conditions for speech activity. Types of communicative spheres. Problems of the Bulgarian speech etiquette: addressing the listener; personal nouns and vocative forms; the form of polite address, third person forms and speech etiquette; holidays and festivities and etiquette. Enrichment of speech culture: literary pronunciation and orthography, contemporary Bulgarian punctuation, etc. Writing business letters.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The lectures and the seminars are taught in parallel and the main linguistic problems are illustrated by selected examples, tables, diagrams on OHP or lantern slides. The students prepare a course work which includes the writing of a formal address or congratulatory letter, CV, records of proceedings, contract, letter of intent, etc.

2496 Lesson Observation

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: preliminary exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The training of students for the qualification “primary school teacher of English” is based on the combination of theoretical knowledge with the acquisition of practical skills in the real classroom. In relation to this lesson observation aims to introduce students to the direct educational practice in schools though the observation of lessons delivered by mentor teachers of English. Simultaneously to this are developed students’ basic skills for analysis and evaluation of the process of teaching and learning a foreign language.
Course content:
The lessons observed in English present the ways in which: a) the four skills (listening, speaking, reading and writing) are developed in the primary school English language lesson; b) grammar and vocabulary are taught. Students pay attention to the: stages of the English language lesson; the interaction patterns in the English language lesson; the teacher talk – giving instructions, checking understanding, eliciting; error correction and giving feedback.
Teaching and assessment:
Students are divided in groups of 10 and observe English language lessons taught by mentors at selected primary schools. The students write down the lesson plan. The observed lessons for the day are discussed after the observation and in this discussion participate all students and the university methodologist.

2497 Practical English Language – Part 1

ECTS credits: 13
Weekly classes: 0lec+0sem+0labs+10ps

Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 1* aims to enrich and systematize the lexical and grammatical knowledge of students, as well as their listening, speaking, reading and writing skills so that students are able to use the language relatively fluently. As a result of the course students' level of mastery of English will increase from level B1 to level B1+.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: memory, career, jobs, television and entertainment, social behaviour. The grammar content includes: Present Simple and Present Continuous tense, Past Simple and Past Continuous tense, Present Perfect Simple and Present Perfect Continuous tense, Past Perfect tense, hypothetical situations in the present or past, modal verbs – perfect infinitive.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2499 Practical English Language – Part 1

ECTS credits: 13 **Weekly classes:** 0lec+0sem+0labs+10ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 1* aims to lay solid grounds for the future development of the target language knowledge and competences of the students during the teaching and learning of English in the next semesters. As a result of the education students are expected to upgrade their knowledge and skills in the foreign language and from level A2 reach level B1. Special emphasis is placed on the development of the perceptive and productive skills of students, as well as on the enrichment of their lexical and grammatical knowledge and skills. Along with this are developed the students' skills for autonomous learning, working with a dictionary and on-line resources for self-directed learning.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: family relations, daily routines, shopping, travelling, communication. The grammar content includes: Present Simple and Present Continuous tense, Past Simple and Past Continuous tense, Expressing future actions, Infinitive of purpose, Modal verbs – *can, might, will*.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2500 English Morphology and Syntax

ECTS credits: 4 **Weekly classes:** 2lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course *English Morphology and Syntax* aims at developing students' knowledge in the field of morphology and syntax of Modern English. It presents to students the basic grammatical features of the English language and introduces them to the basic theoretical platforms in contemporary morphology and syntax.
Course content:
Morphology as a science for the structure of the word and its grammatical categories. Parts of speech and grammatical categories. Nominal categories: the noun, the adjective. The adverb. The Numerical. The Pronoun. The Preposition. The Verb. Basic grammatical categories of the English verb: aspect, tense, mood, voice, person and number. Valency of the verb
The Temporal System. The verbids.
Syntax as a scince. Structure of the English phrase. The Sentence. Basic characteristics of the sentence – linearity, categoriality and hierarchy. Coordination and subordination. The Subject. The Predicate. The Predicative. Secondary parts of the sentence. Specifics of the English word order. The Complex sentence. Types of Complex Sentences.
Teaching and assessment:
The course content is delivered in the form of lectures and seminars. During the lectures are discussed the main theoretical issues, while during the seminars students apply in practice the acquired knowledge. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars

2501 English and American Children's Literature

ECTS credits: 4 **Weekly classes:** 2lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Prof.Ludmilla Konstantinova Kostova, MA, PhD, "St. St. Cyril and Methodius" Veliko Turnovo University
tel.: 062 / 618 355, E-mail: l.kostova@uni-vt.bg
Senior Lecturer Iliana Gancheva Benina, MA, Dept. of Foreign Languages,
tel.: 082 / 888 815, E-mail: ibenina@uni-ruse.bg
Abstract:
The course reflects the current trends in the study of children's literature in the area of humanities. It begins with a historical overview of the concepts of the child and childhood. During the course students analyze children's literature works that have acquired a cannonical status among the readers and researchers such as "Peter Pan", "Alice in Wonderland," "The Wizard of Oz", but the course also focuses on the analyses of particular texts with the intention to provide students with skills for interpretation and tools for critical approach.
Course content:
Specific features of children's literature. Basic approaches to children's literature. Beginning of British children's literature. Development of children's literature in Britain and North America in the 19th and early 20th century. Children's literature after World War II. Development of the fantasy genre in the 1950s.New trends in children's literature in the 1960s, 1970s and 1980s. Rediscovery of the fantasy genre in the 1990s and early 21st century.
Teaching and assessment:
The course of lectures provides students with basic and in-depth knowledge on the latest research on the issue. The seminars focus on the analytical reading of individual literary texts, while focusing on key theoretical issues. Students sit a written exam based on a specially designed syllabus.

2502 Methods of Intercultural Education at Primary School Level

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Art,
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr Juliana Pencheva Popova, MA, PhD, Dept. of European Studies and International Relations,
tel.: 082 / 888 708, E-mail: jppopova@uni-ruse.bg
Annotation:
The course aims at justifying the necessity of intercultural education in the primary school where the development of sensitivity, respect and tolerance towards the Others is of utmost importance for the formation of the value hierarchy of the individuals. The course content includes acquisition with the basics of intercultural education as well as with cultural differences in perceptions, beliefs, attitudes and values, all of which form the basis of existing cultures and cultural orientations.
Course content:
Main concepts in intercultural education. Functions, characteristics and elements of culture. The concepts of mine/ours-foreign and otherness. Acquisition of native culture and foreign culture. The view on cultural grammar and the ideas of eminent researchers in the field of Intercultural Communication. Socio-psychological peculiarities of Intercultural Education. The processes of intercultural adaptation and cultural sensibilisation. Methodics of intercultural education.
Teaching and assessment:
The teaching technology envisages the acquisition of the course content through lectures and seminars whose goal is active students' participation in the development of the course units. The final ECTS grade is based on the results from three components: multiple choice written test, (50%), presentation of a lesson for the pupils from primary school (30%) and participation in discussions and independent tasks (20%).

2503 Practical English Language – Part 2

ECTS credits: 13 **Weekly classes:** 0lec+0sem+0labs+10ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 2* aims to upgrade students' language knowledge and skills acquired during the first semester so that students pass from level B1+ to B2. Special emphasis is placed on the development of the four skills, along with the development of students' vocabulary knowledge, reinforcement of grammatical structures and word formation models.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: communication, ecology, global warming, sports, medicine, transport, literature, art, media, culture and cultural differences. The grammar content includes: present tenses, past tenses, *used to / would*, future tenses, ways for expressing plans and arrangements in the future, passive voice, conditional sentences, modal verbs for ability, possibility and obligation, gerund and infinitive, reported speech.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2504 Teaching Practice in English Language

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: preliminary exam
Type of exam: oral
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The Teaching Practice in English Language aims at acquainting students with the teaching process in English language at primary school level. It provides an opportunity for students to put to practice the acquainted knowledge and developed skills as a result of the education in the *Methods of Instruction in English at Primary School Level,* to establish good rapport with pupils, to get familiar with the work in English classes in Bulgarian schools.
Course content:
Grammar presentation lesson. Vocabulary presentation lesson. Grammar practice lesson. Vocabulary practice lesson. Grammar revision lesson. Vocabulary revision lesson. Integrated skills lesson: listening. Integrated skills lesson: speaking. Integrated skills lesson: reading. Integrated skills lesson: writing.
Teaching and assessment:
At selected schools students are sent to all primary school classes where English language is taught (the classes are appointed provisional by the Head Teacher). Students contact the English language teacher of the classes in advance. The teacher gives them the lesson topics according to the sequence in his / her long term lesson planning schedule. Students prepare lesson plans and present them to the English language teacher or the university methodologist. At the end of all lessons delivered by the student teachers for the day, the lessons are discussed. All students, the university methodologist and the teacher take part in the discussion.

2505 Management of Educational Projects

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Pr. Assist. Prof. Julia Georgieva Doncheva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082 / 841-609, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The main aim of the course is to develop students' basic theoretical knowledge and practical skills in the field of educational project management, as well as to develop their competences for project development and management in their future career.
Course content:
The "Management of Educational Projects" course content provides a detailed discussion of the steps involved in the planning, development, monitoring and final evaluation of a project. The main topics focus on project design; sample projects are also included.
Teaching and assessment:
The theoretical knowledge, which forms the basis of the discipline, is presented during the course of lectures. The topics of the seminars correspond to that of the lectures and allow for the development of students' practical skills through the exploration of sample project models. Active teaching and learning techniques are used in the seminars.

2506 Methodology and Methods of Scientific Research

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps
Type of exam: written

Department involved:
Department of Pedagogy, Psychology and History
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Violeta Yordanova Vaneva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082/ 841 609, ext. 227, 082 / 888 738, E-mail: vaneva@uni-ruse.bg
Pr. Assist. Prof. Asia Simeonova Veleva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082/ 841 609, ext. 243;E-mail: aveleva@uni-ruse.bg

Abstract:
The course aims at introducing students to the theory and methodology of scientific research both in theoretical and empirical aspect. Its main objective is to form basic skills in planning, organizing and conducting empirical research, as well as an ability to analyze and process its results.

Course content:
The course contents include the following topics: Typology of pedagogical research; Planning, organising and conducting empirical pedagogic research; Analysis and presentation of the results from empirical pedagogic research projects; Methods of pedagogic research: observation, polling, didactic tests, projective methods, socio-metric methods, techniques of repertory grids, methods of expert evaluation, content analysis; biographical method and analysis of a specific case; writing a thesis paper.

Teaching and assessment:
Classes are taught using a combination of lectures and seminars. Attendance and active class participation are mandatory. The course completion is evaluated through a written test on the main topics in the syllabus as well as assessment of a practical task related to specific research problem.

2507 Linguistic Aspects of Acquisition of English by Primary School Pupils

ECTS credits: 2
Assessment: exam
Weekly classes: 2lec+0sem+0labs+1ps
Type of exam: written

Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education

Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg

Abstract:
The course gives theoretical knowledge about the main theoretical platforms describing the ways of L1 and L2 acquisition. It focuses on the specific features of the processes and stages of the physical, emotional, psychological, social and cognitive development of primary school pupils, and on their linguistic development in the acquisition of a foreign language. The development of students' practical skills for measuring the level of linguistic competence of L2 primary secondary school pupils is the focal point of the course.

Course content:
Specifics, subject of study and tasks of applied linguistics. Speech perception and production. Similarities and differences in the theoretical platforms describing L1 and L2 acquisition. Similarities and differences between adult and child L2 learners. Physical, emotional, psychological, social and cognitive development of primary school pupils. Readiness to learn a L2. Stages and processes of the acquisition of L1 and L2. Content and expected outcomes of the teaching and learning of English as L2 by children. Orthographic competence. Lexical aspects of L2 acquisition by primary school pupils. Specific characteristics of the acquisition of the L2 grammar.

Teaching and assessment:
The course content is delivered in the form of lectures and seminars. The seminars expand students' theoretical knowledge acquired during the lectures and develop their skills for measuring the linguistic competence of primary school pupils. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars.

2508 Interactive and Multimedia Technologies in English Language Primary School Education

ECTS credits: 2
Weekly classes: 1lec+0sem+0labs+2ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Dept. of Informatics and Information Technologies
tel. 082 / 888 490, 888 645, E-mail: mst@ami.uni-ruse.bg
Pr. Assist. Prof. Svetlozar Stefanov Tsankov, PhD, Department of Informatics and Information Technologies,
tel. 082 / 888 645; E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is to familiarize students with multimedia basic components and the stages for developing multimedia applications (MMAs) and models for the development of e-learning educational resources. Students will acquire basic knowledge on the application of modern systems for the development of multimedia CD and web-based applications. During the seminars the students will get acquainted with specific products, languages and media for the creation of MMA and web-based courses.
Course content:
Introduction in multimedia. Areas of application. Requirements, stages and technology for the creation of MMAs. Basic elements of multimedia and basic instruments for the creation and editing of text and images. Basic elements of multimedia and basic instruments for the creation and editing of video and audio information. Animation – nature, types, usage, elements and characteristic features. Application of animation in education, multimedia and web design. Models and platforms for the creation of e-learning interactive educational resources. Platforms for the development of MMAs and interactive teaching courses.
Teaching and assessment:
The course is conducted in the form of lectures which take place 1 lesson weekly. Practice sessions are 2-lesson classes and are held on topics of the lectures as described above under the supervision of an assistant professor/instructor. At the beginning of the sessions students do a 5-minute brief test or oral questioning as feedback. In the end of the course they do a written test covering the lecture material.

2509 Practical English Language – Part 3

ECTS credits: 7
Weekly classes: 0lec+0sem+0labs+10ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 3* aims to upgrade students' language knowledge and skills acquired during the first semester so that students pass from level B2 to C1. Special emphasis is placed on the development of students' oral fluency and their skills for justifying opinions precisely, for writing about complex subjects in a letter, an essay or a report, for understanding extended speech even when it is not structured, as well as for understanding specialised articles on unfamiliar topics and longer technical instructions.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: communication, ecology, global warming, sports, medicine, transport, literature, art, media, culture and cultural differences. The grammar content includes: perfect and continuous tenses, future tenses, future in the past, passive voice, relative clauses, the article, gradable and ungradable adjectives, past tenses for hypothetical meaning, participle clauses, gerund and infinitive, modal verbs.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2510 Pre-diploma Pedagogical Practice in English Language

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** oral
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Senior lecturer Elga Kirilova Naumova, MA, Dept. of Foreign Languages
tel.: 082 / 888 803, E-mail: enaoumova@uni-ruse.bg
Abstract:
The pre-diploma teaching practice in English puts an end to the practical pedagogical training of the students from the MA programme. It provides an opportunity for students to put the acquired theoretical and methodological knowledge into practice and to get acquainted with the way in which English language is taught in Bulgarian schools. Students teach their English lessons under the supervision and help of the English language teacher of the respective class.
Course content:
Grammar presentation lesson. Vocabulary presentation lesson. Grammar practice lesson. Vocabulary practice lesson. Grammar revision lesson. Vocabulary revision lesson. Integrated skills lesson: listening. Integrated skills lesson: speaking. Integrated skills lesson: reading. Integrated skills lesson: writing.
Teaching and assessment:
The students are allocated to a class in pairs where they teach all the English language classes for the week. The English language teacher monitors their work and guides them, helps them in the choice of teaching materials if necessary. Every student delivers an exam lesson in front of an Examination Committee formed by three lecturers and the teacher of English. The student presents all lesson plans of all the lessons delivered during the pre-diploma teaching practice. When forming the final mark of the observed exam lesson the Examination Committee takes into account the evaluation of the teacher of English of the student's work throughout his / her teaching practice in the school.

2511 Diagnosis of Foreign Language Knowledge And Skills Of Primary School Pupils

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Penka Todorova Kaneva, MA, PhD, Dept. of Primary School Pedagogy, University of Veliko Tarnovo
tel.: 062 / 635 853, E-mail: p.kuneva@gmail.com
Abstract:
The course acquaints students with the main issues related to pedagogical diagnostics and more specifically – with the diagnostics of foreign language knowledge and skills of 5th – 8th grade learners. The specific characteristics of measurement, assessment and approaches for setting the standards for evaluation are also discussed. During the course students prepare a portfolio in which they include the theoretical articles examined and a presentation of the psychometric characteristics of the different test items.
Course content:
Definition, subject matter and pedagogical functions of diagnostics. Measurement - basic characteristics, reliability and errors, validity. Assessment – specific features and types. The test as a measuring tool. Types of language tests. Basic steps in test construction. Test aims. Definition of evaluation standards for interpretation of test results. Alternative means of assessment of language skills – lesson observation, language portfolios, discussions. Cambridge University Tests for the evaluation of learners' English language competences.
Teaching and assessment:
The course content is delivered in the form of lectures (which include presentations and discussions) and seminars which include practical tasks and discussions. Individual practical tasks are assigned to students during the seminars. The final mark is formed on the basis of the presented portfolios by the students, his / her participation during the lectures and seminars and regular attendance of classes.

2512 Pedagogical Rhetoric

ECTS credits: 2
Weekly classes: 1lec+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dimitrina Ignatova Tsoneva, MA, PhD, Dept. of Bulgarian Language, Literature and Art,
tel.: 082 / 888 738, E-mail: dtzoneva@uni-ruse.bg
Abstract:
The basic aim of the Pedagogical Rhetoric course is to reveal the foundations of rhetoric, which would develop students' awareness of eloquence as a speech act and of rhetoric as a science; to provide the theoretical background for the preparation and presentation of different genres and varieties of public speech and for the techniques of self-mastery of the rhetoric art.
The object of the course are history, theory and methods of teaching rhetoric. Taking into consideration the purpose of the course, the emphasis is placed on eloquence and its development throughout history and nowadays.
Due to its interdisciplinary nature Pedagogical Rhetoric is based on a number of other sciences. Specific data, points of view and conclusions that are made, have been united by one common goal – to unveil the process of speech impact and its significance in the communicative sphere of pedagogy.
Course contents:
The main topics are: History of the rhetoric art. Basic rhetorical classification of orator presentations. Composition of the orator's speech. Linguistic features of the rhetorical speech. Non-verbal communication in the rhetoric art. Technique of delivering successful speech. Psychological analysis of the communication between the speaker and the audience. Methods and techniques of speaking convincingly.
Teaching and assessment:
The course is delivered in the form of lectures. Students receive theoretical knowledge on the basic topics included in the syllabus. Lectures are read during one semester and basic rhetoric terms, and language questions are illustrated by selected examples, tables and slides.

2513 State Exam in the Foreign Language

ECTS credits: 15
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Consultants:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The State Exam in the Foreign Language is the ending procedure of the MA course. It is held before an Examination Board and includes four modules: reading, writing, use of English and listening.
Course content:
The State Exam includes four modules: reading, writing, use of English and listening which include all lexical and grammatical structures studied during the MA course and put an emphasis on the basic skills: listening, reading and writing.
Teaching and assessment:
Students sit the exam before a State Examination Board.

2514 Master Thesis Defense

ECTS credits: 15
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department involved in the training process
Abstract:
The Master Thesis is an individual creative assignment, which is fulfilled under the leadership of a research lecturer. Its objective is to give the possibility to the students to demonstrate the knowledge and skills accumulated during their study for achieving the objectives and tasks of the Master Thesis and to present their creative development successfully before an Examination Board.
Course content:
The Bachelor Thesis includes one topic or area of the syllabus and students are allowed to choose in which profile they want to develop a Bachelor Thesis – English language, English Literature, British and American Area Studies, Methods of Instruction of English to Primary School Pupils. Comparative research studies are also allowed (e.g. Bulgarian and English language).
Teaching and assessment:
The Department of Bulgarian Language, Literature and Art provides:

- the organisation of collecting, confirming and announcing of topic suggestions for the Master Thesis;
- the distribution of topics and research leaders among the students;
- the diploma practice organisation;
- the leadership, review and presentation of the Master Thesis.

Weekly tutorials with the research leaders are scheduled for the students.

The final year student presents the Master Thesis before the State Examination Board.

POSTGRADUATE STUDIES IN LINGUISTICS AND DIDACTICS FOR LOWER SECONDARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

PROFESSIONAL STANDARDS
OF A MASTER IN

LINGUISTICS AND DIDACTICS FOR LOWER SECONDARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

Degree Programme: **Linguistics and Didactics for Lower Secondary School Teachers (English Language)**
Educational Degree: **Master**
Professional qualification: **Lower Secondary School Teacher of English (5th – 8th Grade)**

I. STRATEGIC OBJECTIVE AND TARGET GROUPS

The Master level program is aimed at preparing highly qualified specialists in the field of foreign language education to lower secondary school pupils. The training in the Master's programme is particularly relevant and necessary in view of both the new realities in Europe and on global level that require the implementation of the teaching of foreign languages at an early age and the harmonization of standards and methodological formulations for teaching a foreign language to children.

The mastery of foreign languages is of primary importance nowadays when intensive integration processes take place in all spheres of the social, economic and cultural life in Europe and around the world. These current trends demand that young people in Bulgaria possess the necessary knowledge and skills to develop individually, to communicate successfully in a multi-cultural environment and to participate actively in joint projects with members of other cultures and linguistic communities. In view of that the **foreign (English) language teacher** plays a key role not only in the development of the foreign language knowledge and skills of learners but also in the development of their communicative competence.

The preliminary survey of the opinion of BA students from the University of Ruse, of foreign language specialists from universities in Bulgaria, of foreign language experts from the Regional Inspectorates of Education and school directors shows that the MA programme targets the following groups of students:

1. BA level students from the “Pedagogy” professional field from the undergraduate programmes:
    - Primary school pedagogy with a foreign (English) language;
    - Primary school pedagogy;
    - Pre-primary school pedagogy with English language;
    - Pre-primary school pedagogy;
    - Primary and pre-primary school pedagogy;
    - Pedagogy;
    - Special pedagogy.
2. BA level students from the “Pedagogy of teaching in …” professional field from the undergraduate programmes:
    - Bulgarian Language and History;
    - Bulgarian Language and English Language;
    - Bulgarian Language and German Language;
    - Bulgarian Language and French Language;
    - Mathematics and Informatics:
3. MA level students from the “Pedagogy” professional field from the postgraduate programmes:
    - Primary school pedagogy with a foreign (English) language;
    - Primary school pedagogy;
    - Pre-primary school pedagogy with English language;
    - Pre-primary school pedagogy;
    - Primary and pre-primary school pedagogy;
    - Pedagogy;
    - Special pedagogy.

4. MA level students from the "Pedagogy of teaching in …" professional field from the postgraduate programmes:
    - Bulgarian Language and History;
    - Bulgarian Language and English Language;
    - Bulgarian Language and German Language;
    - Bulgarian Language and French Language;
    - Mathematics and Informatics.

II. REQUIREMENTS FOR THE TRAINING OF STUDENTS

The "Linguistics and Didactics for Lower Secondary School Teachers (English Language)" MA Programme includes bot lectures and seminars that lead to the development of solid foreign language knowledge and skills of the students along with broad professional training in the areas of linguistics, methods of teaching English and English literature to young learners, cultural studies and didactics.

Upon graduation the MA level students obtain the professional qualification *lower secondary school teacher of English (5th – 8th grade)* and have to possess the following specific knowledge and competences:

1. **Solid knowledge in the area of linguistics, cultural studies and methods of teaching English and English literature which include an ability to:**
    - implement the prominent linguistic methods and theories in the teaching of English to lower secondary school pupils;
    - plan English language lessons to lower secondary school learners;
    - develop the four language skills in the English language classroom;
    - use interactive methods of teaching English as a foreign language;
    - creative ise of a variety of teaching methods and techniques;
    - design their own teaching materials suitable for lower secondary school learners;
    - apply the principles of teaching of literary texts and intercultural education to lower secondary school pupils;
    - implement literary texts in the intercultural and multicultural aspects of English language education of lower secondary school pupils;

2. **Knowledge about the structure and organization of Modern English (Phonetics, Lexicology, Morphology and Syntax);**

3. **Knowledge about the linguistic aspects of acquisition of English by lower secondary school students and an ability to:**
    - evaluate the progress of learners;
    - identify potential problems in the acquisition of English by students and offer the best possible solution to these problems;
    - work successfully with students with different learning styles, level of mastery of the English language, educational needs and motivation;
    - apply the principles for evaluation of students' progress in the acquisition of English language;

4. **Fluency in the foreign language.**

5. **Special knowledge and skills in the area of computer sciences** – skills and competences in using the modern interactive and multimedia technologies in the teaching of English to lower secondary school pupils;

6. **Planning, managing and monitoring of educational projects:**
    - planning, organizing and implementing educational projects under different sectora programmes from the Lifelong learning programme, Erasmus+ or other programmes for transnational cooperation;

- selecting a suitable form for the management of project activities, selection of project members, team-building skills and conflict management;
- coordinating and managing the development of project activities with subcontractors, risk management etc.;
- financial management of the project;
- monitoring, evaluation, dissemination and exploitation of the project results;

7. **Skills and strategies for lifelong learning:**
   - critical self-reflection;
   - analytical skills for offering concrete solutions to identifies problems in the teaching of English to lower secondary school students;

8. **Ability to plan, organize and carry out scientific pedagogical research in the area of foreign language teaching (L2) to lower secondary school students and implementation of the research results in the L2 classroom.**

9. **Skills and strategies for multiplication of the acquired knowledge and pedagogical competences in the area of L2 teaching in the teaching process.**

IV. POSSIBLE CAREER OPPORTUNITIES

The Master level students graduating the *Linguistics and Didactics for Lower Secondary School Teachers (English Language)* programme can work as lower secondary school teachers of English or educators. They can also work as lower secondary school teachers of English to students from 5th to 8th grade at state and private schools, in private language schools and in all institutions which offer foreign language education to lower secondary school students.

CURRICULUM

of the Master's degree course in

LINGUISTICS AND DIDACTICS FOR LOWER SECONDARY SCHOOL TEACHERS (ENGLISH LANGUAGE)

First year

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
2491	Modern Linguistic Theories	1	2500	English Morphology and Syntax	4
2492	English Phonetics and Lexicology	3	2516	English and American Child and Young Adult Literature	4
2493	Area Studies of Britain and the USA	3	2517	Intercultural and Language Training	3
2515	Methods of Instruction of English to Lower Secondary School Pupils	5	2503	Practical English Language – Part 2	13
2495	Speech Etiquette and Protocole	3	2504	Teaching Practice in English Language	2
2496	Lesson Observation	2			
Elective courses (students elect a course)			***Elective courses (students elect a course)***		
2497		2	2505	Management of Educational Projects	4
2499		2	2506	Methodology and Methods of Scientific Research	4
	Total for the term:	**30**		**Total for the term:**	**30**

Second year

Code	*Third term*	*ECTS*
2518	Linguistic Aspects of Acquisition of English by Lower Secondary School Pupils (grades 5 – 8)	2
2535	Interactive and Multimedia Technologies in English Language Lower Secondary School Education	2
2509	Practical English Language – Part 3	7
2510	Pre-diploma Pedagogical Practice in English Language	2
	Elective courses (students elect a course)	
2511	Diagnosis of Foreign Language Knowledge and Skills of Lower Secondary School Pupils	2
2512	Pedagogical Rhethoric	2
	Graduation	
2513	State Exam in the Foreign Language	15
2514	Master Thesis Defense	15
	Total for the term:	**30**
Total for the course of study: 90 ECTS credits		

2491 Modern Linguistic Theories

ECTS credits: 1
Weekly classes: 1lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Rusi Dimitrov Rusev, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 082 / 841 609, ext. 209; 888 612, E-mail: rrusev@uni-ruse.bg
Abstract:
The **Modern Linguistic Theories** course has a general educational character. It presents to students the change of paradigm in contemporary linguistics in the transition from the 20th to the 21st century and gives a general overview of the modern linguistic theories that have a specific link to the professional profile of the students. Students' attention is focused on the combination of the types of knowledge that form the scientific basis of the specific theory, the aims, approaches and methodology used by researchers in the analytical procedures. The course gives students the opportunity to follow the developmental dynamics of people's knowledge of the language, to develop their understanding of the complex linguistic facts and phenomena.
Course content:
1. The new paradigm of linguistic knowledge at the end of the 20th and the beginning of the 21st century. 2. The Cognitive theory about language. 3. Language as a cultural phenomenon. Linguo-cultural concepts. 4. The theory of the linguistic personality. 5. The mental lexicon theory. 6. Basic principles of the contemporary psycholinguistic theory.
Teaching and assessment:
The course content is delivered in the form of lectures and controlled individual work outside the classroom. The method of oral presentation, problem approach, commentary and discussion are the main means of contact forms.

2492 English Phonetics and Lexicology

ECTS credits: 3
Weekly classes: 1lec+0sem+0labs+1ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course *English Phonetics and Lexicology* helps students to acquire two of the basic structural levels of the English language – Phonetics and Lexicology. The course topics are in accordance with the overall training of the students and their future professional career as primary school teachers of English.
Course content:
The course content provides both theoretical knowledge and practical skills. The students get acquainted with the nature and specific characteristics of English pronunciation on the segment and suprasegmental level, the articulatory and acoustic features of the vocal and consonants system of English, the phonotactics and its application in the determination of the syllable, stress, intonation and speech frames. Special attention is given to the basic lexical relations of words (e.g. synonymy, antonymy, polysemy, homonymy, paronymy), the origin of the English words, the word formation patterns, phraseological units and fixed phrases, etymological sources in contemporary English language, sources for enrichment of the phraseological fund.
Teaching and assessment:
The course content is delivered in the form of lectures and seminars. The seminars are pro-actively oriented as they allow the students to participate in the structuring of the discussions and the development of practical skills. Students' skills for self-directed learning are developed through their work with literary texts in the area of English phonetics, phonology ad lexicology on topics discussed during the course.

2493 Area Studies of Britain and the USA

ECTS credits: 3
Weekly classes: 1lec+0sem+0labs+1ps
Assessment: exam
Type of exam: written
Department involved:
Department of European Studies
Faculty of Business and Management
Lecturers:
Assoc. Prof. Roumyana Petrova,MA, PhD, Dept. of European Studies and Multi-level Management
tel.: 082 / 888 811, E-mail: roumyana.petrova@yahoo.com
Abstract:
Because Area Studies of Britain and the USA aims to develop the students' English linguocultural competence, it is conducted in English, if the students' English language competence allows this.
Course content:
Area Studies of Britain and the USA presents in a systematic way the most basic knowledge about Britain and the USA. Among the topics included are the geography, the political and administrative map and regional distribution of these countries, their social structure and cultural norms and their role in the globalization process.
Teaching and assessment:
The lectures and workshops are conducted in English provided learners demonstrate a good grasp of the foreign language, with a preference of the interactive forms of teaching. Students are encouraged to make oral presentations and take part in discussions. There is a written final exam.

At the end of the semester the students get the course leader's signature on two conditions: full attendance at the workshops and lectures (with less than 50% officially excused absences from lectures) and the delivery of at least one presentation. Assessment is based on a maximum of 100 points (not counting the bonuses) earned by the student in the course of the whole semester. Of them, 20 p. are given for in-class participation, 20 p. for the presentation(s), and 60 p. for the written two-part exam (questions and a composition). The term mark is based on quality criteria, but generally follows a scale in which 100–91p. = 6.00, 90–71p.= 5.00, 70–51p.= 4.00, 50–1p.= 3.00, and 0 p.=2.00. **The correction exam** has the same format and is evaluated as follows: 60 p. (maximum) to 51 p. is equal to Excellent (6.00), 50 – 41 p. to Very Good (5.00), 40 – 31 p. to Good (4.00), 30 – 20 p. to Fair (3.00) and 20 – 0 p. to Poor (2.00).

2515 Methods of Instruction of English to Lower Secondary School Pupils

ECTS credits: 5
Weekly classes: 2lec+0sem+0labs+2ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course content is in compliance with the current developments in the field of foreign language teaching in Europe and the world which introduce new methodological approaches for teaching and learning a foreign language. The content focuses on the development of students' theoretical knowledge and practical skills for teaching English as a foreign language to lower secondary school pupils (grades 5 to 8).
Course content:
Specific Characteristics, Scope and Tasks of the discipline "Methods of Instruction of English". Approaches to teaching a foreign language – a historical overview. Profile of the lower secondary school learner, psychological characteristics and specific features of the foreign language lesson in the lower secondary school. Continuity and further development of the target language knowledge and skills acquired in the primary school foreign language lessons. Lesson planning. Presenting new vocabulary. Presenting new grammar. Development of the skills for listening and speaking. Integrating songs in the foreign language lesson. The role of games in teaching English as a foreign language to lower secondary school learners. Teaching literature. Mixed ability learners. Learning styles. Language and culture teaching in the young learner English language classroom. Error correction. Grading and assessment of young learners' English language knowledge and skills.
Teaching and assessment: The course content is delivered in the form of lectures and practical seminars. The lectures present the main theoretical issues, while the seminars contribute to the development of students' practical skills for planning English language lessons for lower secondary school learners, for development of learners' foreign language knowledge and skills as well as for creation of teaching materials. Students sit a

written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars.

2495 Speech Etiquette and Protocole

ECTS credits: 3
Weekly classes: 1lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturer:
Prof. Dimitrina Ignatova Tsoneva, MA, PhD, Dept. of Bulgarian Language, Literature and Art,
tel.: 082/888 738; E-mail: dtzoneva@uni-ruse.bg
Abstract:
The course is designed to help students improve their written and oral speech by acquiring the norms of Modern Bulgarian and the speech etiquette; to learn how and be able to write business letters and documents; to gain an insight on the different type of genre models, standards and requirements for writing scientific reports, articles, scientific announcements, treatises, etc.
Course content:
Culture of speech and society. Conditions for speech activity. Types of communicative spheres. Problems of the Bulgarian speech etiquette: addressing the listener; personal nouns and vocative forms; the form of polite address, third person forms and speech etiquette; holidays and festivities and etiquette. Enrichment of speech culture: literary pronunciation and orthography, contemporary Bulgarian punctuation, etc. Writing business letters.
Teaching and assessment:
The course is delivered in the form of lectures and seminars. The lectures and the seminars are taught in parallel and the main linguistic problems are illustrated by selected examples, tables, diagrams on OHP or lantern slides. The students prepare a course work which includes the writing of a formal address or congratulatory letter, CV, records of proceedings, contract, letter of intent, etc.

2496 Lesson Observation

ECTS credits: 2
Weekly classes: 0lec+0sem+0labs+2ps
Assessment: preliminary exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The training of students for the qualification “primary school teacher of English” is based on the combination of theoretical knowledge with the acquisition of practical skills in the real classroom. In relation to this lesson observation aims to introduce students to the direct educational practice in schools though the observation of lessons delivered by mentor teachers of English. Simultaneously to this are developed students’ basic skills for analysis and evaluation of the process of teaching and learning a foreign language.
Course content:
The lessons observed in English present the ways in which: a) the four skills (listening, speaking, reading and writing) are developed in the primary school English language lesson; b) grammar and vocabulary are taught. Students pay attention to the: stages of the English language lesson; the interaction patterns in the English language lesson; the teacher talk – giving instructions, checking understanding, eliciting; error correction and giving feedback.
Teaching and assessment:
Students are divided in groups of 10 and observe English language lessons taught by mentors at selected primary schools. The students write down the lesson plan. The observed lessons for the day are discussed after the observation and in this discussion all students participate along with the university methodologist.

2497 Practical English Language – Part 1

ECTS credits: 13 **Weekly classes:** 0lec+0sem+0labs+10ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 1* aims to enrich and systematize the lexical and grammatical knowledge of students, as well as their listening, speaking, reading and writing skills so that students are able to use the language relatively fluently. As a result of the course students' level of mastery of English will increase from level B1 to level B1+.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: memory, career, jobs, television and entertainment, social behaviour. The grammar content includes: Present Simple and Present Continuous tense, Past Simple and Past Continuous tense, Present Perfect Simple and Present Perfect Continuous tense, Past Perfect tense, hypothetical situations in the present or past, modal verbs – perfect infinitive.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2499 Practical English Language – Part 1

ECTS credits: 13 **Weekly classes:** 0lec+0sem+0labs+10ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 1* aims to lay solid grounds for the future development of the target language knowledge and competences of the students during the teaching and learning of English in the next semesters. As a result of the education students are expected to upgrade their knowledge and skills in the foreign language and from level A2 reach level B1. Special emphasis is placed on the development of the perceptive and productive skills of students, as well as on the enrichment of their lexical and grammatical knowledge and skills. Along with this are developed the students' skills for autonomous learning, working with a dictionary and on-line resources for self-directed learning.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: family relations, daily routines, shopping, travelling, communication. The grammar content includes: Present Simple and Present Continuous tense, Past Simple and Past Continuous tense, Expressing future actions, Infinitive of purpose, Modal verbs – *can, might, will*.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2500 English Morphology and Syntax

ECTS credits: 4 **Weekly classes:** 2lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The course *English Morphology and Syntax* aims at developing students' knowledge in the field of morphology and syntax of Modern English. It presents to students the basic grammatical features of the English language and introduces them to the basic theoretical platforms in contemporary morphology and syntax.
Course content:
Morphology as a science for the structure of the word and its grammatical categories. Parts of speech and grammatical categories. Nominal categories: the noun, the adjective. The adverb. The Numerical. The Pronoun. The Preposition. The Verb. Basic grammatical categories of the English verb: aspect, tense, mood, voice, person and number. Valency of the verb
The Temporal System. The verbids.
Syntax as a scince. Structure of the English phrase. The Sentence. Basic characteristics of the sentence – linearity, categoriality and hierarchy. Coordination and subordination. The Subject. The Predicate. The Predicative. Secondary parts of the sentence. Specifics of the English word order. The Complex sentence. Types of Complex Sentences.
Teaching and assessment:
The course content is delivered in the form of lectures and seminars. During the lectures are discussed the main theoretical issues, while during the seminars students apply in practice the acquired knowledge. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars

2516 English and American Child and Young Adult Literature

ECTS credits: 4 **Weekly classes:** 2lec+0sem+0labs+1ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Prof.Ludmilla Konstantinova Kostova, MA, PhD, "St. St. Cyril and Methodius" Veliko Turnovo University
tel.: 062 / 618 355, E-mail: l.kostova@uni-vt.bg
Senior Lecturer Iliana Gancheva Benina, MA, Dept. of Foreign Languages,
tel.: 082 / 888 815, E-mail: ibenina@uni-ruse.bg
Abstract:
The course reflects the current trends in the study of child and young adult literature in the area of humanities. It begins with a historical overview of the concepts of the child and childhood. During the course students analyze children's and young adult literature works that have acquired a cannonical status among the readers and researchers such as "Peter Pan", "Alice in Wonderland," "The Wizard of Oz", but the course also focuses on the analyses of particular texts with the intention to provide students with skills for interpretation and tools for critical approach.
Course content:
Specific features of children's and young adult literature. Basic approaches to children's and young adult literature. Beginning of British children's and young adult literature. Development of children's and young adult literature in Britain and North America in the 19th and early 20th century. Children's and young adult literature after World War II. Development of the fantasy genre in the 1950s.New trends in children's and young adult literature in the 1960s, 1970s and 1980s. Rediscovery of the fantasy genre in the 1990s and early 21st century.
Teaching and assessment:
The course of lectures provides students with basic and in-depth knowledge on the latest research on the issue. The seminars focus on the analytical reading of individual literary texts, while focusing on key theoretical issues. Students sit a written exam based on a specially designed syllabus.

2517 Intercultural and Language Training

ECTS credits: 3 **Weekly classes:** 1lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Art,
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dr Juliana Pencheva Popova, MA, PhD, Dept. of European Studies and International Relations,
tel.: 082 / 888 708, E-mail: jppopova@uni-ruse.bg
Abstract:
The course aims at presentation and justification of the relation between intercultural and language training. The course content includes introduction to the basics of intercultural education as well as to cultural differences in perceptions, beliefs, attitudes and values, all of which form the basis of existing cultures and cultural orientations.
Course content:
Main concepts in intercultural education. Functions, characteristics and elements of culture. The concepts of mine/ours-foreign and otherness. Acquisition of native culture and foreign culture. The view on cultural grammar and the ideas of eminent researchers in the field of Intercultural Communication. Socio-psychological peculiarities of Intercultural Education. The processes of intercultural adaptation and cultural sensibilisation. Methodics of intercultural education.
Teaching and assessment:
Teaching technology envisages the acquisition of the course content through lectures and seminars whose goal is active students' participation in the development of the course units. The final ECTS grade in Intercultural Education is based on the results from three components: multiple choice written test, (50%), presentation of a lesson for the pupils from primary school /30%/ and participation in discussions and independent tasks (20%).

2503 Practical English Language – Part 2

ECTS credits: 13 **Weekly classes:** 0lec+0sem+0labs+10ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 2* aims to upgrade students' language knowledge and skills acquired during the first semester so that students pass from level B1+ to B2. Special emphasis is placed on the development of the four skills, along with the development of students' vocabulary knowledge, reinforcement of grammatical structures and word formation models.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: communication, ecology, global warming, sports, medicine, transport, literature, art, media, culture and cultural differences. The grammar content includes: present tenses, past tenses, *used to / would*, future tenses, ways for expressing plans and arrangements in the future, passive voice, conditional sentences, modal verbs for ability, possibility and obligation, gerund and infinitive, reported speech.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2504 Teaching Practice in English Language

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: preliminary exam **Type of exam:** oral
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Abstract:
The Teaching Practice in English Language aims at acquainting students with the teaching process in English language at primary school level. It provides an opportunity for students to put to practice the acquainted knowledge and developed skills as a result of the education in the *Methods of Instruction in English at Primary School Level,* to establish good rapport with pupils, to get familiar with the work in English classes in Bulgarian schools.
Course content:
Grammar presentation lesson. Vocabulary presentation lesson. Grammar practice lesson. Vocabulary practice lesson. Grammar revision lesson. Vocabulary revision lesson. Integrated skills lesson: listening. Integrated skills lesson: speaking. Integrated skills lesson: reading. Integrated skills lesson: writing.
Teaching and assessment:
At selected schools students are sent to all primary school classes where English language is taught (the classes are appointed provisional by the Head Teacher). Students contact the English language teacher of the classes in advance. The teacher gives them the lesson topics according to the sequence in his / her long term lesson planning schedule. Students prepare lesson plans and present them to the English language teacher or the university methodologist. At the end of all lessons delivered by the student teachers for the day, the lessons are discussed. All students, the university methodologist and the teacher take part in the discussion.

2505 Management of Educational Projects

ECTS credits: 4 **Weekly classes:** 2lec+1sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Management and Business Development
Faculty of Business and Management
Lecturers:
Pr. Assist. Prof. Julia Georgieva Doncheva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082 / 841-609, E-mail: jdoncheva@uni-ruse.bg
Abstract:
The main aim of the course is to develop students' basic theoretical knowledge and practical skills in the field of educational project management, as well as to develop their competences for project development and management in their future career.
Course content:
The "Management of Educational Projects" course content provides a detailed discussion of the steps involved in the planning, development, monitoring and final evaluation of a project. The main topics focus on project design; sample projects are also included.
Teaching and assessment:
The theoretical knowledge, which forms the basis of the discipline, is presented during the course of lectures. The topics of the seminars correspond to that of the lectures and allow for the development of students' practical skills through the exploration of sample project models. Active teaching and learning techniques are used in the seminars.

2506 Methodology and Methods of Scientific Research

ECTS credits: 4
Assessment: exam
Weekly classes: 2lec+1sem+0labs+0ps
Type of exam: written

Department involved:

Department of Pedagogy, Psychology and History
Faculty of Natural Sciences and Education

Lecturers:

Assoc. Prof. Violeta Yordanova Vaneva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082/ 841 609, ext. 227, 082 / 888 738, E-mail: vaneva@uni-ruse.bg
Pr. Assist. Prof. Asia Simeonova Veleva, MA, PhD, Dept. of Pedagogy, Psychology and History
tel.: 082/ 841 609, ext. 243;E-mail: aveleva@uni-ruse.bg

Abstract:

The course aims at introducing students to the theory and methodology of scientific research both in theoretical and empirical aspect. Its main objective is to form basic skills in planning, organizing and conducting empirical research, as well as an ability to analyze and process its results.

Course content:

The course contents include the following topics: Typology of pedagogical research; Planning, organising and conducting empirical pedagogic research; Analysis and presentation of the results from empirical pedagogic research projects; Methods of pedagogic research: observation, polling, didactic tests, projective methods, socio-metric methods, techniques of repertory grids, methods of expert evaluation, content analysis; biographical method and analysis of a specific case; writing a thesis paper.

Teaching and assessment:

Classes are taught using a combination of lectures and seminars. Attendance and active class participation are mandatory. The course completion is evaluated through a written test on the main topics in the syllabus as well as assessment of a practical task related to specific research problem.

2518 Linguistic Aspects of Acquisition of English by Lower Secondary School Pupils (grades 5 – 8)

ECTS credits: 2
Assessment: exam
Weekly classes: 2lec+0sem+0labs+1ps
Type of exam: written

Department involved:

Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education

Lecturers:

Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg

Abstract:

The course gives theoretical knowledge about the main theoretical platforms describing the ways of L1 and L2 acquisition. It focuses on the specific features of the processes and stages of the physical, emotional, psychological, social and cognitive development of lower secondary school pupils, and on their linguistic development in the acquisition of a foreign language. The development of students' practical skills for measuring the level of linguistic competence of L2 lower secondary school pupils is the focal point of the course.

Course content:

Specifics, subject of study and tasks of applied linguistics. Speech perception and production. Similarities and differences in the theoretical platforms describing L1 and L2 acquisition. Similarities and differences between adult and child L2 learners. Physical, emotional, psychological, social and cognitive development of lower secondary school pupils. Readiness to learn a L2. Stages and processes of the acquisition of L1 and L2. Content and expected outcomes of the teaching and learning of English as L2 by lower secondary school pupils. Orthographic competence. Lexical aspects of L2 acquisition by lower secondary school pupils. Specific characteristics of the acquisition of the L2 grammar.

Teaching and assessment:

The course content is delivered in the form of lectures and seminars. The seminars expand students' theoretical knowledge acquired during the lectures and develop their skills for measuring the linguistic competence of lower secondary school pupils. Students sit a written exam based on a specially designed syllabus covering all the topics discussed during the lectures and seminars.

2535 Interactive and Multimedia Technologies in English Language Lower Secondary School Education

ECTS credits: 2
Weekly classes: 1lec+0sem+0labs+2ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Dept. of Informatics and Information Technologies
tel. 082 / 888 490, 888 645, E-mail: mst@ami.uni-ruse.bg
Pr. Assist. Prof. Svetlozar Stefanov Tsankov, PhD, Department of Informatics and Information Technologies,
tel. 082 / 888 645; E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is to familiarize students with multimedia basic components and the stages for developing multimedia applications (MMAs) and models for the development of e-learning educational resources. Students will acquire basic knowledge on the application of modern systems for the development of multimedia CD and web-based applications. During the seminars the students will get acquainted with specific products, languages and media for the creation of MMA and web-based courses.
Course content:
Introduction in multimedia. Areas of application. Requirements, stages and technology for the creation of MMAs. Basic elements of multimedia and basic instruments for the creation and editing of text and images. Basic elements of multimedia and basic instruments for the creation and editing of video and audio information. Animation – nature, types, usage, elements and characteristic features. Application of animation in education, multimedia and web design. Models and platforms for the creation of e-learning interactive educational resources. Platforms for the development of MMAs and interactive teaching courses.
Teaching and assessment:
The course is conducted in the form of lectures which take place 1 lesson weekly. Practice sessions are 2-lesson classes and are held on topics of the lectures as described above under the supervision of an assistant professor/instructor. At the beginning of the sessions students do a 5-minute brief test or oral questioning as feedback. In the end of the course they do a written test covering the lecture material.

2509 Practical English Language – Part 3

ECTS credits: 7
Weekly classes: 0lec+0sem+0labs+10ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The course *Practical English Language – Part 3* aims to upgrade students' language knowledge and skills acquired during the first semester so that students pass from level B2 to C1. Special emphasis is placed on the development of students' oral fluency and their skills for justifying opinions precisely, for writing about complex subjects in a letter, an essay or a report, for understanding extended speech even when it is not structured, as well as for understanding specialised articles on unfamiliar topics and longer technical instructions.
Course content:
The course content focuses on the development of students' practical skills. The main topics are: communication, ecology, global warming, sports, medicine, transport, literature, art, media, culture and cultural differences. The grammar content includes: perfect and continuous tenses, future tenses, future in the past, passive voice, relative clauses, the article, gradable and ungradable adjectives, past tenses for hypothetical meaning, participle clauses, gerund and infinitive, modal verbs.
Teaching and assessment:
The course content is delivered in the form of seminars. During the seminars special attention is placed on the development of the four skills through the use of authentic teaching materials and tasks, which contribute to the development of students' lexical and grammatical knowledge. Students are expected to attend classes regularly, to participate actively in them, to prepare individually on a regular basis by doing their homework and to sit successfully three written tests.

2510 Pre-diploma Pedagogical Practice in English Language

ECTS credits: 2 **Weekly classes:** 0lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:** oral
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Senior lecturer Elga Kirilova Naumova, MA, Dept. of Foreign Languages
tel.: 082 / 888 803, E-mail: enaoumova@uni-ruse.bg
Abstract:
The pre-diploma teaching practice in English puts an end to the practical pedagogical training of the students from the MA programme. It provides an opportunity for students to put the acquired theoretical and methodological knowledge into practice and to get acquainted with the way in which English language is taught in Bulgarian schools. Students teach their English lessons under the supervision and help of the English language teacher of the respective class.
Course content:
Grammar presentation lesson. Vocabulary presentation lesson. Grammar practice lesson. Vocabulary practice lesson. Grammar revision lesson. Vocabulary revision lesson. Integrated skills lesson: listening. Integrated skills lesson: speaking. Integrated skills lesson: reading. Integrated skills lesson: writing.
Teaching and assessment:
The students are allocated to a class in pairs where they teach all the English language classes for the week. The English language teacher monitors their work and guides them, helps them in the choice of teaching materials if necessary. Every student delivers an exam lesson in front of an Examination Committee formed by three lecturers and the teacher of English. The student presents all lesson plans of all the lessons delivered during the pre-diploma teaching practice. When forming the final mark of the observed exam lesson the Examination Committee takes into account the evaluation of the teacher of English of the student's work throughout his / her teaching practice in the school.

2536 Diagnosis of Foreign Language Knowledge and Skills (5^{th} – 8^{th} grade)

ECTS credits: 2 **Weekly classes:** 1lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:** written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Penka Todorova Kaneva, MA, PhD, Dept. of Primary School Pedagogy, University of Veliko Tarnovo
tel.: 062 / 635 853, E-mail: p.kuneva@gmail.com
Abstract:
The course acquaints students with the main issues related to pedagogical diagnostics and more specifically – with the diagnostics of foreign language knowledge and skills of 5^{th} – 8^{th} grade learners. The specific characteristics of measurement, assessment and approaches for setting the standards for evaluation are also discussed. During the course students prepare a portfolio in which they include the theoretical articles examined and a presentation of the psychometric characteristics of the different test items.
Course content:
Definition, subject matter and pedagogical functions of diagnostics. Measurement - basic characteristics, reliability and errors, validity. Assessment – specific features and types. The test as a measuring tool. Types of language tests. Basic steps in test construction. Test aims. Definition of evaluation standards for interpretation of test results. Alternative means of assessment of language skills – lesson observation, language portfolios, discussions. Cambridge University Tests for the evaluation of learners' English language competences.
Teaching and assessment:
The course content is delivered in the form of lectures (which include presentations and discussions) and seminars which include practical tasks and discussions. Individual practical tasks are assigned to students during the seminars. The final mark is formed on the basis of the presented portfolios by the students, his / her participation during the lectures and seminars and regular attendance of classes.

2512 Pedagogical Rhetoric

ECTS credits: 2
Weekly classes: 1lec+0sem+0labs+1ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Lecturers:
Prof. Dimitrina Ignatova Tsoneva, MA, PhD, Dept. of Bulgarian Language, Literature and Art,
tel.: 082 / 888 738, E-mail: dtzoneva@uni-ruse.bg
Abstract:
The basic aim of the Pedagogical Rhetoric course is to reveal the foundations of rhetoric, which would develop students' awareness of eloquence as a speech act and of rhetoric as a science; to provide the theoretical background for the preparation and presentation of different genres and varieties of public speech and for the techniques of self-mastery of the rhetoric art.
The object of the course are history, theory and methods of teaching rhetoric. Taking into consideration the purpose of the course, the emphasis is placed on eloquence and its development throughout history and nowadays.
Due to its interdisciplinary nature Pedagogical Rhetoric is based on a number of other sciences. Specific data, points of view and conclusions that are made, have been united by one common goal – to unveil the process of speech impact and its significance in the communicative sphere of pedagogy.
Course contents:
The main topics are: History of the rhetoric art. Basic rhetorical classification of orator presentations. Composition of the orator's speech. Linguistic features of the rhetorical speech. Non-verbal communication in the rhetoric art. Technique of delivering successful speech. Psychological analysis of the communication between the speaker and the audience. Methods and techniques of speaking convincingly.
Teaching and assessment:
The course is delivered in the form of lectures. Students receive theoretical knowledge on the basic topics included in the syllabus. Lectures are read during one semester and basic rhetoric terms, and language questions are illustrated by selected examples, tables and slides.

2513 State Exam in the Foreign Language

ECTS credits: 15
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Arts
Faculty of Natural Science and Education
Consultants:
Assoc. Prof. Tsvetelina Kirilova Harakchiyska, MA, PhD, Dept. of Bulgarian Language, Literature and Art
tel.: 082 / 888 612, E-mail: tharakchiyska@uni-ruse.bg
Senior Lecturer Liliana Ivanova Slavianova, MA, Dept. of Foreign Languages
tel. 082 / 888 816, E-mail: lslavianova@uni-ruse.bg
Abstract:
The State Exam in the Foreign Language is the ending procedure of the MA course. It is held before an Examination Board and includes four modules: reading, writing, use of English and listening.
Course content:
The State Exam includes four modules: reading, writing, use of English and listening which include all lexical and grammatical structures studied during the MA course and put an emphasis on the basic skills: listening, reading and writing.
Teaching and assessment:
Students sit the exam before a State Examination Board.

2514 Master Thesis Defense

ECTS credits: 15
Weekly classes: 0lec+0sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Bulgarian Language, Literature and Art
Faculty of Natural Sciences and Education
Consultants:
All lecturers from the Department involved in the training process
Abstract:
The Master Thesis is an individual creative assignment, which is fulfilled under the leadership of a research lecturer. Its objective is to give the possibility to the students to demonstrate the knowledge and skills accumulated during their study for achieving the objectives and tasks of the Master Thesis and to present their creative development successfully before an Examination Board.
Course content:
The Master Thesis includes one topic or area of the syllabus and students are allowed to choose in which profile they want to develop a Master Thesis – English language, English Literature, British and American Area Studies, Methods of Instruction of English to Lower Secondary School Pupils. Comparative research studies are also allowed (e.g. Bulgarian and English language).
Teaching and assessment:
The Department of Bulgarian Language, Literature and Art provides:

- the organisation of collecting, confirming and announcing of topic suggestions for the Master Thesis;
- the distribution of topics and research leaders among the students;
- the diploma practice organisation;
- the leadership, review and presentation of the Master Thesis.

Weekly tutorials with the research leaders are scheduled for the students.

The final year student presents the Master Thesis before the State Examination Board.

POSTGRADUATE STUDIES IN INFORMATICS

PROFESSIONAL STANDARDS
OF A MASTER IN INFORMATICS

SUBJECT: **"Informatics"**
Educational Degree: **Master**
Professional Qualification: **Master in Informatics**
Term of education: **1 year (2 terms)**

The study program is aimed at specializing bachelors in the field of Informatics and Information Technologies in compliance with the modern requirements of the computer society. The qualification of Masters of Informatics allows them to work as programmers as well as for companies that intensively use computer applications and information technologies, i.e. high-technology-based productions, banks, insurance companies, institutes, laboratories, computing centers, universities, etc.
Students attending the course gain in-depth knowledge on databases, information systems and technologies, computer graphics, computer networks. The graduates have potential for suggesting modern ideas in designing and using of software in wide range of applications. They are able to administrate operations in network environment and effectively apply contemporary Internet technologies.
Characteristic for the teaching process of all disciplines of this course degree is the organic inclusion of computer-based technologies for training and self-study. The accent is laid on programming in network environment and on data security as well as the management and analysis of computer networks. The applied licensed and free software include C++ compilers, PASCAL, the software products Mathematica, Mathlab, ORACLE, and MPI. Personal computers run on licensed MS Windows, MS Office, Borland Pascal, Microsoft Visual Studio. Mathematical studies are expanded with the course "Operations Research".
The full-time study program is scheduled for two terms, and the part-time study program – for three terms. The course ends up with the submission of a thesis or the performance of a state examination. For obtaining a master degree the applicants should have completed a bachelor's degree of Informatics, Pedagogy of Education in Mathematics and Applied Mathematics, Computing.

CURRICULUM

OF THE MASTER'S PROGRAMME

INFORMATICS

FIRST YEAR

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
0726	Modern Software Engineering	5	1116	Management and Analysis of Computer Networks	4
0734	Object-oriented and Distributed Databases (DBs)	6	0944	Programming in Network Environment and Data Security	4
0808	Digital Image Processing	5	1728	Modern Internet Technologies	4
0824	Operations Research	5	1578	Workshop 2	3
1727	Multi-agent and Artificial Intelligence Systems	5			
0837	Workshop 1	4		**Master thesis**	15
	Total for the term:	**30**		**Total for the term:**	**30**

0726 Modern Software Engineering

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Pr. Assist.Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail ptx@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge in continuation of the bachelor's course of Software Technologies. The stress is laid on the phases of analyzing the technology/requirements for designing of software systems using modern tools for automatizing the process. In the workshop sessions a particular attention is paid on the team work. After the course the graduates are able to design overall software systems and work in a team.
Course content:
Role of software engineering for software systems design. Software technologies' links with other areas of the software production. Analysis of the requirements for a software system. Specifying a software project – DFD, UML, ERD, logical, etc. Object-oriented design. Functional-oriented design. Designing of user's interface. Evaluation of a software system performance. Software metrics. Testing and acknowledgment of software systems. Management of software project development.
Learning and assessment:
Problem-oriented lectures are conducted two class-hours per week. The practice sessions objective is to develop students' skills for designing software systems in practice. Students learn to work in a team for working out a complete software project. The course ends up with an examination. The final grade is based on students' practice sessions activities (30), and the examination result (70%).

0734 Object – oriented and Distributed Databases (DBs)

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel. 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Abstract:
The course objective is students to get familiar with the specificity of organization, development and application of the object-oriented databases and distributed databases DBs. Students learn the basic concepts of the object-oriented approach and its applicability to the database theory. The stress is laid on the main architectures for building-up distributed DBs as well as the principles for designing, fragmentation and locating of distributed DBs considering relevant restrictions and data security.
Course content:
Extended entity-relationship model (EERM). Conversion from EERM to object-oriented model (OOM). Object definition – identification, structure. Encapsulating methods. Stability. Classes and types of hierarchy. Inheritance. Advantages and disadvantages of distributed databases management systems (DDBMS). Homogeneous and heterogeneous relational database management systems (RDBMS). Functions and architecture of RDBSs. Distributed relational DBs. Fragmentation. Optimization of distributed queries. Management of distributed transactions and parallelism.
Learning and assessment:
The program of study involves lectures and practice sessions. The lectures elucidate particular stages of the organization, design, build and application of object-oriented and distributed databases. During the practice sessions the students practice relevant stages of designing and application of a specific database for a particular Database Management System (DBMS). During the term the students complete two tests including theoretical questions and practical tasks. The course ends up with an examination. The final grade is based on the examination result, term tests and students' practice activities.

0808 Digital Image Processing

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
тел.: 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Rumen Ivanov Rusev, Department of Informatics and Information Technologies
tel. 888 326, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course deepens students' knowledge in the field of image processing. Issues related with the modern methods for image improvement and restore are put in focus. Due attention is paid on the basic methods and approaches applied for computer vision implementation.
Course content:
Discrete image transforms. Image enhancement – spatial domain methods, frequency domain methods. Computer vision, object removal for investigation and segmentation. Areas analysis. Image acquisition – lightening, geometry of projections on 3-D scenes. Video flow processing. Object recognition.
Learning and assessment:
Students attend lectures and practice sessions. Students perform individually assigned tasks related to the lectures, i.e. program modules implementation for raster image visualization, properties definition, image improvement. Some practice activities apply commercial and freely distributed software products for illustrating sophisticated methods of the image processing and comparative analysis of the results from their application. The course ends with a written exam. The final mark is formed on the basis of student's results shown at the practice sessions (30%) and the xam result (70%).

0824 Operations Research

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Numerical Analysis and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Velizar Todorov Pavlov, PhD, Department of Numerical Analysis and Statistics
tel. 888 466, E-mail: vpavlov@uni-ruse.bg
Assoc. Prof. Plamen Jordanov Yalamov, PhD, Department of Numerical Analysis and Statistics
tel. 888 466, E-mail: yalamov@allianz.bg
Abstract:
The subject aim is to make students acquainted with some specific models arising in solving management problems and up-to-date mathematical and statistical methods for their solving, analyzing and interpretation of received solutions. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving larger real models are provided.
Course syllabus:
Subject and aim of operations research. Mathematical model of operations. Efficiecy and optimum criterion. General formulation of the linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with *m* unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex Method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queuing theory. Elements of inventory theory.
Teaching and learning methods:
The teaching process is realized through lectures and practice sessions. Topics discussed during lectures are illustrated with due examples at the practice sessions. Special attention is paid to the opportunities of the software package MATLAB for solving more complicated and close to the practice problems.

1727 Multi – agent and Artificial Intelligence Systems

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Desislava Stoyanova Atanasova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail datanasova@ami.uni-ruse.bg
Abstract:
The course objective is students to obtain a comprehensive conception and introductory understanding referring to creating of intelligence applications based on the principles of software agent technologies for the knowledge presentation, generation of conclusions and training. The study program of the discipline is scheduled in view of students' knowledge on programming techniques and artificial intelligence. The teaching process is concentrated on two main directions, i.e. enhancing the knowledge for the theoretical prerequisites for creating of multi-agent systems and the programming realization using Java as a basic language for creating of artificial intelligence.
Course content:
Infinite heaps – theoretical basis and application technology. Neural nets. Theory, types, modifications and applications. Agents and multi-agent systems – conversion from artificial intelligence to intelligent agents. Cooperating agents. Competitive agents. Planning of multi-agent systems. Architecture of a software intelligent agent.
Learning and assessment:
The lectures are supported with suitable visual aids and demonstrating outputs are used for some topics. Practice sessions are carried out in parallel to the lectures for gaining practical experience. For complex examples relevant software modification is made on purpose for the practice session. The course ends up with the continuous assessment result.

0837 Workshop 1

ECTS credits: 4 **Weekly classes**: 0lec+0sem+0labs+4ps
Assessment: continuous assessment **Type of exam:**
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Pr. Assist. Prof. Galina Evgenieva Atanasova, Department of Informatics and Information Technologies,
tel. 888 326, E-mail gea@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge in continuation of the bachelor's course of Software Technologies. The stress is laid on the phases of analyzing the technology/requirements for designing of software systems using modern tools for automatizing the process. In the practice sessions a particular attention is paid on the team work. After the course the graduates are able to design overall software systems and work in a team.
Course content:
Role of software technologies for software systems design. Software technologies' links with other areas of the software production. Analysis of the requirements for a software system. Specifying a software project – DFD, UML, ERD, logical, etc. Object-oriented design. Functional-oriented design. Designing of user's interface. Evaluation of a software system performance. Software metrics. Testing and acknowledgment of software systems. Management of software project development.
Teaching and assessment:
The course is conducted through 4-hours practice sessions. Students should have been preliminarily prepared for the themes practiced at the sessions. The workshop objective is to develop students' skills for designing software systems in practice. Students learn to work in a team for preparing a complete software project. The course ends up with a continuous assessment. The final grade is based on the continuous assessment during the practice sessions (50%), the result of developing and defending student's part of the teams project (20%), and the individual presentation of projects' parts (30%).

1116 Management and Analysis of Computer Networks

ECTS credits: 4 **Weekly classes**: 3lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Mihail Petkov Iliev, PhD, Department of Telecommunications
tel. 888 665, E-mail: miliev@ecs.uni-ruse.bg
Abstract:
The course objective is students to obtain appropriate knowledge on the basic principles of network administrating as well as on the monitoring tools and management of computer networks.
The study program involves, on one hand, the principles for network resources administrating and relevant implementation in specific operating systems, and on the other hand, the architecture of the network devices management systems. The accent is laid on the concept of network management on the basis of SNMP protocol. Particular systems are examined during the practice sessions.
Course content:
Basic principles of network objects administrating. Directorial services. Security in local networks. Network analysis and management tools. Architecture of network management systems. Management systems standard on the basis of SNMP protocol. Local networks monitoring and analysis tools.
Learning and assessment:
The course is carried out three class-hours per week and presents the basic principles of the subject topics. During the practice sessions the students perform particular practical tasks related with the theory of the lectures. The course ends up with an examination including theory and practical tasks. The final grade is based on the result from the exam, and on the continuous assessment from the practice sessions activities.

0944 Programming in Network Environment and Data Security

ECTS credits: 4 **Weekly classes**: 3lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
тел.: 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Abstract:
The course objective is students to get familiar with the basic principles for programming in network environment as well as the data security tools. Network applications design techniques are studied on the basis of the TCP/IP protocol stacks using Java technologies. In the practice sessions students perform particular practical tasks. The graduates are able to design network applications of a medium complex character.
Course content:
Java – programming language in network environment. Packages and interfaces. Input/Output. Processing of exceptions. Multi-thread programming. Applets and events. Communication and operation in network environment. TCP – fundaments of TCP sockets. Development of client-server applications. UDP sockets. UDP server and UDP client development. IP multi-casting usage. Protocols manipulators. Data manipulators. Java security.
Learning and assessment:
Practice sessions follow lecture themes. The 3-hour-weekly-sessions are held in computer training room, where each student works individually. Students solve practical problems related with the lecture topics. They should have been prepared in advance with respect to lectures, documentation and examples. The course ends with a practical exam, i. e. each student is given an individual task that has to be implemented on a computer for a scheduled time. The task involves the specifities studied during the course. The results are evaluated by a score table referring to the basic points of the problem implementation. The final mark is formed taking into consideration student's activities during the practice sessions(20%).

1728 Modern Internet Technologies

ECTS credits: 4 **Weekly classes**: 3lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
тел.: 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, Department of Informatics and Information Technologies
tel.: 888 326, E-mail val@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge on the modern tools used in programming for Internet. During the practice sessions students apply theoretical statements for implementation of practical tasks. The graduates are able to design Internet applications of medium complexity.
Course content:
Review of the modern aids for Internet programming. HTML, DHTML, XML Customers scripts. Java Script. Server scripts, JSP, PHP. Theory of programming using Perl. Internet applications using databases.
Learning and assessment:
Lectures are conducted three hours weekly for presenting the basics of the topics. During practice sessions students work out practical tasks related to the lectures. The course ends with a continuous assessment mark. The final mark is based on the results from the practice sessions activities.

1578 Workshop 2

ECTS credits: 3 **Weekly classes**: 0lec+0sem+0labs+6ps
Assessment: continuous assessment **Type of exam:** written and practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail datanasova@ami.uni-ruse.bg
Abstract:
The course focuses on the development of a team project referring to a complex practice-oriented task. Students apply the knowledge gained from studying the diciplines included in the first and second term of the curriculus.
The stress is laid on the individual work of students related to the project, that is assigned on a team of 3 to 5 students. After the course the graduates are able to design, test and present overall software systems, working in a team.
Course content:
Teams' task assignment, planning roles and tasks in the teams; Development project's plan; Working on scheduling sequences and collaborations diagrams; Data model specification; Test plan, test tasks and scenario development; Software system development; Testing and documenting of test results; Finalizing and defending the project.
Teaching and assessment:
The workshop objective is to develop students' skills for designing software systems in practice. Students learn to work in a team for preparing a complete software project. The course ends up with a continuous assessment. The final grade is based on the continuous assessment during the practice sessions (40%), the result of developing and defending the teams' project (30%) and the individual presentation of projects' parts (30%).

PROFESSIONAL STANDARDS OF A MASTERS IN INFORMATICS AND INFORMATION TECHNOLOGY IN EDUCATION

SUBJECT: **Informatics and Information Technology in Education**
Educational Degree: **Master**
Professional Qualification: **Master of IITE**
Term of education: **2 years (4 terms)**

The course may be attended by bachelors from the following fields of higher education: 1. Social, economic and law studies; 3. Natural sciences; 4. Engineering sciences.

The study program aims to graduate highly qualified teachers of Informatics and IT who will be able to:

- apply effectively in practice the modern methods for teaching Informatics and Information Technologies;
- participate and be leaders of scientific researches in the field of teaching IIT;
- take efficient managerial solutions.

The participants in the master degree course of IITE gain knowledge in the following subjects: Object-oriented Programming, Databases, Information Systems and Technologies, Computer Graphics, Computer Networks, Multimedia Systems and Technologies, etc. They will be able to suggest up-to-date solutions for designing and usage of relevant software products in different fields of applications. They can administer the working process in a network environment and effectively apply the modern Internet technologies. Characteristic for all courses involved in the program is the organic inclusion of computer-based technologies for training and students' independent work.
The graduates from the master degree course can take the position of programmers, school principals, expert of Informatics and Information Technologies in the hierarchy of the Ministry of Education and Science, as well as Scientific Institutions and places where the computer applications and technologies are used, i.e. software firms, banks, insurance companies, etc.

POSTGRADUATE STUDIES IN INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION

PROFESSIONAL STANDARDS
OF A MASTER IN INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION

FIRST YEAR

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
0241	Psychology	4	0297	Object Oriented Programming	6
0250	Pedagogy	6	0298	Computer Graphics	6
0251	Information Technologies	5	0301	Computer Systems and Internet	6
0256	Introduction to Programming	5	0320	Methods of Teaching Informatics and Information Technologies	6
0260	Discrete Mathematics	5	0322	Databases and Information Systems	5
0267	Operating Systems	5	0324	Lesson Observation	1
	Total for the term:	30		**Total for the term:**	30

SECOND YEAR

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
0325	Programming in Internet	6	0396	Programming in Comenius Logo Environment	6
0340	Multimedia Systems and Technologies in Education	6	0408	Pre-diploma Pedagogical Practice	5
0385	Computer Networks and Communications	6	***Elective courses 1***		
0386	Data Structures	5	0394	Software Engineering	4
0387	Audio-visual and Information Technologies in Education	3	0395	Visual Programming	4
0391	Current Pedagogical Practice	4	0392	Extracurricular Studies in Informatics	4
			0393	Desktop Publishing	4
			Graduation procedure		
			0416	State examinational lesson in Informatics and Information Technologies	2
			0473	Master thesis	13
	Total for the term:	30		**Total for the term:**	30

0241 Psychology

ECTS credits: 4
Weekly classes: 2lec+1sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:

Department of Pedagogy, Psychology and History

Faculty of Natural Science and Education
Lecturers:

Assoc. Prof. Sinto Mois Ulzari, PhD, Department of Pedagogy, Psychology and History
tel. 888 208, E-mail: sinto@abv.bg
Abstract:
The aim of the course in General Psychology is to introduce students to the contemporary tendencies and advances in the study of the human mental processes.

Course contents:

The course examines such topics as subject matter and methods of study of Psychology; historical survey; current problems of the science, etc. Special attention is drawn to the personal and active approach in psychology, the structure of personality, self-regulative mechanisms, reflection and intercourse relations. It explores the peculiarities of the psychological processes, qualities and states of the character, the progress of the intellectual and the emotional part of one's character.

Teaching and Assessment:

The course is taught by lectures and seminars. Lectures are designed to introduce students to new ideas and to provide a model for further analysis. At seminars, students are encouraged to participare in seminars and discussions.

0250 Pedagogy

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:

Department of Pedagogy,Psychology and History

Faculty of Natural Science and Education
Lecturers:

Assoc. Prof. Peter Raikov Petrov, PhD, Department of Pedagogy, Psychology and History
tel. 888 208, E-mail: petrov1947@abv.bg
Abstract:
Didactics has a fundamental role for the professional development of students. The course aims to: introduce students to the subject matter in a systematic way; reveal the most topical problems in the development of Didactics; analyze the procedural and functional character of education.
Course contents:
Scientific statute of Didactics; Character of the teaching process; Principles of teaching; Methods of Teaching; Systems of organizing the teaching process; Common teaching problems; IPersonalization and differentiation of education; Tutoring; Work with poor and talented pupils.
Teaching and assessment:
The course is taught by a combination of lectures and seminars. At seminars the conversational method is widely used; relevant articles on the topics included in the syllabus are discussed. Active participation is encouraged by awarding students additional points.

0251 Information technologies

ECTS credits: 5 **Weekly classes**: 0lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail:mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, E-mail:valia@ami.uni-ruse.bg
Abstract:
The course objective is the acquisition of in-depth knowledge and skills for operating with the software applications WORD, EXCEL and POWER POINT. It is assumed that students attending the course have elementary computer literacy so as to build up their knowledge and skills further.
The practice sessions are 45 in total. Students are made familiar with Microsoft Office applications and learn how to link and jointly use the data of these applications.
Course content:
Text processing: Create new document and format. Templates. Macros. Publishing of Word document in Web. Define styles. Usage of styles. Finding of styles. Templates. Create template and template application.
Spreadsheets: Create tables. Absolute references. Built-in functions. Tables linking. Databases, sorting and filtering. *Presentations:* New presentation. Transition animation. Presentation display. Macros application. Publishing of slides in Web.
Teaching and assessment:
The academic study is carried in the form of practice sessions. Continuous assessment is implemented on students' classroom activities. Course validation is recorded to students who have not omitted practice sessions except for twice through the whole term. The exam is conducted in student computing labs. Students get an individual task to reveal their knowledge gained during the course.

0256 Introduction to programming

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel.: 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: ptx@ami.uni-ruse.bg
Abstract:
The purpose of this course is introduction to the fundamental concepts and principles of the programming. The lectures aim to set the theoretical bases for algorithm and program construction. The program language taught in the lectures is Pascal, which has all the possibilities of the professional program languages. The basic data types and operations with them are presented. The practice sessions aim students to acquire habits and skills for algorithm creation and the corresponding program realization written in Pascal.
Course content:
Algorithm creation. Basic data types and basic operation the program language Pascal. Ruling structures – conditional, case, loops. Programs with arrays. Procedures and functions. Programs with strings, sets and records. Programs with structured and text files.
Teaching and assessment:
The course comprises lectures and practice sessions. The lectures are 2 hours per week. They introduce the students to the topic. Some details are discussed and suitable examples are given. Within the practice sessions (2 hours per week) the students write and test programs on computers. At the end of each topic a test is taken. The last examination is in written form and together with the assessment of the tests during the term form the final mark.

0260 Discrete Mathematics

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Departments involved:
Department of Algebra and Geometry
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Petar Ivanov Rashkov, PhD, Department of Algebra and Geometry
tel. 888 489, E-mail: tpeter@ami.uni-ruse.bg
Pr. Assist. Prof. Iliyana Petrova Raeva, MSc, Department of Algebra and Geometry
tel.: 888 453, E-mail: iraeva@yahoo.com
Abstract:
The discipline aims to create in students basic notions, abilities and knowledge to work well with different discrete objects and corresponding geometrical objects. It is a classical field of mathematics, having its own importance and at the same time is the basis for studying other mathematical, and informatical disciplines as Probability Theory and Satistics, Optimization, Programming, Data Bases, Computer Graphycs, etc.
Course content:
Sets and operations on them. Relations. Functions. Properties of natural numbers. Groups, rings and fields. Boolean algebras and Boolean fuctions. Combinatorics. Recurrence relations and sequences. Generating functions. Nonoriented graphs. Oriented graphs. Applications to physics, optimization etc. Sentence and predicate logic. Logical problems in school. Algorithms in the form of Turing machines and normal algorithms of Markov. Finite automata. Languages.
Teaching and assessment:
The theoretical topics presented at lectures are considered at the practice sessions by solving problems using these topics. The individual students` work is controlled. There are four home work assignments. Two written tests take place. On the basis of the mark of the test the students receive the corresponding mark after an oral discussion on the respective syllabus section. When forming the final assessment, the home work are taken into consideration too.

0267 Operating Systems

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Responsible department:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course's aim is to give students knowledge and skills about the main principles of building and functioning of the OS. The theory at lectures is illustrated with examples of different modern OS.
Course content:
Operating systems. Main terminology. History. Structure of an OS. Processes. Interaction and management of processes. Processor management. Management of real and virtual memory. Input/output management system. Files management. Distributed systems. Security and safety of OS.
Teaching and assessment:
The lectures are 2 hours per week. The main material is given at lectures.
The practice sessions take place in PC labs under the supervision of a lecturer on the lecture topics. During the practice sessions the students strengthen their knowledge acquired during the lectures by looking at a set of examples. The student's progress is regularly checked with tests during practice sessions.
The final grade is formed on the basis of the continuous assessment during practice sessions.

0297 Object Oriented Programming

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, Email: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, Department of Informatics and Information Technologies
tel.: 888 326, E-mail val@ami.uni-ruse.bg
Abstract:
The course is a continuation of the "Introduction to programming" course. The course focuses the main concepts of the object-oriented programming. The programming language C++ is studied in detail and especially the object-oriented part. Classes and objects are studied being the main categories, as well as the main concepts for working with them.
Course content:
Classes and objects. Components of classes – data members, function members, constructors and destructors. Objects and functions. Friends of classes. Derivatives of classes, inheritance. Streams. Re-definition of operators.
Teaching and assessment:
The lectures explain the process of development of algorithms using classes and objects, as well as their implementation in C++. At the practice sessions students write programmes, test them and do tests. Student's course assignment includes two problems for independent work that has is defended and evaluated on submission. The term is validated for students who defend successfully the course assignment.
The course ends with a written exam but it is also orally defended. The final grade is formed as an average from the exam, course assignment and tests results.

0298 Computer Graphics

ECTS credits: 6 **Weekly classes**: 2lec+0sem++0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vasilev, PhD; Department of Informatics and Information Technologies
tel: 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Rumen Ivanov Rusev, Department of Informatics and Information Technologies
tel: 888 326, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course focuses on the main aspects of two sections of the computer science – computer graphics and image processing. Its objective is to familiarize the students with the basic principles of developing and working with interactive computer graphic systems and to give them the knowledge, which is necessary for the development of software for geometrical modeling of objects and graphical documents, using computers. Students study the main principles and approaches of 2D and 3D objects visualization, how to obtain realistic images of spacious objects and scenes. Attention is paid also to the methods of developing graphical user interface.
Course content:
General information about computer graphics and image processing. Vector and raster graphics. Computer graphics colour. Colour models. Peripheral devices for computer graphics and image processing. Object description in graphic systems – models. Graphic data bases. Basic geometric transformations in the plain. Approximation and modeling of plain curves – interpolation, Besie's curves, cubic splines, B-splines, basic geometric transformations in the space. 3D objects plain projections. Methods of 3D realistic image creation. Basic principles for creating computer animation. Main characteristics of digit images. Image improvement. Image recovering. Image segmentation. Image recognition and interpretation. Standardizing in computer graphics.
Teaching and assessment:
The course comprises lectures and practice sessions. The practice sessions objective is students to enhance the knowledge obtained from lectures and their self study. Special attention is paid on students' independent work. They learn how to create program modules with the methods taught and practically apply the specialized software. The final grade is formed as an average from the exam (70%) and student's work during the term (30%).

0301 Computer Systems and Internet

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Computing
Faculty of Electrical Engineering, Electronics and Automation
Lecturers:
Assoc. Prof. Georgi Nikolov Krastev, PhD, Department of Computing
tel.888 672, Email: gkrastev@ecs.uni-ruse.bg
Abstract:
The course addresses architectural aspects of computer systems. Main terminology in computer architectures are discussed as well as organization of computations. Modern computer architectures are presented analytically and comparatively. Memory hierarchy and input-output subsystem structure are shown as well. Simulations and real systems are used at the seminars to gain more deep understanding.
Course content:
Computer architecture principles. Base components. Historical perspective. Computer system base structure. Accumulator, stack and register architecture. Architecture IA32. Working modes. Computer memory hierarchy. Input-output system.
Teaching and assessment:
The lectures introduce main theoretical topics. Each group of lectures ends with summary of the material and formulation of problems. At practice sessions simulations and real systems are used putting lectures to practice. Each session begins with formulation and analysis of problems. At the very end the students are asked to summarize in written form their results. The information materials needed are given in electronic form to the students.

0320 Methods of Teaching Informatics and Information Technologies

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written and oral
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, Email: valia@ami.uni-ruse.bg
Abstract:
The course is included as compulsory subject in second term of speciality. Its objective is to familiarize the students with the didactical methods for teaching secondary school students in “Informatics” and “Information Technologies”. The accent of this course is laid on the existing educational strategies and the pedagogical tasks which have to be performed in teaching Mathematics and Informatics. Students learn which are the factors effecting the syllabus grounds, subject accents and lesson structure as well.
Course content:
Nature, dynamics and trends in the development of educational methods in Informatics and Information Technologies. Main objectives of the education if Informatics and IT in the Bulgarian school. Specifics of the pedagogic tasks solved when teaching IIT. Essence and specifics of teaching Informatics and IT. Specifics of the lesson in IIT. Diagnosis of the qualities formed in the process of using computer technology.
Teaching and assessment:
The teaching process is carried out through lectures and seminars. The lectures are two hours a week. The main objective of the lectures is to familiarize students with the didactic problems arising with the inclusion of Informatics and IT within the syllabus of Bulgarian secondary schools. The term ends with exam. The final grade is formed on the basis of the result from the exam and student’s involvement in practice discussions.

0322 Databases and Information Systems

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Responsible department:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Katalina Grigorova, PhD, Deptartment of Informatics and Information Technologies
tel. 888 464, 888 326, Email: kgrigorova@ami.uni-ruse.bg
Abstract:
The purpose of this course is introduction of fundamental concepts and principles of organisation and implementation of databases (DB) and database management systems (DBMS).
The students will gain knowledge on the main topics of database theory, physical and logical organisation of DB, data models and their features. The emphasis is on relational database model.
Course content:
Introduction. Data models. Entity-Relationship model. Relational model. Relational algebra. Query languages and query optimisation. Functional dependencies. Normalisation. DBMS. The main principles
Teaching and assessment:
The course comprises lectures and practice sessions. The lectures are 2 hours per week. They introduce the students to the topic. Some details are discussed and suitable examples are given. Within practice sessions (2 hours per week) the students work in team and need to integrate the various parts of the course.
A 3-hour written paper for the knowledge and theoretical components at the end of term accruing to 60% of the final assessment, with 40% of the assessment of practical skills from the practice sessions.

0325 Programming in Internet

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Assist. Prof. Svetlozar Stefanov Tsankov, Department of Informatics and Information Technologies
tel. 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge on the modern software tools used in programming for Internet. During the practice sessions students apply theoretical statements for implementation of practical tasks. The graduates are able to design Internet applications of medium complexity.
Course content:
Review of the modern aids for Internet programming. HTML, DHTML, XML Customers scripts Java Script. Server scripts, JSP, PHP.
Learning and assessment:
Lectures are conducted one class-hour per week involving the basic statements of the topics. During the practice sessions students work out practical tasks related to the lectures. The course ends up with a continuous assessment. The final grade is based on the result from the practice sessions activities.

0340 Multimedia Systems and Technologies in Education

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course objective is students to get familiar with the main components of multimedia systems and the stages for developing multimedia applications. Students learn the fundaments of HTML and gain knowledge on up-to-date systems and technologies for creating multimedia CD and Web-based educational applications. At practice sessions students study concrete software products, languages and environments for creating multimedia applications and Web-based educational courses.
Course content:
Introduction to multimedia. Standard carriers of multimedia information. Main elements of multimedia and basic tools. Author's systems for creating multimedia CD and Web-based applications. Systems for development and management of e-Learning courses. Introduction to HTML. Creating and editing of multimedia elements: script, graphical images, sound, animation and video. Interaction within author's systems. Fundaments of Computer Based Training (CBT). Multimedia and internet. Tools. Developing multimedia for the WWW system. Educational design with hypermedia. Design basics. Web site design. Site types. Site composition.
Teaching and assessment:
Lectures are conducted 2 class hours per week. Practice sessions are timed for 2 hours and are carried out in student computing labs. In the beginning of the practice sessions a 5-minute feedback is implemented for checking students' preparation for the session. The assimilation of the theory is currently evaluated by doing tests, practical tasks and observation of students' activities. Students' assignments are duly evaluated. The course ends up with a result from the continuous assessment. It is formed on the basis of two tests performed during the term and the result from the individually worked out task.

0385 Computer Networks and Communications

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written and oral
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Assoc. Prof. Georgi Nikolov Krastev, PhD, Department of Computing
tel: 888 672, E-mail: gkrastev@ecs.uni-ruse.bg
Abstract:
The objective of the course is to familiarize the students with the principles of designing and functioning of the computer networks; It gives basic knowledge about the main protocols, standards and technologies, established in the modern computer communications. The lectures are structured according to the standard model of open systems interaction - OSI. Internet TCP/IP protocol stack is addressed in details, as well as the Internet protocol stack.
Course content:
Introduction to computer networks and communications. Network classification. Standard model for open system interaction (OSI) and TCP/IP protocol stack. Physical layer. Theoretical fundamentals of data communications. Data link layer. Functions and tasks. Sub-layer for media access control (MAC). LAN standards. Network layer. Routing and routing algorithms. WAN computer and telecommunication networks. Network layer protocols in Internet. Transport layer and services. Transport protocols in Internet. Application layer. Internet application protocols and services. Network security.
Teaching and assessment:
At practice sessions students reinforce the knowledge received at the lectures by using concrete network software. The course ends with an exam. At the exam each student takes a test. The test includes questions and problems based on the course material. After marking the test, there is an oral discussion with the students in order to form the final grade.

0386 Data Structures

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel.: 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Abstract:
The course objective is students to gain knowledge on complex data structures, data structure design algorithms and maintenance, application software. Reference practical cases are considered as data structure applications. The data structures and processing algorithms are considered conceptually at first and afterwards implemented in C++. The focus is placed on the algorithm complexity and optimal execution time.
Course content:
Sorting and searching algorithms. Stack implementation and processing. Queue implementation and processing. Linear link lists. Sorted lists. Binary tree. Binary search tree. Graphs. Presentations. Algorithms and applications.
Teaching and assessment:
The lectures focus on data structures in accordance with the syllabus. The accent is placed on data structure presentations, the applied basic operations and types of problems solved with the created data structure. Program implementation in C++. At the practice sessions students design and test concrete practical cases using complex data structures. Students do 3 tests on theory and practical cases during the term. The course ends with exam. The grade is formed on the basis of the results from the exam, and tests.

0387 Audio – visual and Information Technologies in Education

ECTS credits: 3 **Weekly classes**: 1lec+0sem+0labs+1ps
Assessment: continuous assessment **Type of exam:**
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof.Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel: 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Assist. Prof. Svetlozar Stefanov Tsankov, Department of Informatics and Information Technologies
tel. 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is students to be provided, on one hand, with basic technical knowledge on the principle structure and operation of different devices and video computer systems used for educational purposes, and on the other hand, gain methodical skills for applying their didactic capacities. The course is of theoretical-methodical and practicable character, giving due technical culture and pedagogical experience.
Course content:
Audio-visual technical devices. Didactic materials for statical screening and application methods in the teaching process. Principles of electrical-mechanical electrical-magnetic recording and playing. General physical and technical fundaments of electrical-acoustic devices. Main principles of video devices. Methodical specifities of using video devices in the teaching process and making education movies. Main principles of digital recording and playing. Compact disc devices.
Teaching and assessment:
Course lecturing covers 15 hours and focuses on the classical technical, video and compact disc devices. The accent is placed on the basic physical, technical and didactic capacities of technical devices and the methodology of their application in the teaching process. Practice sessions' target is students to gain skills for using relevant technical devices and didactic materials and to be able to make didactic materials by themselves.

0396 Programming in Comenius Logo Environment

ECTS credits: 6 **Weekly classes**: 3lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course target is students to be provided with knowledge on Comenius Logo system that includes a programming language and operation environment. It involves a set of programming tools which help to create and execute programs in Comenius Logo language. The language interpreter, the text editor and the file sub-system form the basic components of the operation system.
Students learn to define user's procedures, data structures, tortoise geometry, development of Logo projects.
Course content:
Introduction. Basics of the Logo language. Data definition. Procedures. Conditional calculations and statements. Predicates. Recursion. Local variables and action range. Data structures – words, sentences, lists. Tortoise geometry. Multitude representations of tortoise pictures. Operation with tortoise multitude. Operation with images. Creation of images. Images as elements of compound structures.
Teaching and assessment:
The continuous assessment of students' progress includes two tests according to a preliminarily announced schedule. Students work on projects during the practice sessions and they have to present and defend them before the teacher. The practice sessions assessment is formed on the basis of student's activity and the result from the developed project.

0394 Software Engineering

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, Email: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326, E-mail: ptx@ami.uni-ruse.bg
Abstract:
The course equips students with the required practical skills for developing large-sized software projects. It presents a collection of methods, techniques and tools, from which to select when trying to solve problems that are less well defined and larger than they have previously encountered. After studying this course the student should be able to: analyze a problem so as to enable a computer model to be created; demonstrate competencies in designing, writing and testing software systems; work out relevant software documentation; make software cost estimation.
Course contents:
Introduction to Software Engineering. System modeling. Specification of the requirements. Software Architecture. Software Engineering, tools and environments. CASE tools. Integrated CASE tools. Programming languages and codes. Software updating. Software reengineering. Testing and debugging. Program verification and validation. Prototyping role. Software cost estimation. Software development, maintenance and usage. Software legislation aspects.
Teaching and assessment:
The course comprises 2-hour-lectures once a week and practice sessions. The lectures present different case solving. Students have to read the written material on lecture topics in advance. Some details are discussed and suitable examples are given. The practice sessions are intended for students' individual practical training on concrete software tasks and aim to deepen students' knowledge attained from lectures and individual assignments.

0395 Visual Programming

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Teodosieva, PhD, Department of Informatics and Information Technologies
tel.: 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr.Assist.Prof. Magdalena Hristova Andreeva, PhD; Department of Informatics and Information Technologies
tel: 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
The course focuses on the main principles of the object-oriented programming and the event-oriented programming for Windows platform. The accent is laid on designing intuitional graphical interface, using the standard visual components in Windows – buttons, menus, tool bars, text fields, etc. Students study fundamental principles for developing simple applications, MDI applications and DB applications.
Course content:
Object-oriented programming and the event-oriented programming without instrumental device. Programming for Windows in Visual programming environment. Delphi and Object Pascal. Number types. Dynamic arrays. Character strings and variants. Pre-definition of functions in Delphi and default parameters. Object-oriented programming in Delhi. Program techniques with VCL. Methods of classes, indicators to methods, and pseudonyms of classes.
Teaching and assessment:
The accent is laid on the visual programming environment Delphi, studying its traits, Object Pascal language, visual components, etc. At the practice sessions students participate in detail preview of Delphi environment and then they are taught how to develop programs. The course assignment is fulfilled as a home task by the end of the term. The continuous assessment is made through students' involvement in the practice sessions, and a test-paper in the 14th week of the term. Term validation is given for not less than 50% attendance of the lectures and presence at all practice sessions.

0392 Extracurricular studies in Informatics

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam:**
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel: 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel: 888 326, E-mail: ptx@ami.uni-ruse.bg
Abstract:
The course Extracurricular Studies in Informatics (ECSI) familiarizes students with the basic requirements for teaching Informatics and Information Technologies as an optional subject at school. Students develop sample syllabus for teaching Informatics and Information Technologies as an optional subject at school. For the ECSI course students need to have attended all courses in Informatics beforehand. The knowledge gained from the ECSI course is helpful for all next elective courses of the curriculum.
Course content:
Targets and tasks of the ECSI. Experience obtained in Bulgaria and in other countries.
Requirements to the syllabus of Informatics and Information Technology taught as an optional subject at school. Themes of ECSI course. Type approved syllabuses for teaching IIT as an optional subject at school: operating systems, text processing, data spreadsheets, data bases, computer graphics, and graphical user interface. Type approved syllabus for teaching Programming as an optional subject. How to introduce the main control structures (branches, cycles, procedures, functions, recursion) and the main data structures (static and dynamic variables, arrays, lists, trees, stacks, queues, etc.)
Teaching and assessment:
The theoretical material is presented by the lectures. During the practice sessions students solve problems related to theory and design syllabuses involving sample themes for teaching Informatics as an optional subject. Students do 2 tests during the practice sessions. The final grade is formed as 70% of the average mark from the two tests + 30% of the course assignment mark.

0393 Desktop publishing

ECTS credits: 4 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, Email: valia@ami.uni-ruse.com
Abstract:
The course familiarises the students with the bases of computer preparation of texts and illustration materials for polygraph reproduction. Attention is paid on main requirements to initial materials, main functions and methods of text processing, formatting and treatment of colour graphic materials, and their realisation through contemporary computer systems.
Course Contents:
Introduction to Desktop publishing systems. Main concepts. Technical instruments of publishing systems. Structure of publishing systems. Requirements of preparing text materials for reproduction. Main functions of text editors. Preparation of table information and formulas. Preparation of graphic materials for reproduction. Main functions of text formatters. Contemporary desktop publishing systems – possibilities and trends in the future.
Learning and assessment:
The course comprises lectures and practice sessions. The main material is taught at the lectures. Lots of examples about application of theory in practice are also discussed. At the practice sessions students prepare an exemplary publication. The final mark is formed mainly from tests and work through the term.

POSTGRADUATE STUDIES IN INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION

PROFESSIONAL STANDARDS
OF A MASTER IN
INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION

SUBJECT: **INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION**
Educational Degree: **Master**
Professional Qualification: **Master of IITE**
Term of education: **2 years (3 terms)**

The course may be attended by bachelors from the following fields of higher education: 1. Pedagogical sciences; 2. Social, economic and law studies; 3. Natural sciences; 4. Engineering sciences and teacher qualification.

The study program aims to graduate highly qualified teachers of Informatics and IT who will be able to:

- apply effectively in practice the modern methods for teaching Informatics and Information Technologies;
- participate and be leaders of scientific researches in the field of teaching IIT;
- take efficient managerial solutions.

The participants in the master degree course of IITE gain knowledge in the following subjects: Object-oriented Programming, Databases, Information Systems and Technologies, Computer Graphics, Computer Networks, Multimedia Systems and Technologies, etc. They will be able to suggest up-to-date solutions for designing and usage of relevant software products in different fields of applications. They can administer the working process in a network environment and effectively apply the modern Internet technologies. Characteristic for all courses involved in the program is the organic inclusion of computer-based technologies for training and students' independent work.
The graduates from the master degree course can take the position of programmers, school principals, expert of Informatics and Information Technologies in the hierarchy of the Ministry of Education and Science, as well as Scientific Institutions and places where the computer applications and technologies are used, i.e. software firms, banks, insurance companies, etc.

CURRICULUM
MASTERS IN INFORMATICS AND INFORMATION TECHNOLOGIES IN EDUCATION

FIRST YEAR

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
0285	Introduction to Programming	5	1351	Discrete Mathematics	4
0286	Computer Systems and Internet	5	1352	Computer Graphics	5
1029	Information Technologies	4	1357	Multimedia Systems and Technologies in Education	5
1356	Databases and Information Systems	5	1360	Programming in Internet	5
1358	Methods of Teaching Informatics and Information Technologies	5	1362	Computer Networks and Communications	5
1359	Lesson Observation	1	1363	Object Oriented Programming	5
1365	Operation Systems	5	1366	Current Pedagogical Practice	1
	Total for the term:	30		**Total for the term:**	30

SECOND YEAR

Code	*Third term*	*ECTS*
0735	Programming in Comenius Logo environment	5
1353	Data Structures	5
	Elective courses within Group I	
1028	Desktop publishing	3
1361	Software Engineering	3
1354	Extracurricular studies in Informatics	3
1039	Visual Programming	3
	Post-term practices	
1367	State Pedagogical Practice	2
	Graduation procedure	
0362	Master thesis	13
0361	State Examinational Lesson in Informatics and Information Technologies	2
	Total for the term:	30

0285 Introduction to Programming

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel.: 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326; E-mail: ptx@ami.uni-ruse.bg
Abstract:
The purpose of this course is introduction to the fundamental concepts and principles of the programming. The lectures aim to set the theoretical bases for algorithm and program construction. The program language taught in the lectures is Pascal, which has all the possibilities of the professional program languages. The basic data types and operations with them are presented. The practice sessions aim students to acquire habits and skills for algorithm creation and the corresponding program realization written in Pascal.
Course content:
Algorithm creation. Basic data types and basic operation the program language Pascal. Ruling structures – conditional, case, loops. Programs with arrays. Procedures and functions. Programs with strings, sets and records. Programs with structured and text files.
Teaching and assessment:
The course comprises lectures and practice sessions. The lectures are 2 hours per week. They introduce the students to the topic. Some details are discussed and suitable examples are given. Within the practice sessions (2 hours per week) the students create and test programs on computers. At the end of each topic a test is taken. The last examination is in written form and together with the assessment of the tests during the term form the final mark.

0286 Computer Systems and Internet

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Computing
Faculty of Electrical Engineering, Electronics and Automation
Lecturers:
Assoc. Prof. Georgi Nikolov Krastev, PhD, Department of Computing
tel.888 672, E-mail: gkrastev@ecs.uni-ruse.bg
Abstract:
The course addresses architectural aspects of computer systems. Main terminology in computer architectures are discussed as well as organization of computations. Modern computer architectures are presented analytically and comparatively. Memory hierarchy and input-output subsystem structure are shown as well. Simulations and real systems are used at the seminars to gain more deep understanding.
Course content:
Computer architecture principles. Base components. Historical perspective. Computer system base structure. Accumulator, stack and register architecture. Architecture IA32. Working modes. Computer memory hierarchy. Input-output system.
Teaching and assessment:
The lectures introduce main theoretical topics. Each group of lectures ends with conclusion of material and formulation of problems. At the seminars simulations and real systems are used putting lectures to practice. Each seminar begins with formulation and analysis of problems. At very end the students are asked to sumarize in written form their results. The information materials needed are given in electronic form to the students.

1029 Information Technologies

ECTS credits: 4 **Weekly classes**: 0lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course objective is the acquisition of in-depth knowledge and skills for operating with the software applications WORD, EXCEL and POWER POINT. It is assumed that students attending the course have elementary computer literacy so as to build up their knowledge and skills further.
The practice sessions are 45 in total. Students are made familiar with Microsoft Office applications and learn how to link and jointly use the data of these applications.
Course content:
Text processing: Create new document and format. Templates. Macros. Publishing of Word document in Web. Define styles. Usage of styles. Finding of styles. Templates. Create template and template application.
Spreadsheets: Create tables. Absolute references. Built-in functions. Tables linking. Databases, sorting and filtering. *Presentations:* New presentation. Transition animation. Presentation display. Macros application. Publishing of slides in Web.
Teaching and assessment:
The academic study is carried in the form of practice sessions. Continuous assessment is implemented on students' classroom activities. Course validation is recorded to students who have not omitted practice sessions except for twice through the whole term. The exam is conducted in student computing labs. Students get an individual task to reveal their knowledge gained during the course.

1356 Databases and Information Systems

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Deptartment of Informatics and Information Technologies
tel. 888 464, 888 326, Email: kgrigorova@ami.uni-ruse.bg
Abstract:
The purpose of this course is introduction of fundamental concepts and principles of organisation and implementation of databases (DB) and database management systems (DBMS).
The students will gain knowledge on the main topics of database theory, physical and logical organisation of DB, data models and their features. The emphasis is on relational database model.
Course content:
Introduction. Data models. Entity-Relationship model. Relational model. Relational algebra. Query languages and query optimisation. Functional dependencies. Normalisation. DBMS. The main principles
Teaching and assessment:
The course comprises lectures and practice sessions.
The lectures are 2 hours per week. They introduce the students to the topic. Some details are discussed and suitable examples are given. Within practice sessions (2 hours per week) the students work in team and need to integrate the various parts of the course.
A 3-hour written paper for the knowledge and theoretical components at the end of term accruing to 60% of the final assessment, with 40% of the assessment of practical activities from the practice sessions.

1358 Methods of Teaching Informatics and Information Technologies

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written and oral
Department involved:
Department of Informatics and Information Technologies,
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course is included as compulsory subject in second term of speciality. Its objective is to familiarize the students with the didactical methods for teaching secondary school students in “Informatics” and “Information Technologies”. The accent of this course is laid on the existing educational strategies and the pedagogical tasks which have to be performed in teaching Mathematics and Informatics. Students learn which are the factors effecting the syllabus grounds, subject accents and lesson structure as well.
Course content:
Nature, dynamics and trends in the development of educational methods in Informatics and Information Technologies. Main objectives of the education if Informatics and IT in the Bulgarian school. Specifics of the pedagogic tasks solved when teaching IIT. Essence and specifics of teaching Informatics and IT. Specifics of the lesson in IIT. Diagnosis of the qualities formed in the process of using computer technology.
Teaching and assessment:
The teaching process is carried out through lectures and seminars. The lectures are two hours a week. The main objective of the lectures is to familiarize students with the didactic problems arising with the inclusion of Informatics and IT within the syllabus of Bulgarian secondary schools. The term ends with exam. The final grade is formed on the basis of the result from the exam and student’s involvement in discussions.

1365 Operation Systems

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course's aim is to give students knowledge and skills about the main principles of building and functioning of the OS. The theory at lectures is illustrated with examples of different modern OS.
Course content:
Operating systems. Main terminology. History. Structure of an OS. Processes. Interaction and management of processes. Processor management. Management of real and virtual memory. Input/output management system. Files management. Distributed systems. Security and safety of OS.
Teaching and assessment:
The lectures are 2 hours per week. The main material is given at lectures.
The practice sessions take place in PC labs under the supervision of a lecturer on the lecture topics. During the practice sessions the students strengthen their knowledge acquired during the lectures by looking at a set of examples. The student's progress is regularly checked with tests during practice sessions.
The final grade is formed on the basis of the continuous assessment during the practice sessions and the exam.

1351 Discrete Mathematics

ECTS credits: 4 **Weekly classes**: 1lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**: written
Departments involved :
Department of Algebra and Geometry
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Petar Ivanov Rashkov, PhD, Departmentof Algebra and Geometry
tel. 888 489, E-mail: tpeter@ami.uni-ruse.bg
Pr. Assist. Prof. Iliyana Petrova Raeva, MSc, Department of Algebra and Geometry
tel.: 888 453, E-mail: iraeva@yahoo.com
Abstract:
The discipline aims to create in students basic notions, abilities and knowledge to work well with different discrete objects and corresponding geometrical objects. It is a classical field of mathematics, having its own importance and at the same time is the basis for studying other mathematical, and informatical disciplines as Probability Theory and Satistics, Optimization, Programming, Data Bases, Computer Graphycs, etc.
Course content:
Sets and operations on them. Relations. Functions. Properties of natural numbers. Groups, rings and fields. Boolean algebras and Boolean fuctions. Combinatorics. Recurrence relations and sequences. Generating functions. Nonoriented graphs. Oriented graphs. Applications to physics, optimization etc. Sentence and predicate logic. Logical problems in school. Algorithms in the form of Turing machines and normal algorithms of Markov. Finite automata. Languages.
Teaching and assessment:
The theoretical topics presented at lectures are considered at the practice sessions by solving problems using these topics. The individual students` work is controlled. There are four home work assignments. Two written tests take place. On the basis of the mark of the test the students receive the corresponding mark after an oral discussion on the respective syllabus section. When forming the final assessment, the home work are taken into consideration too.

1352 Computer Graphics

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vasilev, PhD; Department of Informatics and Information Technologies
tel: 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Rumen Ivanov Rusev, Department of Informatics and Information Technologies
tel: 888 326, E-mail: rir@ami.uni-ruse.bg
Abstract:
The course focuses on the main aspects of two sections of the computer science – computer graphics and image processing. Its objective is to familiarize the students with the basic principles of developing and working with interactive computer graphic systems and to give them the knowledge, which is necessary for the development of software for geometrical modeling of objects and graphical documents, using computers. Students study the main principles and approaches of 2D and 3D objects visualization, how to obtain realistic images of spacious objects and scenes. Attention is paid also to the methods of developing graphical user interface.
Course content:
General information about computer graphics and image processing. Vector and raster graphics. Computer graphics colour. Colour models. Peripheral devices for computer graphics and image processing. Object description in graphic systems – models. Graphic data bases. Basic geometric transformations in the plain. Approximation and modeling of plain curves – interpolation, Besie's curves, cubic splines, B-splines, basic geometric transformations in the space. 3D objects plain projections. Methods of 3D realistic image creation. Basic principles for creating computer animation. Standardizing in computer graphics.
Teaching and assessment:
The course comprises lectures and practice sessions. The objective is students to enhance the knowledge obtained from lectures and their self study. Special attention is paid on students' independent work. They learn how to create program modules with the methods taught and practically apply the specialized software. The current assessment is rated with two tests. The evaluation is in accordance with a score scale of 100 scores. The final grade is the average from the continuous assessment (ca) mark and the result from the exam(e) in accordance with the formula 0,4ca+0,6e.

1357 Multimedia Systems and Technologies in Education

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course objective is students to get familiar with the main components of multimedia systems and the stages for developing multimedia applications. Students learn the fundaments of HTML and gain knowledge on up-to-date systems and technologies for creating multimedia CD and Web-based educational applications.
Course content:
Introduction to multimedia. Standard carriers of multimedia information. Main elements of multimedia and basic tools. Author's systems for creating multimedia CD and Web-based applications. Systems for development and management of e-Learning courses. Introduction to HTML. Creating and editing of multimedia elements: script, graphical images, sound, animation and video. Interaction within author's systems. Fundaments of Computer Based Training (CBT). Multimedia and internet. Tools. Developing multimedia for the 'www' system. Educational design with hypermedia. Design basics. Web site design. Site types. Site composition.
Teaching and assessment:
The lectures are 2 hours a week. The practice sessions are 3 hours per week and are conducted under the supervision of a lecturer following the topics given the course content. The first 5 minutes are spent for checking students' knowledge on the subject. Course assignment is allotted to each student with the task to prepare a multimedia application with an author system and Web-based educational application. Students' advance is checked through feedback questions, practical tasks and observations on students' involvement in the classes. In the end of the term students do a test-paper on lecture theory. The course ends with an assessment mark that is formed as 0.5 of the test-paper result, 0.1 of the practice session participation mark and 0.4 of the course assignment mark.

1360 Programming in Internet

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Assist. Prof. Svetlozar Stefanov Tsankov, Department of Informatics and Information Technologies
tel. 888 645, E-mail: stzancov@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge on the modern software tools used in programming for Internet. During the practice sessions students apply theoretical statements for implementation of practical tasks. The graduates are able to design Internet applications of medium complexity.
Course content:
Review of the modern aids for Internet programming. HTML, DHTML, XML Customers scripts Java Script. Server scripts, JSP, PHP.
Learning and assessment:
Lectures are conducted one class-hour per week involving the basic statements of the topics. During the practice sessions the students work out practical tasks related to the lectures. The course ends up with a continuous assessment. The final grade is based on the result from the practice sessions activities.

1362 Computer Networks and Communications

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written and oral
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Assoc. Prof. Georgi Nikolov Krastev, PhD; Department of Computing
tel: 888 672, E-mail: gkrastev@ecs.uni-ruse.bg
Abstract:
The objective of the course 'Computer Networks and Communications' is to familiarize the students with the principles of designing and functioning of the computer networks; It gives basic knowledge about the main protocols, standards and technologies, established in the modern computer communications. The lectures are structured according to the standard model of open systems interaction - OSI. Internet TCP/IP protocol stack is addressed in details, as well as the Internet protocol stack.
Course content:
Introduction to computer networks and communications. Network classification. Standard model for open system interaction (OSI) and TCP/IP protocol stack. Physical layer. Theoretical fundamentals of data communications. Data link layer. Functions and tasks. Sub-layer for media access control (MAC). LAN standards. Network layer. Routing and routing algorithms. WAN computer and telecommunication networks. Network layer protocols in Internet. Transport layer and services. Transport protocols in Internet. Application layer. Internet application protocols and services. Network security.
Teaching and assessment:
The practice sessions take place in computer-equipped labs under the lecturer's supervision on the above listed topics. At the practice sessions students reinforce the knowledge received at the lectures by using concrete network software. The course ends with an exam. At the exam each student takes a test. The test includes questions and problems based on the course material. After marking the test, there is an oral discussion with the students in order to form the final grade.

1363 Object Oriented Programming

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, Email: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Valentin Petrov Velikov, Department of Informatics and Information Technologies
tel.: 888 326, E-mail val@ami.uni-ruse.bg
Abstract:
The course is a continuation of the “Introduction to programming” course. The course focuses the main concepts of the object-oriented programming. The programming language C++ is studied in detail and especially the object-oriented part. Classes and objects are studied being the main categories, as well as the main concepts for working with them. The practice sessions aim at acquiring skills for developing object-oriented programs. The programs are implemented and tested in the computer labs.
Course content:
Classes and objects. Components of classes – data members, function members, constructors and destructors. Objects and functions. Friends of classes. Derivatives of classes, inheritance. Streams. Re-definition of operators.
Teaching and assessment:
The lectures explain the process of development of algorithms using classes and objects, as well as their implementation in C++. The lectures are supported with lots of exemplary programs and students have to modify the examples and write similar programs for training themselves in programming. At practice sessions students write programs, test them and do tests. Student’s course assignment includes two problems for independent work that has is defended and evaluated on submission. The term is validated for students who defend successfully the course assignment. The course ends with a written exam but it is also orally defended. The final grade is formed as an average from the exam, course assignment and tests results.

0735 Programming in Comenius Logo Environment

ECTS credits: 5 **Weekly classes**: 3lec+0sem+0labs+3ps
Assessment: continuous assessment **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel.: 888 645, E-mail: valia@ami.uni-ruse.bg
Abstract:
The course target is students to be provided with knowledge on Comenius Logo system that includes a programming language and operation environment. It involves a set of programming tools which help to create and execute programs in Comenius Logo language. The language interpreter, the text editor and the file sub-system form the basic components of the operation system.
Students learn to define user's procedures, data structures, tortoise geometry, development of Logo projects.
Course content:
Introduction. Basics of the Logo language. Data definition. Procedures. Conditional calculations and statements. Predicates. Recursion. Local variables and action range. Data structures – words, sentences, lists. Tortoise geometry. Multitude representations of tortoise pictures. Operation with tortoise multitude. Operation with images. Creation of images. Images as elements of compound structures.
Teaching and assessment:
The discipline is taught through lectures and practice sessions.
Educational materials are available and students can get acquainted with them in advance. In the course of the lectures the teachers provoke discussions on basic modules of the current topic and elucidate basic principles and terminology. The current assessment of students' progress includes two tests according to a preliminarily announced schedule. Students work on projects during the practice sessions and they have to present and defend them before the teacher. The practice sessions assessment is formed on the basis of student's activity and the result from the developed project.

1353 Data Structures

ECTS credits: 5 **Weekly classes**:3lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturer:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel.: 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Abstract:
The course objective is students to gain knowledge on complex data structures, data structure design algorithms and maintenance, application software. Reference practical cases are considered as data structure applications.
The data structures and processing algorithms are considered conceptually at first and afterwards implemented in C++. The focus is placed on the algorithm complexity and optimal execution time. At the practice sessions students write programs connected with the reference cases presented with the lectures, they learn how to modify them and create new ones. Students have to do individual assignments applying the studied data structures.
Course content:
Sorting and searching algorithms. Stack implementation and processing. Queue implementation and processing. Linear link lists. Sorted lists. Binary tree. Binary search tree. Graphs. Presentations. Algorithms and applications.
Teaching and assessment:
The lectures focus on data structures in accordance with the syllabus. The accent is placed on data structure presentations, the applied basic operations and types of problems solved with the created data structure. Program implementation in C++. At the practice sessions students design and test concrete practical cases using complex data structures. Students do 3 tests on theory and practical cases during the term. The course ends with exam. The grade is formed on the basis of the results from the exam, and tests.

1028 Desktop Publishing

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Pr. Assist. Prof. Valentina Nikolaeva Voinohovska, PhD, Dept. of Informatics and Information Technologies
tel. 888 645, Email: valia@ami.uni-ruse.bg
Abstract:
The course familiarises the students with the bases of computer preparation of texts and illustration materials for polygraph reproduction. Attention is paid on main requirements to initial materials, main functions and methods of text processing, formatting and treatment of colour graphic materials, and their realisation through contemporary computer systems. In practice students use to work with concrete contemporary publishing systems and prepare an exemplary publication.
Course Contents:
Introduction to Desktop publishing systems. Main concepts. Technical instruments of publishing systems. Structure of publishing systems. Requirements of preparing text materials for reproduction. Main functions of text editors. Preparation of table information and formulas. Preparation of graphic materials for reproduction. Main functions of text formatters. Contemporary desktop publishing systems – possibilities and trends in the future.
Learning and assessment:
The course comprises lectures and practice sessions. The main material is taught at the lectures. Lots of examples about application of theory in practice are also discussed. At the practice sessions students prepare an exemplary publication. The final mark is formed mainly from tests and work through the term.

1361 Software Engineering

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, Email: Tvassilev@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel. 888 326, Email: ptx@ami.uni-ruse.bg
Abstract:
The course equips students with the required practical skills for developing large-sized software projects. It presents a collection of methods, techniques and tools, from which to select when trying to solve problems that are less well defined and larger than they have previously encountered. After studying this course the student should be able to: analyze a problem so as to enable a computer model to be created; demonstrate competencies in designing, writing and testing software systems; work out relevant software documentation; make software cost estimation.
Course contents:
Introduction to Software Engineering. System modeling. Specification of the requirements. Software Architecture. Software Engineering, tools and environments. CASE tools. Integrated CASE tools. Programming languages and codes. Software updating. Software reengineering. Testing and debugging. Program verification and validation. Prototyping role. Software cost estimation. Software development, maintenance and usage. Software legislation aspects.
Teaching and assessment:
The course comprises 2-hour-lectures once a week and practice sessions. The lectures present different case solving. Students have to read the written material on lecture topics in advance. Some details are discussed and suitable examples are given. The practice sessions are intended for students' individual practical training on concrete software tasks and aim to deepen students' knowledge attained from lectures and individual assignments.

1354 Extracurricular Studies in Informatics

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof.Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel: 888 464, 888 326, E-mail: kgrigorova@ami.uni-ruse.bg
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel: 888 326, E-mail: ptx@ami.uni-ruse.bg
Abstract:
The course “Extracurricular studies in Informatics” (ECSI) familiarizes students with the basic requirements for teaching Informatics and Information Technologies as an optional subject at school. Students develop sample syllabus for teaching Informatics and Information Technologies as an optional subject at school. For the ECSI course students need to have attended all courses in Informatics beforehand. The knowledge gained from the ECSI course is helpful for all next elective courses of the curriculum.
Course content:
Targets and tasks of the ECSI. Experience obtained in Bulgaria and in other countries. Requirements to the syllabus of Informatics and Information Technology taught as an optional subject at school. Themes of ECSI course. Type approved syllabuses for teaching IIT as an optional subject at school: operating systems, text processing, data spreadsheets, data bases, computer graphics, and graphical user interface. Type approved syllabus for teaching Programming as an optional subject. How to introduce the main control structures (branches, cycles, procedures, functions, recursion) and the main data structures (static and dynamic variables, arrays, lists, trees, stacks, queues, etc.)
Teaching and assessment:
The theoretical material is presented by the lectures. During the practice sessions students solve problems related to theory and design syllabuses involving sample themes for teaching Informatics as an optional subject. Students do 2 tests during the practice sessions. The final grade is formed as 70% of the average mark from the two tests + 30% of the practical sessions mark.

1039 Visual Programming

ECTS credits: 3 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, Email: mteodosieva@ami.uni-ruse.bg
Pr.Assist.Prof. Magdalena Hristova Andreeva, PhD, Department of Informatics and Information Technologies
tel: 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
The course focuses on the main principles of the object-oriented programming and the event-oriented programming for Windows platform. The accent is laid on designing intuitional graphical interface, using the standard visual components in Windows – buttons, menus, tool bars, text fields, etc. Students study fundamental principles for developing simple applications, MDI applications and DB applications.
Course content:
Object-oriented programming and the event-oriented programming without instrumental device. Programming for Windows in Visual programming environment. Delphi and Object Pascal. Number types. Dynamic arrays. Character strings and variants. Pre-definition of functions in Delphi and default parameters. Object-oriented programming in Delhi. Program techniques with VCL. Methods of classes, indicators to methods, and pseudonyms of classes. Characteristics and events. The class T-object. Hierarchy of classes in VCL. Review of characteristics, methods and events in VCL. Usage of components – standard, extensional, Win32, system, etc. File operations. Graphics, drawing, and bitmat images. Tool bars, and user interface elements. Dialog windows and multiple page forms.
Teaching and assessment:
The accent is laid on t he visual programming environment Delphi, studying its traits, Object Pascal language, visual components, etc. At practice sessions students participate in detail preview of Delphi environment and then they are taught how to develop programs. The course assignment is fulfilled as a home task by the end of the term. The continuous assessment is made through students’ involvement in the practice sessions.

POSTGRADUATE STUDIES IN SOFTWARE ENGINEERING

PROFESSIONAL STANDARDS
OF A MASTER IN

SOFTWARE ENGINEERING

SUBJECT: **Software engineering**
Educational Degree: **Master**
Professional Qualification: **Master of SE**
Term of education: **1,5 year (3 terms)**

This master degree program is one of the first courses in our country that has been developed mutually by an academic institution (University of Ruse) and an industrial software engineering firm (Sirma Group). The main objective is to train and graduate specialists in the field of software engineering in compliance with the requirements for Masters in Software Engineering of international professional organizations like the ACM and the IEEE Computing Society. The study program is intended to train masters who can start working as business analysts, software designers, code and test engineers, managers of software projects at large-scaled companies, self-employed software engineers or advisers in the area of software designing, development and maintenance.
The backbone of the program is built by courses of Object Oriented Programming (JEE), Design of Software Systems (UML) and Software System Engineering (CBSE). Special attention is paid on the first and last tier of the multi-layer software architectures, being essential for the software application quality of life by teaching courses of Web-components Programming (JSP, JSF) and Databases (Oracle). Students acquire designing skills by studying courses of Computer Systems and Networks, and SOA Environments. Issues related to the quality of the developed applications and their testing are within the focus of all above mentioned courses. Students gain knowledge on the internal and external organization of software businesses, marketing issues, as well as business and technological process management by studying the course of Software Project Management based on International standards in the area of RUP, CMMI and Prince.
The basic working principles of the program can be listed as the provision of increased practice sessions' curricular hours, the teamwork, the competitive start and the work on real problems from the software industry. The individual practical work on a real problem is implemented within the course of Workshop 1. Teamwork and competitive start are required for the course of Workshops 2 and 3, as well as for the Master thesis development. The study program ends with a diploma project that is assigned during the second term; it is worked out by student's team and is defended by the team.
The program is scheduled for full-time studying with duration of 3 terms. For the entrance in the master degree program the candidates should have earned a bachelor's degree in the professional field of Informatics and Computer Sciences, in Computing, in Pedagogy of Education in Mathematics and Applied Mathematics, or any other allied programs.

CURRICULUM
MASTERS IN SOFTWARE ENGINEERING

FIRST YEAR

Code	*First term*	*ECTS*	*Code*	*Second term*	*ECTS*
0306	Object Oriented Programming	6	0620	Programming of Web-components	6
0432	Databases	6	0653	Implementation of Software Systems	6
0435	Design of Software Systems	6	0667	IT Projects Management	6
0618	Computer Systems and Networks	5	0704	Instrumental Environments	5
0619	Workshop 1	7	0705	Workshop 2	7
	Total for the term:	**30**		**Total for the term:**	**30**

SECOND YEAR

Code	*Third term*	*ECTS*
0710	Workshop 3	15
	Graduation procedure	
1729	Master thesis	13
	Total for the term:	**30**

0306 Object Oriented Programming

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written - practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tsvetomir Ivanov Vasilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: tvassilev@ami.uni-ruse.bg
Adrian Mitev, MEng, Sirma Group Corp.
E-mail: adrian.mitev@sirma.bg
Abstract:
The course familiarizes students with the possibilities, principles and approaches of the modern programming for Windows and Internet, focusing on one fundamental philosophy of the OOP ideology, developed by Sun and widely applied in the modern software industry. It steps on students' knowledge of programming and object oriented programming. The course constructs the prerequisites for implementing service-oriented programming based on 3-tier-technologies with the help of Java EE. One of the essential teaching goals is to equip students with relatively deepened knowledge and self-confidence for going further into special substructures of the Internet technologies. The input links of this discipline are the Bachelor degree Informatics courses.
Course content:
After a concise introduction to the principle possibilities and tools of the Internet programming, follows a deeper study and practice of one basic part of Java packages and classes, serving for programming of Internet applications. Students learn about Generics in Java, Reflections, Serialization, GUI-dialogues and swings with Pluggable Look-and-Feel and Model-View-Controlling; Testing and creating a testing suite.
Teaching and assessment:
The practice sessions follow the relevant lecture sequence and are directed to solving practice-oriented problems or modular extracts of such problems. The assessment is done considering the result from the practical exam for which students can use helpful papers for the practical solving of a given task within a scheduled time on a computer provided with relevant software installation.

0432 Databases

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Deptartment of Informatics and Information Technologies
tel. 888 464, E-mail: kgrigorova@ami.uni-ruse.bg
Milen Vitanov, MEng, Sirma Group Corp.
tel.: +359-882-116709, E-mail: milen.vitanov@sirma.com
Abstract:
The course aims to deepen the students' knowledge in database technology and focuses on the modern issues in this technology.
At the beginning the main principles of the relational databases are discussed. The database design using Entity-relationship model and Extended entity-relationship model is considered. The examination of semi structured and non structured data processing using XML language is included.
Course content:
Data modeling. Conceptual modeling. Entity Relationship Model (ERM). Extended ERM (EERM). Mapping EERM to object oriented model. Relational model. Queries and query languages. SQL. System aspects of SQL. Functional dependencies. Normalization. Semi structured data. XML. Accessing the elements of XML document. XPath. Query language XQuery. Object oriented approach of creating database. Object oriented concepts of query languages. Characteristics of object oriented databases. Characteristics of object relational databases
Teaching and assessment:
The course comprises lectures and practice sessions. The lectures are 2 hours per week. They introduce the students to the topic. Some details are discussed and suitable examples are given. Within practice sessions (3 hours per week) the students need to integrate the various parts of the course. Student's knowledge and skill are evaluated during the practice sessions, and at the end of the term by written exam. The final assessment is formed on the basis of student's performance during the practice sessions and the exam results.

0435 Design of Software Systems

ECTS credits: 6 **Weekly classes**: 2lec+0sem+3labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Vladimir Dimitrov, PhD, Department of Computer Informatics, Sofia University
tel.: +359-2-8161-594, E-mail: cht@fmi.uni-sofia.bg
Pr. Assistant Prof. Ivan Stanev, MSc, Department of Informatics an Information Technologies
tel.: 888-326, E-mail: istanev@ami.uni-ruse.bg
Abstract:
This is core subject for Master of Science Software Engineering (MSE). The Students will review all significant types of software systems, and software architectures. They will be trained to design, and manage different types of IT Projects. This subject is based on the international OMG (Object Management Group) standards BPMN (Business Process Modeling Notation) and UML (Unified Modeling Language). For Project Management will be used the industrial standard RUP (Rational Unified Process). During this training the students need to establish skills for realisation of SOA (Service Oriented Architectures) using industrial or freeware Application, DB, and Process servers. During the labs in this subject students must develop an individual IT projects, realised based on the above mentioned standards.
Course content:
This subject includes the below mentioned topics: Software Architectures – distributed, centralised, multi-tier, service oriented, OLAP, etc; RUP – phases, disciplines, plans, artefacts, procedures, odits, etc.; Introduction in BPMN – tasks, events, gateways, swim lines, swim pools, etc.; UML - Use Case Diagram, Activity Diagram, Object Diagram. Class Diagram, Data Model Final Version, Sequence Diagram, Collaboration Diagram. State Engine, Component Diagrams. Infastructure Diagrams; maps between RUP, UML, and BPMN; design of software architectures, and design of Technological Framework.
Teaching and assessment:
Lectures are once per week 2 hours, practice sessions are once per week 3 hours. Student's knowledge and skill are evaluated during the practice sessions, and at the end of the subject with written exam. The final assessment is formed on the basis of student's performance during the practice sessions (30%) and the exam results (70%).

0618 Computer Systems and Networks

ECTS credits: 5 **Weekly classes**: 2lec+0sem+2labs+0ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Tzvetomir Ivanov Vassilev, PhD, Department of Informatics and Information Technologies
tel. 888 475, E-mail: Tvassilev@ami.uni-ruse.bg
Abstract:
The course aims at deepening students' knowledge about the mathematical and logical fundamentals of computer systems, modern computer architectures and peripheral devices, as well as the widespread operating systems and application software. In addition parallelism in computer systems and parallel architectures are also addressed. Attention is paid to computer communications, network protocols and network services. The students learn about configuration and administration of network devices, building VPN and verification of functionality of infrastructure solutions.
Course content:
Computer architectures. Hardware components. System software. Centralised and parallel architectures. Communications. Distribution of data, computing process and communications. Administration of network devices and services, building a VPN.
Teaching and assessment:
The course includes lectures and workshops.The lectures address separate aspects of the organisation and characteristics of modern computer architectures, characteristics and features of modern operating systems and interaction of application software with the system software. The knowledge about computer networks and communications is deepened. During the workshops students perform specific tasks about studying computer architectures, performance and parameters. Attention is drawn to practical work with operating systems (Linux, Windows). Network devices and services are configured. Depending on the task the students work in teams or independently. The course finishes with an exam. The final grade is computed considering the exam mark and the work during the workshops.

0619 Workshop 1

ECTS credits: 7 **Weekly classes**: 0lec+0sem+6labs+0ps
Assessment: continuos assesment **Type of exam**:
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Pr. Assist. Prof. Plamenka Todorova Hristova, PhD, Department of Informatics and Information Technologies
tel.: 888 326 E-mail ptx@ami.uni-ruse.bg
Desislava Obretenova, MEng, Sirma Group Corp., E-mail: desislava.obretenova@sirma.bg
Abstract:
During the Workshop 1 students will design an IT Information system, the realization of which require the use of knowledge from the studied in the same semester subjects Object Oriented Programming, Data Bases, and Design of Software Systems.
The organization of the individual students work in the frame of Workshop will follow the recommendations of Rational Unified Process (RUP).
Final product of the students work will be set of artefatcs, defined in RUP as final set of artifacts for Phase Elaboration.
Course content:
Students activities in the Workshop will concerne: Analysis of the Terms of Reference describing the realization of the designed IT system, Defining ot the required for the realization of the project roles and responsibilities, preparation of the poject plan, definition of set of functional and supplementary requirement specification, design of set of Business processes, preparation of Data Model.
Teaching and assessment:
Workshop will take place once a week during 6 academic hours. Regullarrly in the workshop students will present their work. Based on their presentation will be assigned grades. Set of these grades will form the Semester grade of the workshop.

0620 Programming of Web-components

ECTS credits: 6 **Weekly classes**: 2lec+0sem+0labs+3ps
Assessment: exam **Type of exam**: written - practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Vladimir Dimitrov, PhD, Department of Computer Informatics, Sofia University
tel.: +359-2-8161-594, E-mail: cht@fmi.uni-sofia.bg
Vladimir Alexiev, PhD, Sirma Group Corp., E-mail: vladimir.alexiev@sirma.bg
Adrian Mitev, MEng, Sirma Group Corp., E-mail: adrian.mitev@sirma.bg
Abstract:
The course acquaints students with the Client-Socket programming principle and the RMI programming, thus making a transition from Java SE to Java EE. The core study of the course is Java EE platform. The course familiarizes students with the approaches of creating dynamic web sites and puts accent on the distributed applications' architecture. Within the course's curricular hours and thematic range students learn relevant technological specifications as Application Server, Client, Web Container, and EJB Container. In the same way and associations students study the Java EE technologies: EJB, Servlet, JSP, WS, JMX, JNDI, JDBC, JTA, JAAS, JavaMail, JAXP, JAX-RPC, JAXR, JACC, JCA, JAF, JAX-WS, StAX, JSF, JSTL. Theoretical principles are directed to immediate practical implementation and they aim at clarifying and fixing the good practice elements into the teaching process and, in turn, become reinforced during the practice sessions by testing them in different aspects. The course steps on the experience related to Java SE and the Bachelor degree Informatics courses. The course goal is to give students relatively deepened knowledge for implementing service-oriented programming based on 3-tier-technologies with the help of Java EE.
Course content:
After a concise introduction to the principle possibilities and tools of the Internet programming, follows a deeper study and practice of one basic part of Java packages and classes, as well as of Java technologies as basis for programming different-tier applications.
Teaching and assessment:
The practice sessions follow the relevant lecture sequence and are directed to solving practice-oriented problems or modular extracts of such problems. The assessment is done considering the result from the practical exam for which students can use helpful papers for the practical solving of a given task within a scheduled time on a computer provided with relevant software installation.

0653 Implementation of Software Systems

ECTS credits: 6 **Weekly classes**: 3lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Prof. Margarita Stefanova Teodosieva, PhD, Department of Informatics and Information Technologies
tel. 888 490, 888 645, E-mail: mteodosieva@ami.uni-ruse.bg
Mihail Stoynov, MSc, Sirma Group Corp.. tel: +359-888-126364 , E-mail: mihail@stoynov.com
Pr. Assist. Prof. Galina Evgenieva Atanasova, Department of Informatics an Information Technologies
tel.: 888-326, E-mail: gea@ami.uni-ruse.bg
Abstract:
This subject is the third part from the chain describing the implementation process. Discussed here topics concern mainly Business Layer, Persistent Layer, and the connections between these layers in the terms of Model View Controller (MVC) architectures. Architecture and techniques for the realisation of the Messaging system of Multilayer architectures. In the terms of Service Oriented Architectures (SOA) the subject describes some of the important implementation techniques for realisation of services, management of the services, the communication between services. Some of the more important J2EE, and SOA technical and architectural patterns are described.
Course content:
Remote Invocation Methods. Enterprise Java Beans: Lifecycle, Dependencies Injection, Session Beans, Transactions (CMT/BMT), JTA, Declarative Transactions, Entity Beans, unit tests, documenting. Hibernate: JPA, patterns, best practices, unit tests, documenting. XML: namespaces, JAXB, best practices, practical problems, unit tests, documenting. Messaging: JMS – Introduction, architectural patterns, best practices, unit tests, documenting. Web Services: classification of the services, SOAP, JAX-WS, WSIT, practical problems testing and documenting of services. J2EE technical and architectural patterns. Best Practices. Teamworking in the implementation phase.
Teaching and assessment:
Lectures are once per week 3 hours; labs are once per week 2 hours. Student's knowledge and skill are evaluated during the labs, and at the end of the subject with written exam. The final assessment is formed on the basis of student's performance during the practice sessions and the exam results.

0667 IT Projects Management

ECTS credits: 6 **Weekly classes**: 3lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Katalina Petrova Grigorova, PhD, Department of Informatics and Information Technologies
tel. 888 464, Email: kgrigorova@ami.uni-ruse.bg
Vladimir Alexiev, PhD, Sirma Group Corp., E-mail: vladimir.alexiev@sirma.bg
Abstract:
The main goal of the subject is the establishment of knowledge for general methods, and practices for project management, as well as its application in the area of IT Project Management. The lectures cover both main aspects for the IT project management – project life cycle based on project phases and iterations, and the full set of technological IT project disciplines. During the labs students train preparation of project plans, specification of the project resources, evaluation of project risks and issues, monitoring of project progress.
Course content:
Processes and projects: types of projects, types of IT projects, project context and project dependencies; technological general project disciplines; project phases according PMBOK, the selected IT process, and project type; software project life cycle, configuration and change management, analysis, design, implementation and testing; software development methodologies: Waterfall, Rational Unified Process, Agile process, software projects evaluation; function point analysis: COCOMO, Delphi, bottom-up, etc.; Project Planning: critical path analysis, critical chain, PERT, Earned Value Management; Project Management Tools – MS pRojcet, Web based tools, Kidasa.
Teaching and assessment:
The course comprises lectures and practice sessions. The lectures are 3 hours per week. The students need to read the lecture notes in advance. During the lectures some details are discussed and suitable examples are given. The purpose of practice sessions (2 hours per week) is to deepen the students' knowledge gained from lectures and self-training. The course ends with exam. The final assessment is formed on the basis of student's performance during the practice sessions and the exam results.

0704 Instrumental Environments

ECTS credits: 5 **Weekly classes**: 2lec+0sem+0labs+2ps
Assessment: exam **Type of exam**: written
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Vladimir Dimitrov, PhD, Department of Computer Informatics, Sofia University
tel.: +359-2-8161-594, E-mail: cht@fmi.uni-sofia.bg
Pr.Assist.Prof. Magdalena Hristova Andreeva, PhD, Department of Informatics and Information Technologies
tel. 888 470, E-mail: magie@ami.uni-ruse.bg
Abstract:
Evaluate both technical and business values of an SOA. Describe the business structure of an organization at a macro level, and be able to identify where SOA can provide added values to that line of business. Identify barriers for SOA adoption in the organization. Be able to act as a link between the technical teams and business strategists. Understand the need of SOA Governance. Be able to identify which roles are needed in a solution in accordance to the SOA lifecycle, focusing on Business Driven Development, and to determine which tools from the IBM SOA Foundations are related to each of those roles. Get hands-on experience with the WebSphere tools involved in the Business Driven Development methodology.
Course content:
SOA overview. IBM SOA Foundation products overview. SOA design patterns and principles. Developing SOA Solutions using IBM SOA Foundation. WebSphere Business Modeler. Introduction to WebSphere Process Server and WebSphere ESB. Service Component Architecture overview. WebSphere Integration Developer. Introduction to Process Choreography and WS-BPEL. Business rules. Human tasks. Supporting services overview. Developing mediation devices. Service message objects. Mediation primitives. Adapters. Deploying to WebSphere Process Server. Managing SOA. SOA security. SOA governance. Wrap-up.
Teaching and assessment:
Lectures are once per week 2 hours; labs are once per week 2 hours.
Student's knowledge and skill are evaluated during the labs, and at the end of the subject with written exam. The final assessment is formed on the basis of student's performance during the practice sessions (30%) and the exam results (70%).

0705 Workshop 2

ECTS credits: 7 **Weekly classes:** 0lec+0sem+0labs+6ps
Assessment: continuous assessment **Type of exam:** written and practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Assoc. Prof. Desislava Stoyanova Atanasova, PhD, Department of Informatics and Information Technologies
tel.: 888 326, E-mail: datanasova@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge and skills in practical work. The students have to develop whole serious practical task as a team assessment. They should use their knowledge for the subjects from first and second semester in the master course.
The stress is laid on the individual work of each student, as a part of the team, and on the teams work as a whole, too. After the course the graduates are able to design, test and present overall software systems, working in a team.
Course content:
Teams' task assignment, planning roles and tasks in the teams; Development project's plan; Working on scheduling sequences and collaborations diagrams; Data model specification; Test plan, test tasks and scenario development; Software system development; Testing and documenting of test results; Finalizing and defending the project.
Teaching and assessment:
The workshop objective is to develop students' skills for designing software systems in practice. Students learn to work in a team for preparing a complete software project. The course ends up with a continuous assessment. The final grade is based on the continuous assessment during the workshop sessions (40%), the result of developing and defending the teams' project (30%) and the individual presentation of projects' parts (30%).

0710 Workshop 3

ECTS credits: 15 **Weekly classes:** 0lec+0sem+0labs+20ps
Assessment: continuous assessment **Type of exam:** written and practical
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Science and Education
Lecturers:
Pr. Assist. Prof. Valentin Petrov Velikov, Department of Informatics and Information Technologies
tel.: 888 326, E-mail val@ami.uni-ruse.bg
Abstract:
The course objective is to deepen students' knowledge and skills from all courses in practical work. The student's teams receive individual tasks, to develop through the semester. They have to define the problems (subtasks), to allot them into the team; develop serious individual practical work; to collect and test the subtasks and to test the whole system.
Course content:
Teams' task assignment, planning roles and tasks in the teams (task for example: To develop a client-server application for a dentist surgeries. The system have to serve few dentist surgeries (dentists), the patients can to change the dentist, to reserve consultation hours via Internet etc.).
The teams have to analyse the problem; to define the subtasks; to analyse the data stream; to choice a suitable information (DataBase) system for project creation; to project and create the separated modules; to collect and test them; to prepare the necessary documentation.
Teaching and assessment:
The workshop objective is to develop students' skills for designing software systems in practice. Students learn to work in a team for preparing a complete software project. During the practical work every student develop an individual part of the project and receive a valuation which is used to final result.
The course ends up with a continuous assessment. The final grade is based on the continuous assessment during the workshop sessions (30%), the result of developing and defending the individual part of the project (20%),the result of developing and defending the teams' project (10%), the individual presentation of projects' parts (30%) and. presentation of whole project (10%)

POSTGRADUATE STUDIES IN MATHEMATICAL MODELING IN THE FINANCE, INSURANCE AND SOCIAL WORK

PROFESSIONAL STANDARDS
OF A MASTER IN
MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK

COURSE: **MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK**
Educational Degree Award: **Master**
Professional Qualification: **Master of Mathematical Modeling in Finance, Insurance and Social Work**
Term of education: **1 year (2 semesters)**
For graduated EDA "BACHELOR" in PQ 4.5. MATEMATICS

BASIC PURPOSE OF THE EDUCATION

The basic purpose of the education of the specialty is to provide deeply fundamental preparation, combined with profiling in the area of composition and analyzing of mathematical models in finance, insurance and social work.

REQUIREMENTS TO THE CANDIDATES

The educational plan of the specialty is developed in two variations. In the first variation, it continues two semesters and it is designed for students, finished EDA "Bachelor" in professional qualification 4.5. Mathematics. For the second variation, the educational plan has length of three semesters and it is designed for students, finished EDA "Bachelor" in the area of high education 4. Natural sciences, Mathematics and Informatics, and also similar disciplines, related to Finance, Accounting, Financial Analysis, Control and Audit, Insurance, Economics, Statistics, Econometrics, Business-informatics. In such case an additional (adapting) semester is provided as first. This semester includes basic disciplines from the Bachelor program of Financial Mathematics in University of Ruse.

GENERAL AND SPECIFIC PREPARATION

The Magister students of the specialty Mathematical modeling in finance, insurance and social work receive

- ***Deeply fundamental preparation*** in the area of Financial and Insurance Mathematics, Statistics and Econometrics, Specialized Software, Labor and Social Statistics, Social Work, Investment Strategies, Financial Audit;
- ***Profiled preparation*** in the area of Mathematical Modeling and applications of the Mathematics and Statistics in Finance, Insurance and Social Work, and also for analyzing of financial and insurance risk.

PROFESSIONAL QUALIFICATION

The students, which successfully finish the course of education, receive the professional qualification: MASTER OF MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK

CAREER OPPORTUNITIES

The masters, which are finishing the specialty Mathematical modeling in finance, insurance and social work in University of Ruse, could choose realization in Banking, Insurance, Financial institutions, Budget organizations, National Revenue Agencies, Audit companies, and also in all other sectors of Economics and Business, with priority.

The necessity of such specialists is related to the development of specific models in Finance, Insurance and Social Work, as well as with the need of performing complex mathematical and financial computations.

They also could realize themselves as actuaries, analysts, specialists of analysis and financial and insurance risk control, specialists of elaborating of banks, finance and insurance products.

OPPORTUNITIES FOR EDUCATIONAL AND SCIENTIFIC DEVELOPMENT

The master students, which are finishing the specialty of Mathematical modeling in finance, insurance and social work in University of Ruse could also successfully continue their educational and scientific development in the PhD program Mathematical modeling and application of mathematics, and also in PhD programs in the area of Economics, Finance, Insurance and Social Work.

CURRICULUM

of the Degree Course in

MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK
For graduated EDA "BACHELOR" in PQ 4.5. MATEMATICS

First year

Code	***First semester***	***ECTS***	***Code***	***Second semester***	***ECTS***
3773	Financial Mathematics	5	3779	Analysis of financial and insurance risk	4
3774	Insurance Mathematics	5	3780	Modeling in Finance	3
3784	Financial Accounting	5	3781	Modeling in Insurance	3
3776	Social and health Insurance	5	3782	Modeling in Social Work	3
3777	Labor and Social Statistics	5			
	Selective courses (students select one course)			*Selective courses (students select one course)*	
3778	Investment Strategies	5	3783	Management of the credit institutions	2
	Games Theory	5	3775	Financial Audit	2
	Modelling Economic Processes	5		Big Data Analytics Technologies	2
	Total for the semester:	**30**		**Total for the semester:**	**30**
			3785	Diploma	15

3773 Financial Mathematics

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of the exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Dimitrov Kandilarov, PhD, Dept. of Mathematics,
Tel.: 082 / 888 634, e-mail: ukandilarov@uni-ruse.bg
Abstract: The discipline is a based one for a master degree in mathematics and its applications in economics and finances. The programme unit aims to enable students to acquire active knowledge and understanding of some basic concepts in financial mathematics. It gives a mathematical perspective on the valuation of financial instruments.
Course content: A simple market model, notations and assumptions, risk-free and risk assets, zero-coupon bonds, binomial tree model, discrete market model, portfolio management, two or more securities, forward and future contracts, European and American options, option pricing, financial engineering, Delta hedging and Greek parameters, variable interest rates, dynamic hedging, stochastic interest rates.
Teaching and assessment: The seminars follow the lectures and put stress on the individual students' work. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

3774 Insurance Mathematics

ECTS credits: ***5*** **Workload per week** **:** 2lec+2sem+0labs+0ps
Assessment: exam **Type of exam** **:** written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamen Yalamov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 888-466, e-mail: yalamov@allianz.bg
Abstract: The course aims to familiarize students with basic mathematical models arising in solving problems of the sphere of insurance and modern methods for solving, analysis and interpretation. Some basic problems from the actuarial mathematic are included. The considered examples and problems have mainly applicable character, close to the practice. The insurance business is an area with many applications of mathematics and the models which are considered are impartible part from the insurance practice.
Course content: Essence of general insurance. Insurance operations. Statistical basis of insurance. Simple and compund interest. Annuitie. Accumulated values. Life insurance. Interest with variable size over time. Rescheduling of the liabilities, rents, annuities and payment flows. Risk Theory. Capital and profit. Reinsurance. Billing practices. Classification of risks. Actuarial methods in general insurance. Insurance portfolio. Forecasting in general insurance. Calculation of insurance premiums.
Teaching and assessment: The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the solving more complicated and close to the practice problems.

3784 Financial Accounting

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lectures:
Assoc. Prof. Lyudmila Mihaylova, PhD, Department of Management and Business Development,
tel: 082 / 888 518; e-mail: liudmilla@abv.bg
Abstract: Financial Accounting provides students with fundamental knowledge in the field of financial accounting, as well as major links in this area between theory and practice. The course has theoretical and practical character and input-output connections with other disciplines in the Master's program. Some discussed methods and technologies are illustrated with examples and problems from the practice. Seminars are connected with solving complex problems from the field of financial accounting.
Course content: Introduction - evaluation and reporting of fixed assets, intangible, financial assets. Accounting of inventories currency revenue expenditure, etc. Formation of the company's profit. Accounting and analysis of cash flows. Preparation of balance sheet, etc. Specifics of accountability and social insurance organizations.
Teaching and assessment: The traditional way of delivering lectures will be enriched by visual materials put on slides and or multimedia packages. At seminars students will work on case studies. The continuous assessment is on the basis of tests and students' participation. The final note will depend on the note from the continuous assessment (40%) and from the final exam (60%).

3776 Social and health Insurance

ECTS credits: 5
Workload per week: 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assist. Prof. Maria Radeva, PhD, Department of Public Law,
tel.: 082 / 888 434, e-mail: mradeva@uni-ruse.bg
Abstract: The course aims at providing students with general and basic understanding of the law of social and health insurance and security. It presents an introduction to the subject of insurance law, presenting the rules in both their legal and socio-economic contexts. It examines the growth of contemporary „compensation culture" and assesses the culture's impact on the development of insurance law and policy.
Course content: The course comprises of general and special part. The general part covers the subject, method, principles and sources of insurance law, nature and types of insurance legal relations, insured social risk, financial compensations and aids, types of pensions, additional insurance for retirement benefit, insurance in case of unemployment, health insurance.
Teaching and assessment: Lectures present the main terms, categories and institutions of insurance law. The theoretical material is followed by commentary of the main domestic legislation and international conventions in this field. Students are provided with contemporary theory of insurance law and with judicial practice and the one of National Social Security Institute, National Employment Agency, National Health Insurance Fund, retirement insurance corporations. During seminars students discuss on legislation and do case studies. The degree of acquiring of the learning material is assessed and the mark reflects the students' preparation and their participation in seminars.

3777 Labor and Social Statistics

ECTS credits: 5 **Workload per week:** 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Pavlov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: vpavlov@uni-ruse.bg
Assistant Prof. Vesela Mihova, MSc (Math), Group of Applied Mathematics and Statistics;
tel.: 082 / 888 424; e-mail: vmicheva@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of Labor and Social Statistics, as well as with the basic links between theory and practice. The character of this course is markedly applied. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of SPSS are provided for solving the assigned problems.
Course content: Basic Sources of Information for Labor and Social Statistics, Statistical Distributions, Statistical Study of Development, Demographic Statistics, Labor Statistics, Construction of Social Indicators.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests. To determine the final mark, further interview with the student can be carried out, if necessary.

3778 Investment Strategies

ECTS credits: 5 **Workload per week:** 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlana Stefanova, Group of Computer Systems and Technologies,
tel.: 082 / 888 356; e-mail: sstefanova@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of financial markets, as well as with the basic links between theory and practice. The character of this course is markedly applied. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of software packages are provided for solving the assigned problems.
Course content: Investing Basics. Investment strategies and investment policy. Short and long term financial goals. Structure of the investment portfolio. Investment plan. Forex. Capital markets. Securities. Investment funds. Property markets. Restrictions on the choice of strategy. Withdrawal of funds. Balloons and pyramids.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Special attention is paid to certain problems from practice. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests.

3779 Analysis of financial and insurance risk

ECTS credits: 4 **Workload per week:** 3lec+2sem+0labs+0ps
Assessment: exam
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Iliya Brayanov, Group of Applied Mathematics and Statistics;
tel.: 082 / 888 466; e-mail: brayanov@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with basic concepts, problems and methods in the analysis and management of financial and insurance risks, in particular of underwriting risk in general insurance and its associated financial risks. After completing the course students are expected to have received competences in the field of management of the finance and insurance risks in general insurance.
Course content: Fundamentals of Solvency II Directive and its applications for underwriting risk in general insurance. Deterministic and stochastic methods assessment of reserves and pricing in general insurance. Methods for evaluation of major damage and catastrophic events. Evaluation of premium reserves. Methods to reduce the risk.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester - their purpose is to help students for successful performance on the exam. The main method for forming the final grade is written exam, which includes solving test, two problems and a theoretical question.

3780 Modeling in Finance

ECTS credits: 3 **Weekly classes:** 3lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written

Department involved:

Department of Applied Mathematics and Statistics

Faculty of Natural Sciences and Education
Lecturers:
Prof. Lyuben Valkov, MSc, PhD, Department of Applied Mathematics and Statistics
tel. 082 / 888 725, e-mail : lvalkov@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics
tel. 888 / 489, e-mail tgulov@uni-ruse.bg
Abstract: The subject has the aim to give a comprehensive overview of some of the most popular financial models as well as to present the contemporary trends and problems of the modeling in finance. The course recalls some well known material considered from the higher theoretical and practical background's point of view received during the program. In addition, some new aspects which are currently investigated will be presented, namely, the impact of the transaction costs and the option valuation as stochastic dynamic programming problem.
Course contents: Portfolio diversification, effective frontier. CRR model. Geometric Brownian motion, Black-Scholes model. Lévy processes. Models of Vasicek, Cox-Ingersoll-Ross, Hull-White, Chen, term structure of interest rates, Heath-Jarrow-Morton framework. Local and stochastic volatility, Heston, CEV, SABR and GARCH models. Credit risk: structural models, reduced-form models, intensity based models. Transaction costs, Leland's model. Stochastic dynamic programming, HJB equation, optimal utility.
Teaching and assessment: The course is taught through lectures and seminar classes. The final assessment is based on the results from the written exam.

3781 Modeling in Insurance

ECTS credits : 3
Workload per week : 3lec+2sem+0labs+0ps
Assessment : exam
Type of exam : written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamen Yalamov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: yalamov@allianz.bg

Abstract: The course aims to familiarize students with basic stochastic models, used in solving problems for analysis and estimation of the risk in the insurance and also, modern methods for solving, analysis and interpretation of their results. There are examples and problems with applied and theoretical character. The probability models are in the basis of the insurance business and the considered models are of big importance in the insurance practice. The considered methods are based on mathematical models, which are widely developed and applied into actuarial mathematic and into the mathematical modeling in the insurance. **Course content:** Probability and statistical basis of general insurance. Events, accidents, chance, danger and risk. Claim process - distributions of the number, size and frequency of the claims. Heft of the claims as a random variable. The frequency of the claims as a stochastic process. General models of the risk in development. Fundamental principles for investing. Actuarial methods for analysis of investment portfolios. Forecasting of insurance portfolio. "Monte Carlo" method for forecasting and estimation of the risk. Optimization of portfolio and risk managment.

Teaching and assessment: The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the solving more complicated and close to the practice problems.

3782 Modeling in Social Work

ECTS credits: 3
Workload per week: 3lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Pavlov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: vpavlov@uni-ruse.bg
Assistant Prof. Vesela Mihova, MSc (Math), Group of Applied Mathematics and Statistics;
tel.: 082 / 888 424; e-mail: vmicheva@uni-ruse.bg

Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of Modeling in Social Work, as well as with the basic links between theory and practice. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of SPSS are provided for solving the assigned problems.

Course content: Social Work – theories, models and perspectives; Logical Modeling; Dispersion Analysis; Single-factor and Multifactor Models in Social Work; Factor Analysis; Clustering Models; Hierarchical Linear Modeling (HLM) in Social Work.

Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests. To determine the final mark, further interview with the student can be carried out, if necessary.

3783 Management of the credit institutions

ECTS credits: 2
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emil Papazov, PhD, Department of Business and Management,
tel: 082 / 888 518; e-mail: epapasov@gmail.com
Abstract: The course "Management of credit institutions" provides a set of theoretical and applied knowledge for effective management of existing credit institutions. The main objective of the training is to acquire knowledge on key processes and techniques relating to the management of different credit institutions operating in the country.
Course content: Introduction to the course "Management of credit institutions." Theoretical foundation and legal basis of management of credit institutions. Types of banks. Management of banks. Business game "Investor banks - the basis of modern knowledge and experience to effectively manage a banking institution.
Teaching and assessment: The course will use lecture-based training combined with practical exercises, within which the business game "Investor banks" will form the basis. Periodic assessment will be provided after solving specific tasks and tests during the seminars. At the end of the semester the students will receive a continuous assessment, reflecting the student's performance during the semester.

3775 Financial Audit

ECTS credits: 2
Workload per week: 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Ognyan Simeonov, Group of Financial Control, UNWE;
tel.: 02 / 962 34 73; e-mail: osimeonov@unwe.bg
Abstract: The subject aim is to make students acquainted with some fundamental knowledge in the sphere of Financial Audit, as well as with the basic links between theory and practice. The character of this course is markedly applied. The audit methodology is viewed with focus on auditing in the IT environment, and the use of computer-assisted audit techniques. Examples and problems from the practice are used for illustration. If technically possible, demonstrations with the usage of software packages are provided for solving the assigned problems during the exercises.
Course content: Principles and objectives of the audit. Responsibilities in the audit. Stages of the audit. Audit procedures for the assessment of materiality and audit risk. Evaluation of the internal control system related to financial reporting. Audit procedures in response to assessed risks of material omissions and inconsistencies. Audit procedures regarding accountability, supported by IT applications. Evidence in the audit. Audit sampling. Audit software. Final stage of the audit - reporting. Institutional aspects.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Special attention is paid to certain problems from practice. The final grade is formed on the basis of written exam, which includes questions and tasks.

POSTGRADUATE STUDIES IN MATHEMATICAL MODELING IN THE FINANCE, INSURANCE AND SOCIAL WORK

PROFESSIONAL STANDARDS
OF A MASTER IN
MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK

COURSE: **MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK**
Educational Degree Award: **Master**
Professional Qualification: **Master of Mathematical Modeling in Finance, Insurance and Social Work**
Term of education: **1 year (2 semesters)**
For graduated EDA "BACHELOR" in PQ 4. Natural sciences, Mathematics and Informatics, and also similar disciplines, related to Finance, Accounting, Financial Analysis, Control and Audit, Insurance, Economics, Statistics, Econometrics, Business-informatics

BASIC PURPOSE OF THE EDUCATION

The basic purpose of the education of the specialty is to provide deeply fundamental preparation, combined with profiling in the area of composition and analyzing of mathematical models in finance, insurance and social work.

REQUIREMENTS TO THE CANDIDATES

The educational plan of the specialty is developed in two variations. In the first variation, it continues two semesters and it is designed for students, finished EDA "Bachelor" in professional qualification 4.5. Mathematics. For the second variation, the educational plan has length of three semesters and it is designed for students, finished EDA "Bachelor" in the area of high education 4. Natural sciences, Mathematics and Informatics, and also similar disciplines, related to Finance, Accounting, Financial Analysis, Control and Audit, Insurance, Economics, Statistics, Econometrics, Business-informatics. In such case an additional (adapting) semester is provided as first. This semester includes basic disciplines from the Bachelor program of Financial Mathematics in University of Ruse.

GENERAL AND SPECIFIC PREPARATION

The Magister students of the specialty Mathematical modeling in finance, insurance and social work receive

- ***Deeply fundamental preparation*** in the area of Financial and Insurance Mathematics, Statistics and Econometrics, Specialized Software, Labor and Social Statistics, Social Work, Investment Strategies, Financial Audit;
- ***Profiled preparation*** in the area of Mathematical Modeling and applications of the Mathematics and Statistics in Finance, Insurance and Social Work, and also for analyzing of financial and insurance risk.

PROFESSIONAL QUALIFICATION

The students, which successfully finish the course of education, receive the professional qualification: MASTER OF MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK

CAREER OPPORTUNITIES

The masters, which are finishing the specialty Mathematical modeling in finance, insurance and social work in University of Ruse, could choose realization in Banking, Insurance, Financial institutions, Budget organizations, National Revenue Agencies, Audit companies, and also in all other sectors of Economics and Business, with priority.

The necessity of such specialists is related to the development of specific models in Finance, Insurance and Social Work, as well as with the need of performing complex mathematical and financial computations.

They also could realize themselves as actuaries, analysts, specialists of analysis and financial and insurance risk control, specialists of elaborating of banks, finance and insurance products.

OPPORTUNITIES FOR EDUCATIONAL AND SCIENTIFIC DEVELOPMENT

The master students, which are finishing the specialty of Mathematical modeling in finance, insurance and social work in University of Ruse could also successfully continue their educational and scientific development in the PhD program Mathematical modeling and application of mathematics, and also in PhD programs in the area of Economics, Finance, Insurance and Social Work.

CURRICULUM

of the Degree Course in

MATHEMATICAL MODELING IN FINANCE, INSURANCE AND SOCIAL WORK

First Year

Code	*First semester*	*ECTS*	*Code*	*Second semester*	*ECTS*
3786	Introduction to the Financial Mathematics	5	3773	Financial Mathematics	5
3787	Differential Equations	5	3774	Insurance Mathematics	5
3788	Statistics	5	3784	Financial Accounting	5
3789	Numerical Methods with MatLab	5	3776	Social and health Insurance	5
3790	Operations Research	5	3777	Labor and Social Statistics	5
3791	Visual Programming in Excel	5		*Selective courses (students select one course)*	
			3778	Investment Strategies	5
			????	Games Theory	5
			????	Modelling Economic Processes	5
	Total for the semester:	**30**		**Total for the semester:**	**30**

Second year

Code	*Third semester*	*ECTS*
3779	Analysis of financial and insurance risk	4
3780	Modeling in Finance	3
3781	Modeling in Insurance	3
3782	Modeling in Social Work	3
	Selective courses (students select one course)	
3783	Management of the credit institutions	2
3775	Financial Audit	2
????	Big Data Analytics Technologies	2
	Total for the semester:	**30**
3785	Diploma	15

3786 Introduction to the Financial Mathematics

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Dimitrov Kandilarov, PhD, Dept. of Mathematics,
tel.: 082 / 888 634, e-mail: ukandilarov@uni-ruse.bg
Abstract: The discipline is a based one for a master degree in mathematics and its applications in economics and finances. The programme unit aims to enable students to acquire active knowledge and understanding of some basic concepts in financial mathematics. It gives a mathematical perspective on the valuation of financial instruments.
Course content: Simple interest, compound interest, relative and conformal interest rate, **anticipate** interest **rate, discount, mathematical and banks discount rates, annuity, periodic interest rate, private means, long loan, secured loans, bonds and other financial derivatives.**
Teaching and assessment: The seminars follow the lectures and put stress on the individual students' work. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

Differential Equations

ECTS credits: 6
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics,
Faculty of Natural Sciences and Education
Lecturers:
Prof. Doctor of Math. Sciences Stepan Agop Tersian, Department of Mathematics,
tel.: 082 / 888 226, e-mail: sterzian@uni-ruse.bg
Assoc. Prof. Dr. Julia Chaparova, Department of Mathematics,
tel.: 082 / 888 226, e-mail: jchaparova@uni-ruse.bg
Abstract: The subject gets the students acquainted with the basic notions and methods for ordinary and partial differential equations. The main purpose is to teach students solving and analyzing the behavior of solutions in order to promote their educational and research activities. Particular attention is paid to modeling of the wave and diffusive processes in the economics. The gained knowledge is essential for further courses such as Modeling in Finance, Modeling in Insurance, Modeling in Social Affairs etc.
Course content: First order differential equations, Existence and uniqueness, Linear equations and systems, Qualitative theory of differential equations, Partial differential equations.
Teaching and assessment: The education is realized by lectures and seminars. The lectures are organized to present the material theoretically and by appropriate examples. Seminars are orientated towards controlling students' understanding and developing skills for solving problems. A term certification is obtained according to Internal rules for the educational activities. The exam test includes 6 problems and/or theoretical tasks.

3788 Statistics

ECTS credits: 5 **Weekly classes:** 2lec+2sem+0labs+0ps
Assessment: exam
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Evelina Veleva, MSc (Math), PhD (Math), Department of Applied Mathematics and Statistics,
tel.: 082 / 888 606, e-mail: eveleva@uni-ruse.bg
Assistant Prof. Vesela Mihova, MSc (Math), Department of Applied Mathematics and Statistics;
tel.: 082 / 888 424; e-mail: vmicheva@uni-ruse.bg
Abstract: The course aims to acquaint students with fundamental knowledge in the field of statistics, which have been applied in sphere of finance, insurance and social science. The material covers not only the theory in a classic course in statistics, but also focuses on topics that are of special interest to students and professionals in the specific scientific field. Demonstrations with the usage of SPSS are provided for solving the assigned problems.
Course content: Descriptive statistics. Graphical representation of data. Linear regression analysis. Point estimation. Confidence intervals. Hypothesis testing. One-way and two-way analysis of variance. Nonparametric procedures.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester. The course ends with an exam that includes problem solving and development to a question from the questionnaire. The final grade is formed based on the current assessment and assessment.

3789 Numerical Methods with MatLab

ECTS credits: 5 **Weekly classes:** 2lec+0sem+0labs+2ps
Assessment: continuous assessment **Type of the exam:** written
Department involved:
Department of Applied Mathematics and Statistics,
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Dimitrov Kandilarov, PhD, Dept. of Mathematics,
tel.: 082 / 888 634, e-mail: **ukandilarov@uni-ruse.bg**
Abstract: The discipline is a based one for a master degree in mathematics and its applications in economics and finances. The programme unit aims to enable students to acquire active knowledge and understanding of some basic concepts in numerical methods. It gives also a technical knowledge on computing with Matlab.
Course content: Interpolation, numerical differentiation and integration, exact and numerical methods for linear system, nonlinear equations, difference equations, methods of Euler, Runge-Kutta, Adams, theory of difference schemes, maximum principal, finite element method, difference schemes for PDE, integral equations.
Teaching and assessment: The seminars follow the lectures and put stress on the individual students' work. Two control works are planned after every part of the course. The students draw up a programs in Matlab, that solve concrete problems. The forming of the final mark is defined in the teaching program of the course.

3790 Operations Research

ECTS credits: 5 **Workload per week:** 2lec+2sem+0labs+0ps
Assessment: test **Type of exam:** ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Pavlov, MSc (Math), PhD (Math), Department of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: vpavlov@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with some specific models arising in solving management problems and up-to-date mathematical and statistical methods for their solving, analyzing and interpretation of received solutions. The character of this course is markedly applied. All the discussed examples and problems have their economics applications near the practice. Demonstrations with usage of software packages for solving larger real models are provided.
Course content: Subject and aim of operations research. Mathematical model of operations. Efficiecy and optimum criterion. General formulation of the linear programming problem (LPP). Working out linear programming models. Linear vector spaces. Systems of *n* linear equations with *m* unknowns (LSE). Properties of the LSE solutions. Graphic method for solving LPP. Simplex Method. Duality in linear programming. The transportation problem. Goal programming. Integer programming. Network analysis, including PERT-CPM. Elements of queuing theory. Elements of inventory theory.
Teaching and assessment: The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the opportunities of the software package MATLAB for solving more complicated and close to the practice problems.

3791 Visual Programming in Excel

ECTS credits: ***5*** **Workload per week:** 2lec+0sem+0labs+2ps
Assessment: ongoing assessment
Department involved:
Department of Informatics and Information Technologies
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Desislava Atanasova, PhD, Department of Informatics and Information Technologies;
tel.: 082 / 888 326; e-mail: datanasova@ami.uni-ruse.bg
Senior Assistant Prof. Svetlozar Tzankov, PhD, Group of Informatics and Information Technologies;
tel.: 082 / 888 645; e-mail: stzancov@ami.uni-ruse.bg
Abstract: The subject aim is to develop students' knowledge about Visual Programming in Excel and to give them new skills to develop their own interface in visual environment. The theoretical material, presented in lecture classes, is illustrated with appropriate examples. The practical exercises are based on programming in VBA environment in MS Excel.
Course content: Introduction to objects and collections. Container, circulation to specific objects in collections or container. Adding objects. Projects and modules. Menu. Interface design. Dialogs. Elements of dialogs. Built-in dialogs. Custom dialogs. Properties of control elements. Events. Methods. Management of host applications of Office.
Teaching and assessment: Students attend lectures and practical exercises. The practice sessions are held with subgroups in computer labs. During these exercises students have to solve on their own tasks related to lecture material. Decisions are implemented in an appropriate programming environment VBA in Excel. The course finishes with an ongoing assessment. The final mark is based on evaluation of the students from the two control tests conducted during the semester (70%) and the average score achieved as a result of the current control during exercise.

3773 Financial Mathematics

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of the exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Yuriy Dimitrov Kandilarov, PhD, Dept. of Mathematics,
Tel.: 082 / 888 634, e-mail: ukandilarov@uni-ruse.bg
Abstract: The discipline is a based one for a master degree in mathematics and its applications in economics and finances. The programme unit aims to enable students to acquire active knowledge and understanding of some basic concepts in financial mathematics. It gives a mathematical perspective on the valuation of financial instruments.
Course content: A simple market model, notations and assumptions, risk-free and risk assets, zero-coupon bonds, binomial tree model, discrete market model, portfolio management, two or more securities, forward and future contracts, European and American options, option pricing, financial engineering, Delta hedging and Greek parameters, variable interest rates, dynamic hedging, stochastic interest rates.
Teaching and assessment: The seminars follow the lectures and put stress on the individual students' work. Two control works are planned after every part of the course. The final mark could be received before the session time. Its forming is defined in the teaching program of the course.

3774 Insurance Mathematics

ECTS credits: ***5***
Workload per week **:** 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam **:** written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamen Yalamov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 888-466, e-mail: yalamov@allianz.bg
Abstract: The course aims to familiarize students with basic mathematical models arising in solving problems of the sphere of insurance and modern methods for solving, analysis and interpretation. Some basic problems from the actuarial mathematic are included. The considered examples and problems have mainly applicable character, close to the practice. The insurance business is an area with many applications of mathematics and the models which are considered are impartible part from the insurance practice.
Course content: Essence of general insurance. Insurance operations. Statistical basis of insurance. Simple and compund interest. Annuitie. Accumulated values. Life insurance. Interest with variable size over time. Rescheduling of the liabilities, rents, annuities and payment flows. Risk Theory. Capital and profit. Reinsurance. Billing practices. Classification of risks. Actuarial methods in general insurance. Insurance portfolio. Forecasting in general insurance. Calculation of insurance premiums.
Teaching and assessment: The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the solving more complicated and close to the practice problems.

3784 Financial Accounting

ECTS credits: 5
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: exam
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lectures:
Assoc. Prof. Lyudmila Mihaylova, PhD, Department of Management and Business Development,
tel: 082 / 888 518; e-mail: liudmilla@abv.bg
Abstract: Financial Accounting provides students with fundamental knowledge in the field of financial accounting, as well as major links in this area between theory and practice. The course has theoretical and practical character and input-output connections with other disciplines in the Master's program. Some discussed methods and technologies are illustrated with examples and problems from the practice. Seminars are connected with solving complex problems from the field of financial accounting.
Course content: Introduction - evaluation and reporting of fixed assets, intangible, financial assets. Accounting of inventories currency revenue expenditure, etc. Formation of the company's profit. Accounting and analysis of cash flows. Preparation of balance sheet, etc. Specifics of accountability and social insurance organizations.
Teaching and assessment: The traditional way of delivering lectures will be enriched by visual materials put on slides and or multimedia packages. At seminars students will work on case studies. The continuous assessment is on the basis of tests and students' participation. The final note will depend on the note from the continuous assessment (40%) and from the final exam (60%).

3776 Social and health Insurance

ECTS credits: 5
Workload per week: 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assist. Prof. Maria Radeva, PhD, Department of Public Law,
tel.: 082 / 888 434, e-mail: mradeva@uni-ruse.bg
Abstract: The course aims at providing students with general and basic understanding of the law of social and health insurance and security. It presents an introduction to the subject of insurance law, presenting the rules in both their legal and socio-economic contexts. It examines the growth of contemporary „compensation culture" and assesses the culture's impact on the development of insurance law and policy.
Course content: The course comprises of general and special part. The general part covers the subject, method, principles and sources of insurance law, nature and types of insurance legal relations, insured social risk, financial compensations and aids, types of pensions, additional insurance for retirement benefit, insurance in case of unemployment, health insurance.
Teaching and assessment: Lectures present the main terms, categories and institutions of insurance law. The theoretical material is followed by commentary of the main domestic legislation and international conventions in this field. Students are provided with contemporary theory of insurance law and with judicial practice and the one of National Social Security Institute, National Employment Agency, National Health Insurance Fund, retirement insurance corporations. During seminars students discuss on legislation and do case studies. The degree of acquiring of the learning material is assessed and the mark reflects the students' preparation and their participation in seminars.

3777 Labor and Social Statistics

ECTS credits: 5 **Workload per week:** 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Pavlov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: vpavlov@uni-ruse.bg
Assistant Prof. Vesela Mihova, MSc (Math), Group of Applied Mathematics and Statistics;
tel.: 082 / 888 424; e-mail: vmicheva@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of Labor and Social Statistics, as well as with the basic links between theory and practice. The character of this course is markedly applied. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of SPSS are provided for solving the assigned problems.
Course content: Basic Sources of Information for Labor and Social Statistics, Statistical Distributions, Statistical Study of Development, Demographic Statistics, Labor Statistics, Construction of Social Indicators.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests. To determine the final mark, further interview with the student can be carried out, if necessary.

3778 Investment Strategies

ECTS credits: 5 **Workload per week:** 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Svetlana Stefanova, Group of Computer Systems and Technologies,
tel.: 082 / 888 356; e-mail: sstefanova@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of financial markets, as well as with the basic links between theory and practice. The character of this course is markedly applied. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of software packages are provided for solving the assigned problems.
Course content: Investing Basics. Investment strategies and investment policy. Short and long term financial goals. Structure of the investment portfolio. Investment plan. Forex. Capital markets. Securities. Investment funds. Property markets. Restrictions on the choice of strategy. Withdrawal of funds. Balloons and pyramids.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Special attention is paid to certain problems from practice. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests.

3779 Analysis of financial and insurance risk

ECTS credits: 4 **Workload per week:** 3lec+2sem+0labs+0ps
Assessment: exam
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Iliya Brayanov, Group of Applied Mathematics and Statistics;
tel.: 082 / 888 466; e-mail: brayanov@uni-ruse.bg
Abstract: The subject aim is to make students acquainted with basic concepts, problems and methods in the analysis and management of financial and insurance risks, in particular of underwriting risk in general insurance and its associated financial risks. After completing the course students are expected to have received competences in the field of management of the finance and insurance risks in general insurance.
Course content: Fundamentals of Solvency II Directive and its applications for underwriting risk in general insurance. Deterministic and stochastic methods assessment of reserves and pricing in general insurance. Methods for evaluation of major damage and catastrophic events. Evaluation of premium reserves. Methods to reduce the risk.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester - their purpose is to help students for successful performance on the exam. The main method for forming the final grade is written exam, which includes solving test, two problems and a theoretical question.

3780 Modeling in Finance

ECTS credits: 3 **Weekly classes:** 3lec+2sem+0labs+0ps
Assessment: exam **Type of exam:** written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Lyuben Valkov, MSc, PhD, Department of Applied Mathematics and Statistics
tel. 082 / 888 725, e-mail : lvalkov@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics
tel. 888 / 489, e-mail tgulov@uni-ruse.bg
Abstract: The subject has the aim to give a comprehensive overview of some of the most popular financial models as well as to present the contemporary trends and problems of the modeling in finance. The course recalls some well known material considered from the higher theoretical and practical background's point of view received during the program. In addition, some new aspects which are currently investigated will be presented, namely, the impact of the transaction costs and the option valuation as stochastic dynamic programming problem.
Course contents: Portfolio diversification, effective frontier. CRR model. Geometric Brownian motion, Black-Scholes model. Lévy processes. Models of Vasicek, Cox-Ingersoll-Ross, Hull-White, Chen, term structure of interest rates, Heath-Jarrow-Morton framework. Local and stochastic volatility, Heston, CEV, SABR and GARCH models. Credit risk: structural models, reduced-form models, intensity based models. Transaction costs, Leland's model. Stochastic dynamic programming, HJB equation, optimal utility.
Teaching and assessment: The course is taught through lectures and seminar classes. The final assessment is based on the results from the written exam.

3782 Modeling in Insurance

ECTS credits : 3
Workload per week : 3lec+2sem+0labs+0ps
Assessment : exam
Type of exam : written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Plamen Yalamov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: yalamov@allianz.bg

Abstract: The course aims to familiarize students with basic stochastic models, used in solving problems for analysis and estimation of the risk in the insurance and also, modern methods for solving, analysis and interpretation of their results. There are examples and problems with applied and theoretical character. The probability models are in the basis of the insurance business and the considered models are of big importance in the insurance practice. The considered methods are based on mathematical models, which are widely developed and applied into actuarial mathematic and into the mathematical modeling in the insurance. **Course content:** Probability and statistical basis of general insurance. Events, accidents, chance, danger and risk. Claim process - distributions of the number, size and frequency of the claims. Heft of the claims as a random variable. The frequency of the claims as a stochastic process. General models of the risk in development. Fundamental principles for investing. Actuarial methods for analysis of investment portfolios. Forecasting of insurance portfolio. "Monte Carlo" method for forecasting and estimation of the risk. Optimization of portfolio and risk managment.

Teaching and assessment: The teaching process is realized through lectures, seminar exercises and course assignment. Topics discussed during lectures are to be illustrated and given meaning additionally through practical exercises. Special attention is paid to the solving more complicated and close to the practice problems.

3782 Modeling in Social Work

ECTS credits: 3
Workload per week: 3lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Velizar Pavlov, MSc (Math), PhD (Math), Group of Applied Mathematics and Statistics,
tel.: 082 / 888 466, e-mail: vpavlov@uni-ruse.bg
Assistant Prof. Vesela Mihova, MSc (Math), Group of Applied Mathematics and Statistics;
tel.: 082 / 888 424; e-mail: vmicheva@uni-ruse.bg

Abstract: The subject aim is to make students acquainted with some fundamental issues in the sphere of Modeling in Social Work, as well as with the basic links between theory and practice. All the discussed models and technologies have their applications in practice. Demonstrations with the usage of SPSS are provided for solving the assigned problems.

Course content: Social Work – theories, models and perspectives; Logical Modeling; Dispersion Analysis; Single-factor and Multifactor Models in Social Work; Factor Analysis; Clustering Models; Hierarchical Linear Modeling (HLM) in Social Work.

Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes are lead by the teacher as an organized problem solving on a material from the lecture topics. Two control tests are taken during the semester – they consist of questions and problems. The discipline is on an ongoing assessment, which is formed as an average mark from the conducted control tests. To determine the final mark, further interview with the student can be carried out, if necessary.

3783 Management of the credit institutions

ECTS credits: 2
Weekly classes: 2lec+2sem+0labs+0ps
Assessment: continuous assessment
Type of exam: written
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Emil Papazov, PhD, Department of Business and Management,
tel: 082 / 888 518; e-mail: epapasov@gmail.com
Abstract: The course "Management of credit institutions" provides a set of theoretical and applied knowledge for effective management of existing credit institutions. The main objective of the training is to acquire knowledge on key processes and techniques relating to the management of different credit institutions operating in the country.
Course content: Introduction to the course "Management of credit institutions." Theoretical foundation and legal basis of management of credit institutions. Types of banks. Management of banks. Business game "Investor banks - the basis of modern knowledge and experience to effectively manage a banking institution.
Teaching and assessment: The course will use lecture-based training combined with practical exercises, within which the business game "Investor banks" will form the basis. Periodic assessment will be provided after solving specific tasks and tests during the seminars. At the end of the semester the students will receive a continuous assessment, reflecting the student's performance during the semester.

3775 Financial Audit

ECTS credits: 2
Workload per week: 2lec+2sem+0labs+0ps
Assessment: ongoing assessment
Department involved:
Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education
Lecturers:
Prof. Ognyan Simeonov, Group of Financial Control, UNWE;
tel.: 02 / 962 34 73; e-mail: osimeonov@unwe.bg
Abstract: The subject aim is to make students acquainted with some fundamental knowledge in the sphere of Financial Audit, as well as with the basic links between theory and practice. The character of this course is markedly applied. The audit methodology is viewed with focus on auditing in the IT environment, and the use of computer-assisted audit techniques. Examples and problems from the practice are used for illustration. If technically possible, demonstrations with the usage of software packages are provided for solving the assigned problems during the exercises.
Course content: Principles and objectives of the audit. Responsibilities in the audit. Stages of the audit. Audit procedures for the assessment of materiality and audit risk. Evaluation of the internal control system related to financial reporting. Audit procedures in response to assessed risks of material omissions and inconsistencies. Audit procedures regarding accountability, supported by IT applications. Evidence in the audit. Audit sampling. Audit software. Final stage of the audit - reporting. Institutional aspects.
Teaching and assessment: The material is presented in lecture classes - the theory is illustrated with many example problems. The seminar classes approve the understanding of the material. They are lead by the teacher as an organized problem solving on a material from the lecture topics. Special attention is paid to certain problems from practice. The final grade is formed on the basis of written exam, which includes questions and tasks.

POSTGRADUATE STUDIES IN MATHEMATICAL MODELING

PROFESSIONAL STANDARDS
OF A MASTER IN
MATHEMATICAL MODELING

Degree Programme: **Mathematical Modeling**
Educational Degree: **Master**
Professional Qualification: **Master of Mathematical Modeling**

The aim of the master's programme is to acquaint the students with the contemporary development of mathematical modeling. The students are trained in setting up and analyzing models of real engineering problems, solving them by developing numerical methods and computer programmes, and presenting the numerical results to possible customers or clients.

The master's programme Mathematical Modeling in Engineering is appropriate to students who graduated their bachelor degree in Mathematics, Computer Science, and Engineering. During the course, students can improve greatly their knowledge of differential equations, numerical methods, optimization, mathematical software, mathematical modeling of real technical and economic phenomena. The course offers tuition in mathematical modeling and simulation of semiconductor devices, design of instruments, and risk theory. The fields of application are flexible and can be changed depending on problems of the present day.

The duration of the course is 3 semesters and ends with writing a Master's Thesis. In each semester the subjects are mandatory and elective and total 30 ECTS credits. Students can specialize in one of the following areas: technical modeling or economic modeling. Special attention is paid to participation of students in the departmental research seminars. The thesis subject is assigned no later than the end of the first semester and the work on it is controlled by a supervisor. Both the individual and team research work are encouraged as well as the participation in international conferences and educational programs.

The students who have graduated can continue their study in a doctoral programme and have a wide range of job opportunities to apply to software and consulting companies, higher education institutions, research institutes and centers in the relevant fields of science and engineering.

CURRICULUM

of the Master's degree course in

MATHEMATICAL MODELING

First year

Code	First semester	ECTS
S02001	Ordinary Differential Equations	6
S00357	Numerical Analysis	6
S00370	Variational Methods and Optimization	6
S00369	Applied Functional Analysis	6
Elective courses (students elect a course)		
S00364	Introduction to Financial Mathematics	6
S00365	Analytical Dynamics with Matlab	6
	Total for the semester:	30

Code	Second semester	ECTS
S03796	Partial Differential Equations	6
S00368	Numerical Methods for Differential Equations with Matlab	6
S00371	Finite Element Methods with Matlab	6
Elective courses (students elect a course)		
S00360	Differential Models in Financial Mathematics	6
S00373	Mechanics of Continuous Media	6
Elective courses (students elect a course)		
S00374	Topological Methods for Differential Equations	6
S00375	Difference schemes for interface problems	6
	Total for the semester:	30

Second year

Code	Third semester	ECTS
S00376	Workshop	3
Elective courses (students elect 2 courses from module A or module B)		
Module A (Technical modeling)		
S00378	Nonlinear Vibrations of Mechanical Systems	6
S00390	Numerical simulations of semiconductor devices	6
SM13975	Mathematical Models in Hydromechanics	6
Module B (Economic modeling)		
S00425	Financial Mathematics	6
S00438	Mathematical Theory of Risk	6
S00460	Credit Risk	6
Graduation		
S00498	Master thesis	15
	Total for the semester:	30

S02001 Ordinary Differential Equations

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: exam **Test type:** written and oral
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education
Lectires:

Assoc. Prof. Julia Chaparova, MSc, PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail jchaparova@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail tgulov@uni-ruse.bg

Abstract:
The course covers classical results concerning ordinary differential equations as well as modern techniques for qualitative investigation of equations modeling different processes from natural and life sciences. Topics such as existence, uniqueness and continuation of solutions of initial value problems for first order systems, as well as phase portrait analysis and stability for linear and autonomous systems, and Sturm – Liouville boundary value problems are included.
Course contents:
Initial value problems for first order systems of differential equations – existence, uniqueness, continuation of solutions, linear and autonomous systems – phase portraits, stability, Sturm – Liouville boundary value problems.
Teaching and assessment:
The course consists of lectures and practical exercises in a computer laboratory with Mathematica software installed, consultancy and an individual homework. The assessment is based on the written exam at the end of the course.

S00357 Numerical Analysis

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: exam **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Science and Education
Lectires:

Assoc. Prof. Dr. Miglena Koleva, Department of Mathematics, Faculty of Natural Science and Education, tel. 082 888 587, e-mail mkoleva@uni-ruse.bg

Assoc. Prof. Dr. Ivanka Angelova, Department of Mathematics, Faculty of Natural Science and Education, tel. 082 888 587, e-mail: iangelova@uni-ruse.bg

Abstract:

The course offers solving numerically main types of ordinary differential problems utilizing the MATLAB® software. The students can use the gained knowledge for their master thesis elaboration as well as in the practice.
Course contents:

Euler's and Runge-Kutta methods. One and multistage methods. Balance method, difference schemes for singularly perturbed problems.
Teaching and assessment:

The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consultancy and a course work. There is a final written exam at the end of the course.

S00370 Variational Methods for Differential Equations

ECTS credits: 6 **Weekly classes: 2lec+2sem+0labs+0ps**

Assessment: exam **Type of exam: written and oral**

Departments involved:
Department of Mathematics, Faculty of Natural Sciences and Education

Lecturers:
Prof. Stepan Tersian, MSc, DSc, Department of Mathematics, Faculty of Natural Sciences and Education tel. 082 888 226, e-mail sterzian@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail tgulov@uni-ruse.bg

Abstract:
The aim of the subject is to present classical and modern methods in the theory of variational calculus and linear and convex optimization.

Course contents:
Fréchet and Gateaux derivatives of functionals, Euler-Lagrange equation, Direct method of variations, Convex functionals and subdifferentials, Ekeland's theorems, Palais-Smale conditions, Mountain-pass theorem, Linear and convex optimization, Applied problems in game theory, optimal allocation of resources.

Teaching and assessment:
The course consists of lectures and seminar exercises as well an individual homework is assigned. There is a final written exam at the end of the course.

S00369 Applied Functional Analysis

ECTS credits: 6 **Weekly classes: 2lec+2sem+0labs+0ps**

Assessment: exam **Type of exam: written and oral**

Departments involved:
Department of Mathematics
Faculty of Natural Sciences and Education

Lecturers:
Assoc. Prof. Julia Chaparova, MSc, PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail jchaparova@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail tgulov@uni-ruse.bg

Abstract:
The study of mappings on various abstract spaces has a significant importance for a wide range of mathematical areas, e.g., differential equations, calculus of variations, optimization and optimal control theory, numerical methods and many others. Their contemporary development is impossible without a thorough knowledge of the notions, facts and tools from the functional analysis. Accordingly, the course 0369 Applied Functional Analysis is included as a mandatory for the master program Mathematical modeling in engineering.

Course contents:
Lebesgue measure and integration theory. Metric, topological, linear normed and Hilbert spaces. Elements of the convex programming. Main theorems of functional analysis. Generalized functions. Fourier transform. Integral equations. Differential calculus in Banach spaces.

Teaching and assessment:
The course consists of lectures and seminar exercises, as well an individual homework is assigned. There is a final written exam at the end of the course. The course consists of lectures and seminar exercises, as well an individual homework is assigned. There is a final written exam at the end of the course.

S00364 Introduction to Financial Mathematics

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: continuous assessment **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education
Lecturers:
Prof. DSc. Stepan Tersian, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail: sterzian@uni-ruse.bg
Assist. prof. Dr Tihomir Gulov, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail: tgulov@uni-ruse.bg

Abstract:

The course offers mathematical methods for analyzing interest rates, financial markets and pricing financial dervatives. The students can use the gained knowledge for their master thesis elaboration as well as in practice.

Course contents:

Interest rate theory and pricing obligations. Financial rents. Financial markets. Risk and risk models. Portfolio risk. Portfolio optimization. Mathematical models of financial market. European options: mathematical model and numerical solution to the problem for pricing options. American options.

Teaching and assessment:

The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consultancy and a course work. There is a final written exam at the end of the course.

S00365 Analytical Dynamics with MATLAB

ECTS credits: 6 **Weekly workload**: 2 l + 2 p
Assessment: continuous assessment **Test type:** written
Departments involved: Department of Engineering Mechanics, Faculty of Mechanical and Manufacturing Engineering
Lecturer:

Assoc. prof. PhD Velina Bozdouganova, Department of Engineering Mechanics, Mechanical and Manufacturing Engineering Faculty, tel. 082 888 572, e-mail: velina@uni-ruse.bg

Assoc. prof. PhD. Venko Vitliemov, Department of Engineering Mechanics, Mechanical and Manufacturing Engineering Faculty, tel. 082 888 622, e-mail venvit@uni-ruse.bg

Annotation:

The course offers learning of techniques for modeling of discrete mechanical systems, for formulation, solving, and investigation of the main type of analytical dynamics problems using the MATLAB software. The students can use the gained knowledge for their master thesis elaboration as well as in the practice.

Course syllabus:

Dynamics of unconstrained and constrained mechanical systems. A new approach for investigation of constrained mechanical systems. Description of the position and inertia of rigid bodies. Elements of Lagrangian mechanics. Two general principles of analytical dynamics.

Teaching and learning methods:

The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consultancy and individual work. The course ends with a continuous assessment.

S03796 Partial Differential Equations

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: exam **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education
Lectires:

Prof. Dr. Sci. Stepan Tersian, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail sterzian@uni-ruse.bg

Assist. prof. Dr. Tihomir Gulov, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail: tgulov@uni-ruse.bg

Abstract:

Classical results for first order quasilinear partial differential equations are studied in the course as well as three important second-order linear equations – the wave equation, the heat equation and Laplace equation in $\mathbf{R}^1, \mathbf{R}^2, \mathbf{R}^3$ spaces, accordingly. Both explicit methods for representation of the solutions and energy methods for qualitative analysis are demonstrated during the course, such as fundamental solutions method, Fourier method, and energy methods.

Course contents:

Quazilinear first order PDEs, Classification of second-order semilinear PDs, Wave equation –initial value problem, d'Alambert, Kirchhoff and Poisson formulas, Heat equation – fundamental solution, Laplace equation – Poisson formula, Properties of the harmonic functions, Maximum principle, Fourier method.

Teaching and assessment:

The course consists of lectures and seminar exercises in a computer laboratory with *Mathematica* software installed, consultancy and a course work. There is a final written exam at the end of the course.

S00368 Numerical methods for differential equations with Matlab

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: exam **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Science and Education

Lectires:

Assoc. prof. Miglena Koleva Ph.D, Department of Mathematics, Faculty of Natural Science and Education, tel. 082 888 587, e-mail: mkoleva@uni-ruse.bg

Assoc. prof. Ivanka Angelova Ph.D, Department of Mathematics, Faculty of Natural Science and Education, tel. 082 888 587, e-mail: iangelova@uni-ruse.bg

Abstract:

The course offers for learning the main tools in theory of difference scheme and its application for solving typical problems in mathematical physics, formulated as partial differential equations of elliptic, parabolic and hyperbolic type.

Course contents:

Maximum principle. Difference schemes for elliptic, parabolic and hyperbolic problems. Принцип за максимума. Iconomic difference schemes for multi-dimensional problems. Thomas method. Direct methods.

Teaching and assessment:

The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consultancy and a course work. There is a final written exam at the end of the course.

S00371 Finite element method with MATLAB

ECTS credits: 6 **Weekly workload**: 2 l + 0 s + 0 lab + 2 p
Assessment: exam **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education

Lectures:

Assoc. prof. Miglena Koleva, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 587, e-mail: mkoleva@uni-ruse.bg

Assoc. prof. Ivanka Angelova Ph.D, Department of Mathematics, Faculty of Natural Science and Education, tel. 082 888 587, e-mail: iangelova@uni-ruse.bg

Abstract:

The course offers the finite element method (FEM) for solving, and investigation of the main type of differential problems utilizing the MATLAB® software. The students can use the gained knowledge for their master thesis elaboration as well as in the practice.

Course contents:

Model problems. Idea for the basic numerical methods for DEs. Theoretical bases of the FEM. Nonconforming FEM. Mixed FEM for evolution problems.

Teaching and assessment:

The course consists of lectures and seminar exercises in a computer laboratory with MATLAB software installed, consultancy and a course work. There is a final written exam at the end of the course.

S00360 Differential Models in Financial Mathematics

ECTS credits: 6 **Weekly classes: 2lec+2sem+0labs+0ps**
Assessment: exam **Type of exam: written and oral**
Departments involved:
Department of Mathematics, Faculty of Natural Sciences and Education
Lecturers:
Prof. Stepan Tersian, MSc, DSc, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail sterzian@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, MSc, PhD, Department of Mathematics
Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail tgulov@uni-ruse.bg
Abstract:

At the present time the complete understanding of the phenomena of the financial world is impossible without the presence of a profound mathematical knowledge and advanced skills. Despite the serious criticism that appeared in the last few years with respect to the adequacy of the well-known models for pricing of financial derivatives and the consequences of their application, there is no doubt about the necessity of their consideration in the curriculum of any master course in financial engineering.

The course 0360 Differential Models in Financial Mathematics has for an object to introduce the students to some basic topics in financial derivative value modeling presented on strong mathematical ground. Since the subject has more or less theoretical nature the course is a non-mandatory one in the curriculum of the master program Mathematical Modeling in Engineering. However, its practical importance is obvious due to the nature of the considered topics.

Course contents:

Random variables and stochastic processes, Itô's integral and formula, stochastic differential equations, options and derivatives, arbitrage, Black-Scholes-Merton model, European and American style options, free boundary problems, interest rate models.

Teaching and assessment:

The course consists of lectures and seminar exercises, as well an individual homework is assigned. The semester mark is based on exam.

S00373 Mechanics of Continuous Medium

ECTS credits: 6 **Weekly workload: 2** l + 2 p
Assessment: exam **Type of exam:** written
Department(s) involved: Dept. of Engineering Mechanics

Lecturer:
Assoc. Prof. Ivelin V. Ivanov, Dept. of Engineering Mechanics, tel: 082 888 472 e-mail: ivivanov@uni-ruse.bg

Annotation:
The course gives the opportunity for students to study the phenomena of nature, describing them mathematically in a right way by means which are common for several engineering sciences. The subject gives capability to analyze the strain and stress in solids, fluids, and gases – continuous media, using matrix, vector, and tensor mathematics. The physical laws of the different media are derived by common mathematical formulations, which are easy to be used in the mathematical modeling of various phenomena.

Course syllabus:
Introduction to vector, matrix and tensor algebra. Kinematics of continuous media: strain, strain tensor, strain rate tensor, principle strain, and invariants. Statics: stress tensor, principle stress, Mohr's circle, stress surface, equilibrium equation. General principles: conservation of energy law and conservation of momentum law. Constitutive equations: general Hook's law. Constitutive equations for elastic solids. Constitutive equations for inelastic solids. Constitutive equations for fluids, kinds of fluids.

Teaching and learning methods:
The matter given in lectures is being learned by exercises solving problems under the supervision and by the help of an assistant. The organized middle term and final term tests give an opportunity for the outstanding students to get rid of the exam. The final exam is written, which consists of two problems for solving and a theoretical topic, which can be chosen from three of them.

S00374 Topological Methods for Differential Equations

ECTS credits: 6 **Weekly classes: 2lec+2sem+0labs+0ps**
Assessment: continuous assessment **Type of exam: written and oral**
Departments involved:
Department of Mathematics, Faculty of Natural Sciences and Education

Lecturers:
Prof. Stepan Tersian, DSc, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 226, e-mail sterzian@uni-ruse.bg
Assist. Prof. Tihomir Gyulov PhD, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 489, e-mail tgulov@uni-ruse.bg

Abstract:
First theorems about existence of solutions derived via topological methods belong to Birkhoff and Kellog. The main idea of their proof is formulated by Schauder in his celebrated fixed point principle, one of the corner-stones of the contemporary nonlinear analysis. The further development of the topological methods in various directions verifies their usefulness and effectiveness in the study of nonlinear differential equations.

The course 0374 Topological Methods for Differential Equations has for an object to introduce the students to this branch of the nonlinear analysis. Since the subject has mainly theoretical nature the course is a non-mandatory one in the curriculum of the master program Mathematical Modeling in Engineering. Yet, the theoretical aspects do not exhaust the interest in that topic. The numerous examples and applications included in the course of study confirm that.

Course contents:
Nemytskii operators. Fixed point theorems of Brouwer, Schauder and Schaeffer. Leray-Schauder topological degree. Bifurcation theorems of Krasnoselskii and Rabinowitz.

Teaching and assessment:
The course consists of lectures and seminar exercises, as well an individual homework is assigned. The semester mark is based on continuous assessment.

S00375 Difference schemes for interface problems

ECTS credits: 6 **Weekly workload**: 2 l +2 s + 0 lab + 0 p
Assessment: continuous assessment **Test type:** written
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education
Lectures:
Assoc. Prof. Yuriy Kandilarov, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 634, e-mail: ukandilarov@uni-ruse.bg
Assoc. prof. Dr. Ivanka Angelova, Department of Mathematics, Faculty of Natural Sciences and Education, tel. 082 888 587, e-mail iangelova@uni-ruse.bg

Abstract:
The course objective is the finite difference methods for solving elliptic and parabolic problems with discontinuous coefficients and singular own sources. The students can use the gained knowledge for their master thesis elaboration as well as in their further work.

Course contents:
Analytical theory of the interface problems. Finite difference schemes for 1D elliptic and parabolic problems with discontinuous coefficients. Parabolic problems with moving own sources. Finite difference schemes for 2D elliptic and parabolic problems. Immersed interface method for elliptic-parabolic problems. Immersed interface finite element method.

Teaching and assessment:
The course consists of lectures, practical exercises in a computer laboratory with MATLAB software installed and consultancy. In the lectures the educational material is theoretically presented and demonstrated by proper example problems. In the seminars the educational material understanding is controlled and skills for solving practical problems are developed. Continuous assessment is applied to form the semester mark.

S00378 Nonlinear Vibrations of Mechanical Systems

ECTS credits: 6 **Weekly workload**: 3 l + 0 s + 0 lab + 3 p
Assessment: continuous assessment **Test type:** written
Departments involved: dep. of Engineering Mechanics, fac. of Mechanical and Manufacturing Engineering
Lectires:
Assoc. prof. Dr. Stoyan Stoyanov, Department of Engineering Mechanics, Mechanical and Manufacturing Engineering Faculty, tel. 082 888 572, e-mail sgstoyanov@uni-ruse.bg
PhD Svetlin Stoyanov, dep. of Engineering Mechanics, Mechanical and Manufacturing Engineering Faculty, tel. 082 888 622, e-mail: sstoyanov@uni-ruse.bg

Abstract:
The course offers learning of techniques for modelling and investigation of nonlinear vibrations of discrete mechanical systems. The solving, and investigation of the main type of analytical dynamiical problems of nonlinear vibrations utilizing the MATLAB® software. The students can use the gained knowledge for their master thesis elaboration as well as in the applied mathematical practice.

Course contents:
General concepts of nonlinear oscillation theory. Nonlinear oscillators. Self-Excited Vibrations. Parametric oscillations.

Teaching and assessment:
The course consists of lectures and seminar exercises in a computer laboratory with MATLAB® software installed, consultancy and a course work. There are midterm and final exam for assessment.

S00390 Numerical Simulation of Semiconductor Devices

ECTS credits: 6 **Weekly workload: 3** l + 3 p
Assessment: exam **Type of exam:** written
Department(s) involved: Dept. of Electronics

Lecturer:
Assoc. Prof. Krasimira Stefanova Shtereva, PhD. Dept. of Electronics, tel. 082 888 366 e-mail: KShtereva@ecs.uni-ruse.bg

Annotation:

The course "Numerical Simulation of Semiconductor Devices" provides a fundamental knowledge of the principals of operation, essential physics, numerical analysis and modeling of the mainstream semiconductor devices. The physical models for the semiconductor devices that are used for integrated circuits analysis and synthesis will be reviewed. The Spice models for bipolar and MOSFET transistors and AIM-Spice software will be presented. A review of the device technologies and modeling of the manufacturing operations for fabrication of semiconductor devices and integrated circuits will be done.

Course syllabus:
Numerical analysis and computer methods in semiconductor technologies; basic semiconductor physics; p-n junction, semiconductor diodes; modeling of bipolar transistors; modeling of metal-oxide-semiconductor field effect transistors (MOSFET); modeling of thin film transistors; modeling of optoelectronic devices; modeling of photovoltaic devices; modeling of semiconductor devices and integrated circuits manufacturing processes; computer added design of semiconductor devices and integrated circuits.

Teaching and learning methods:
Teaching of this course is carried out through lectures (3 hours per week) and practical exercises (3 hours per week). Simulation of the device operation and semiconductor processing for technology development and manufacturing will be done using the technology computer added design (TCAD) tools during the practical exercises. The students submit a report for each practical exercise to the course instructor which includes the results of the simulations and an analysis. The additional requirements are according the Internal Academic Regulations. Finishing course procedure is a written exam in the form of a test with 120 minutes duration. The test is graded on a scale from 0÷100 points. Final assessment is based: 20% on practical assignments and 80% on the final test.

S00425 Financial Mathematics

Weekly classes: 2lec+0sem+0labs+2ps

ECTS credits: 6
Assessment: exam **Type of exam: written and oral**
Departments involved: Department of Mathematics, Faculty of Natural Sciences and Education

Lecturers:
Prof. Stepan Tersian, DSc, Department of Mathematics, Faculty of Natural Sciences and Education
tel. 082 888 226, e-mail sterzian@uni-ruse.bg
Pr. Assist. Prof. Tihomir Gyulov, PhD, Department of Mathematics, Faculty of Natural Sciences and Education
tel. 082 888 489, e-mail tgulov@uni-ruse.bg

Abstract: The course aims to present basic concepts and ideas of modern financial mathematics. The basic concepts and values and their behavior are considered such as interest rates, bonds and yield rates, risks and risk premiums, investments, portfolio theory and asset allocation, dynamic macroeconomic models. The main mathematical tools used in the considered models are ordinary differential equations (in continuous timing) or difference equations (in discrete timing).

Course contents: Elements of the theory of interest; Annuities, amortization, and sinking funds; Bonds and yield rates; Elements of the theory of portfolios; Macroeconomic Modelling.

Teaching and assessment: The course consists of lectures and seminar exercises, as well an individual homework is assigned. The semester mark is based on exam.

S00438 Mathematical Theory of Risk

ECTS credits: 6 **Weekly workload: 3** l + 3 p
Assessment: exam **Type of exam:** written
Department(s) involved: Dept. of Applied Mathematics and Statistics, Faculty of Natural Sciences and Education

Lecturer:
Assoc. Prof. Dr Iliya Brayanov , tel.: 359 2 902 7041, e-mail: iliya.brayanov@dzi.bg
Prof. Dr Lubin Vulkov, **:** Dept. of Applied Mathematics and Statistic, Faculty of Natural Sciences and Education, tel. 082 888 725, e-mail: lvalkov@uni-ruse.bg
Annotation:
The subject of this course is to make students acquainted with the basic concepts, problems and methods of the mathematical theory of risk. The course includes information on the application of the theory in insurance and reinsurance risk assessment and portfolios optimization.
Course syllabus:
Basic concepts of probability. Loss distributions. Reinsurance. Credibility theory and utility theory. Models of individual and collective risk. Ruin theory. Stochastic processes. Probability and risk measures. Optimal portfolios.
Teaching and learning methods:
During the lectures the teaching material is presented theoretically, the theory is illustrated by numerous examples. The goal of the practice classes is theoretical knowledge to find their practical application. During these classes students solve also a number of practical problems using Excel.

S00460 Credit Risk

ECTS credits: 6 **Weekly classes: 3lec+0sem+0labs+3ps**
Assessment: exam **Type of exam: written and oral**
Departments involved:
Department of Applied Mathematics and Statistics, Faculty of Natural Sciences and Education
Lecturers:
Assoc. Prof. Leda Minkova, DSc, FMI, University of Sofia, tel. 02 8161-676, e-mail: leda@fmi.uni-sofia.bg
Prof. Lubin Valkov, PhD, Department of Applied Mathematics and Statistics
Faculty of Natural Sciences and Education , tel. 082 888 725, e-mail lvalkov@uni-ruse.bg
Abstract:
The credit risk assessment is a primary problem that has to be solved by banks when making a decision about lending, insurance companies, credit rating agencies and all financial institutions. The aim of the course is to introduce the students to the main points and methods to solve this problem. Applications to the credit rating evaluation are presented as well.
Course contents:
The term structure modeling, Merton's model, reduced form models, first passage time and intensity process, hazard function and martingale representation, compensator of a random time, default probability and recovery rules, credit spread in reduced form modeling, risk assessment and credit rating valuation.
Teaching and assessment:
The course consists of lectures and practical exercises, as well as individual homework assignment. The semester mark is based on exam.