

1. English for students of information science

ECTS кредити: 4; I term – extra-curricular assignments-75
classes: 2 lectures+0 seminars+1 practical seminars

Weekly

Form of evaluation: ongoing assessment - test

Type of examination: written

Department of Pre-School and Primary School Pedagogy

Faculty of Education

Lecturers:

Chief assistant professor Milena Dimitrova Levunlieva (Department of Education; e-mail: levunlieva@swu.bg)

Course description:

The course in the subject English for Information Science is meant for the students who pursue their Master's degree in Information Technologies in primary school education. It is oriented to the acquisition of basic communicative skills, such as reading and editing texts, related to information technologies and their application in the process of education. At the end of the course, the students are expected to have acquired profound knowledge of IT terminology and to be able to employ different forms of communication in internet as well as to be capable of discussing computer software and hardware in the appropriate vocabulary.

Course content:

Knowledge acquisition in the sphere of the English language system through: 1) improvement of the students' skills to communicate via internet and use the appropriate register in a written form; 2. Building on the reading and listening comprehension skills with a focus on the presentation of technical data; 3. Mastering of the relevant terminology.

Education technology:

Based on the application of interactive teaching methods within the framework of the communicative approach, the process is focused on the acquisition of new knowledge and the improvement and adjustment of already existing competencies. In the process of performing the assignments in the syllabus, students use their own resources in order to internalize the language structures taught in class. The checking of homework assignments and tests provide feedback for the quality of the knowledge they have acquired.

Recommended reading:

Primary:

1. Английски език за техническите професии. С. 2002.

Additional: 2. McCarthy, M., F. O'Dell (2005). English Vocabulary in Use (Elementary).

OUP: Oxford;

3. Murphy, R. (2007). English Grammar in Use (Elementary), OUP: Oxford;

4. Leech, G. (2003). An A-Z of English Grammar and Usage. Oxford: OUP.

2. Computer Information Systems

(Name of the course)

ECTS credits: 4,0

Type of the course: compulsory

Hours per week: 2 lectures, 2 labs

Assessment form: exam / continuous assessment

Leading department:

Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Associate Professor Velin Kralev, PhD, Department of Informatics

tel: 073 / 588 532, e-mail: velin_kralev@swu.bg

Annotation:

The course teaches methods for developing databases applications through object-oriented integrated development environments (IDEs) for visual design and event-oriented programming. Various aspects of design databases applications using various objects: a datasets, tfield objects and data bound controls. Developed different single-layer (desktop) applications to access data. Students learn different technologies for data access by: ADO, ADO.NET, dbExpress and others.

Content of the course:

Design database applications. Using TDataSet objects. Using Data Aware Controls. Working with BDE, ADO and dbExpress technologies. Using Client Datasets. Using XML in database applications. Using Connection, Command and DataReader ADO.NET objects. Using DataAdapter and DataSet ADO.NET objects. Workin with win forms and data binding.

Recommended reading:

Evaluating the student shall be carried out in the sixth grad scale. Current control is performed during the laboratory sessions during the semester through two courseworks, one control test and one course project (50% of final grade). Course ends with a written exam on the material according to the attached syllabus (50% of final grade). When shown a weak exam score, the student appears on the makeup exam and retain the information received from the course work assessment.

3. INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATION AND WORK IN A DIGITAL ENVIRONMENT

ECTS credits: 4.0

Week workload: 2+0+1 academic hours

Evaluation: written exam

Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. prof. Nikolay Tsankov, Ph.D.

E-mail ntzankov@swu.bg

Course description:

The course is organized in a way to provide opportunities for the students to integrate a variety of activities involving the application of information and communication technologies in education and work in a digital environment. The training aims at developing specific competences and skills of the future education specialists orientated towards: (1) developing knowledge and understanding about the different applying aspects of information and communication technologies and the working mechanisms for their integration in education; (2) developing strategies and technics to apply information and communication technologies in the educational process in order to improve learner's communicative skills, constructive and critical thinking, and effective strategies to process information from different type of sources; (3) developing awareness of innovative teaching and assessment methods and planning skills; (4) developing applying skills of using information and communication technologies in education to support learning and to motivate learners to develop their digital skills; (5) developing awareness of the rules and requirements to create safe education environment for the learners including the Internet access; (6) developing presentation technics and skills as a part of the teacher's professional profile on one side, and acquiring technics and strategies to support the learner's presentation skills on the other.

Course content:

Application of information and communication technologies in pre-school and school education. Electronic tables as a supporting tool for teachers - MS Excel. Creating and formatting electronic tables for education purposes. Formulas and functions. Different options and models of using information and communication technologies to present data. Computer based presentations in education. Design specifics and requirements of the computer based presentations for educational purposes. Applied aspects of MS Power Point to create original presentations. Computer based interactive technologies for education. Interactive whiteboards – technological solutions and functionality. Interactive software for education. Virtual classrooms. Systems for generating and sharing educational content. Electronic platforms in education. Software for creating multimedia applications. Educational electronic gates. Applying aspects of information and communication technologies to support education of children with special educational needs. Computer based multisensory and games orientated approach. Web portals with resources suitable for children with special educational needs. Specialized software. Cloud computing technologies. Functional characteristics of education. Sharing of information. Online communication via e-mail and Skype. Online forms – Office 365 Forms, as a tool for testing and inquiries. Application of Microsoft Sway for online educational presentations. Application of OneNote in class. Electronic notebook of the class.

Technology and organization of the course:

The course combines both theoretical and practical approach and provides opportunities for development and improvement of intellectual and practical skills of students for work in a digital environment. A number of problems and practical tasks related to the content aims at developing future teachers' professional competence. Students' achievement is regularly assessed and the results are organized in a personal portfolio as a prerequisite for the final grading. The training also provides opportunities to move from standard educational content to shared knowledge via technologies.

4. Computer Games and Education

(Name of the course)

ECTS credits: 5

Type of the course: compulsory

Hours per week: 2 lectures, 0 seminars, 2 labs

Assessment form: exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: **assoc. prof. Daniela Tuparova, PhD**, as.prof. Maya Kaseva, PhD, Department of Informatics

tel: **0898 441341**; e-mail: ddureva@swu.bg

Annotation: The aim of the course is to provide adequate preparation of the primary school teachers in area of use educational computer games in their teaching practice. The basic problems regarding to place of educational computer games are considered. The characteristics of the educational computer games are discussed. The core skills and competencies for adapting of available educational computer games for lessons activities are developed. The students master competencies for design of pedagogical scenarios of educational computer games.

Content of the course:

The main topics of the course are as following:

1. The games in education
2. Basic characteristics of educational computer games
3. Taxonomy of educational computer games
4. Performance and analysis of online educational games
5. Performance and analysis of stand alone educational computer games
6. Design of scenarios for educational computer games
7. Tools for rapid prototyping of educational computer games

During the course each student has to prepare 2 assignments:

- To find a suitable computer game for implementation in determined subject and grade in the primary school in Internet and to describe the game and the possibilities for implementation in the class.
- To develop scenario for educational computer game.

Recommended reading:

1. On-line course at URL: www.e-learning.swu.bg
2. Gibson D., C. Andry, M. Prensky, Games and Simulations in Online learning, Information Science Publishing, 2007
3. Kasperavicius, L.C.C., Bezerra, L.N.M., Silva, L. & Silveira, I.F.(Vo.8 2011), “ Building Computer Games as Effective Learning Tools For Digital Natives- and Similar”.
4. Rieber, L. P., & Noah, D. (2008). Games, Simulations, and Visual Metaphors in Education: Antagonism between Enjoyment and Learning. *Educational Media International*, 45(2), 77-92.
5. van Dam, A., Becker, S., & Simpson, R.M. (2005). Next-generation educational software: Why we need it and a research agenda for getting it. *Educause Review*, March/April, 26-43.
6. Prensky, M. (2001). Digital game-based learning. Minnesota: Paragon House.

5.1. e-Learning environments and technologies

(Name of the course)

ECTS credits: 3

Type of the course: compulsory

Hours per week: 2 lectures, 0 seminars, 1 labs

Assessment form: exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: **assoc. prof. Daniela Dureva**, Department of INformatics.

tel: 0898 441341, e-mail: georgette@swu.bg

Annotation:

The general aim of the course is to form knowledge, skills and abilities about elearning technologies and methods and their successful implementation into educational process in primary school level.

Content of the course:

Basic topics in the course are:

Basic technological and pedagogical concepts in e-learning.

Models of e-learning courses.

Psychology theories of learning and their implementation in e-learning.

Functional features of e-learning environment Moodle: Using integrated HTML editor;

Working with learning resources – web page, label, link to external resources, link to file or directory etc.; Working with learning activities – assignment, forum, blog, wiki, questionnaire etc.; Students management.

Students have to develop a part of e-learning course with obligatory components:

e-learning content in form of web page;

link to files with, presentation;

audio and video content;

test with diversity of test's items.

The course have to be based on own scenario. The evaluation of the student's skills is grounded on the developed e-learning courses.

Recommended reading:

1. E-Learning course at www.e-learning.swu.bg
2. Pierre Tchounikine, Computer Science and Educational Software Design, Springer-Verlag Berlin Heidelberg 2011
3. Moodle Documentation, URL: <http://docs.moodle.org/23/en/?lang=en>
4. Marc J. Rosenberg, E-Learning: Strategies for Delivering Knowledge in the Digital Age, 2000
5. Ruth C. Clark, R. Mayer, e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning, Third Edition, Pfeiffer, 2011

5.2.PLATFORMS AND TECHNOLOGIES FOR ELECTRONIC TRAINING

ECTS credits: 4.0

Week workload: 2+0+1 academic hours

Evaluation: written exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. prof. Nikolay Tsankov, Ph.D.

E-mail ntzankov@swu.bg

Course description:

The beginnings of the 21st century are related to the intensive development of various forms of technology-assisted learning at different levels of school and university education, which in some of its variants seriously reformat the educational process in its traditional sense. The search for ways to ensure synergy between the pursuit of lifelong learning and the rapid development of information and communication technologies provides new opportunities for the development of e-learning platforms and consumer self-improvement through e-courses. Electronic platforms and their use in education imply a higher level of interactivity in the course of the training and is the basis for increasing the learners' activity and motivation, and thus the efficiency of the learning process. Interactivity and adaptability are key features of any eLearning system that ensures personalization of learning and enhancing its effectiveness. E-learning technology evolves separately from knowledge management technology. With the development of Internet technologies, eTwinning technologies and platforms are also developing. E-learning systems are developed and established, as well as standards and models for it. In recent years, the number of platform-independent eLearning support systems has grown and many e-courses are being developed for different educational programs.

Course content:

Training in a digital environment. Pedagogical models of e-learning. Design of e-learning. Requirements and Ethical Standards in Developing Electronic Courses. Modular Object-Oriented Dynamic Learning Environment: MOODLE - e-learning system. Common feature. Role. Users. Rights. Main user activities. Courses in Moodle. Learning course in Moodle. Basic functionalities of the e-learning course. Formats of the course - thematic, weekly and social. Learning activities and content - design. Electronic Course Design via Moodle - Abstract; label; pages; hyperlinks (URL); files; folders; direct integration from Google Docs, YouTube, Flickr, Picasa, Wikimedia; Create: dictionary, forum, chat, poll, test, assignment and wiki. Blackboard Learn e-learning platform. Common feature. Basic functionalities. Blackboard Learn - my institution, menus, features, my ratings. Environment of the discipline, access to content, content areas, tools. Menu of the discipline, adding tools, creating content areas. Homepage - Announce Calendar, Notifications. Personalization. Discipline management board. Adding and removing modules. File for the discipline and content collection. Content Links. Management, access control. Create evaluation tools. Tasks, job assignments, tests, surveys. Interactive tools - Dashboard for discussions, blogs, journals, wikis, groups, chat. Virtual classroom. Assessment. Tools, full electronic diary. Scoreboard. Reports for the discipline. Evaluation of an electronic rate. Variability and functionality.

Technology and organization of the course:

The course combines both theoretical and practical approach and provides opportunities for development and improvement of intellectual and practical skills of students for work in a digital environment. A number of problems and practical tasks related to the content aims at developing future teachers' professional competence. Students' achievement is regularly assessed and the results are organized in a personal portfolio as a prerequisite for the final grading. The training also provides opportunities to move from standard educational content to shared knowledge via technologies.

6. Multimedia backgrounds for elaboration of didactic means

ECTS credits: 3; 1-st semester

Type of the course: compulsory

Hours per week: 30 lectures, 0 seminars, 15 practical exercises

Assessment form: ongoing assessment

Type of the exam: written

Methodical guidance:

Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. prof. D.Sc. Lidiya Tsvetanova - Churukova

Tel. 0888492612; e-mail: lidycveta@mail.bg

Annotation: The contemporary information technologies give possibilities to mold and present the curriculum in the primary grades in an interesting and compelling way. The multimedia means facilitate the perception of the given information. To facilitate the preparation process, creation and presentation of educational materials by computer presentation are created specialized programs. These programs give to the user different templates and instruments, with which help will be able to be prepared a presentation quickly and easily. In the package **Microsoft Office** is included such program – **Power Point**. She offers great number of instruments which permit a separate creation and organization of the presentation step by step. During its preparation the user can import objects – tables, drawings, diagrams, music and text, created by other programs or creates them independently.

Content of the course: Reforms in the European education and perspectives for implementation of progressive educational technologies in the training in primary grades. Pedagogical innovations and qualification of primary and children teachers. Didactic multimedia possibilities in the training. Hypertext, multimedia and their integration in the training (1st - 4th grade). Educational software and multimedia. The usage of electronic educational resources in preparation of pedagogical massif for everyday usage. Contemporary backgrounds for electronic learning. The usage of computer presentations in the primary education system. Essence of computer presentations. Kinds of presentations and slides. Requirements to the presentations. Methodological aspects of work with the program Power Point. Creation and usage of computer presentations. Verification and knowledge evaluation of the pupils in primary grades by computer tests. Programs for creation of test's variants – comparative analysis.

Educational technology: The lectures and exercises are lead in an interactive regime. Examination's evaluation is formed on the basis of successful or unsuccessful defense or prepared plan-synopsis with multimedia presentation of different kind of lesson (round 20 slides) in primary grades (theme, subject, cultural and educational field – at oneself choice) or plan-scenario with a presentation about some integrated educational form (or portfolio including the above-mentioned attributes and similar others) by using information technologies.

Recommended reading:

1. The encyclopedia of comparative education and national systems of education / Ed. By T. Neville Post lethaite. – Oxford:Pergamon Press, 1988. – XXVIII, 778 p.
2. Global education digest 2004: Comparing education statistics across the world. – Montreal: UNESCO inst. for Statistics, 2004. – 153 p.
3. E-LEARNING and training in Europe: A survey into the use of e-learning in training and professional development in the European Union. – Luxembourg: Office for office. Publ. of the Europ. Communities, 2002. – VI, 65 p.
4. WHAT schools for the future? Schooling for tomorrow. – Paris: OECD, 2001. – 250 p.
5. CHANG, Gwand-Chol et al. Educational planning through computer simulation / G. – C.Chang, M.Radi – Paris: UNESCO, 2001. – [VIII], 85 p.
6. Learning to bridge the digital divide: schooling for tomorrow. – Paris: OECD, 2000. – 137 p.

7. LEARNING to change: the experience of transforming education in South East Europe, Ed. By Terrice Bassler. – Budapest etc.; Centr. Europ. Univ. Press, 2005. – XIX, 220 p.
8. Bates, Tony National strategies for e-learning in post-secondary education and training. – Paris: UNESCO, 2001. – 132 p.
9. Education trends in perspective: Analysis of the world education indicators. – 2005 ed. – Paris: UNESCO, 2005. – 229 p.
10. E-LEARNING: The partnership challenge. – Paris: OECD, 2001. – 110 p.
11. Lebrun Marcel eLearning pour enseigner et apprendre. Allier pedagogie et technologie. – Louvain-la-Neuve: Bruylant-academia, 2005. – 269 p.
12. Depover Christian, De Lievre Bruno, Peraya Daniel, Quintin Jean-Jacques et Jaillet Alain Le tutorat en formation a distance. – Bruxelles: Editions De Boeck Universite, 2011. – 284 p.

7. INFORMATION TECHNOLOGY IN EDUCATIONAL RESEARCH

ECTS credits: 3

Type of the course: compulsory

Hours per week: 2 lectures, 1 seminars

Assessment: continuous assessment

Department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assos. Prof. Trayan Popkochev, Department of pedagogy

tel: 073/831562, **e-mail:** popkochev@swu.bg

Course summary: the course provides knowledge and skills for the application of different ICT in educational research. An accent is put on the standard operating systems and their applications Excel and Access together with the Microsoft (Office 2003/ Office 10) office pack. On the other hand it offers some specific software products such as reference management – BiblioExpress, Bibus and statistics tools SPSS. . The choice of the abovementioned software is based on its frequent use for academic research and educational needs, on its continual development and legal accessibility. The course has both theoretical and practical aspects. The theory is presented in straightforward, readily understandable terms, emphasizing the practical value of the knowledge acquired.

Course content: the course addresses the following topics: ACCESS data, spreadsheet programs and Excel formulas, ANOVA-Analysis, SPSS – statistics and graphics, Descriptive Statistics, Correlation analysis, Nonparametric Tests, Reference manager BiblioExpress and Bibus, anti plagiarism software Advego Plagiatus, cluster analysis.

References: (last updated in September 2012).

1. Advego Plagiatus . <http://advego.ru/plagiatus/>
2. BiblioExpressII <http://www.biblioscape.com/biblioexpress.htm>
3. Bibus bibliographic database II http://bibus-biblio.sourceforge.net/wiki/index.php/Main_Page
4. Ccount. II <http://www.winsite.com/Business/Applications/CCOUNT-the-free-Market-Research-Software/>
5. Free Research Software on Free2u.org II http://www.free2u.org/freeware/education/research/free_research_software.html
6. [Idea Rover v.1.1](http://www.winsite.com/go/download/34547/) II <http://www.winsite.com/go/download/34547/>
7. Jennings, R. 2010. Microsoft Access 2010 In Depth.
8. Pallant, Julie. 2010. SPSS Survival Manual: A step by step guide to data analysis using SPSS.
9. Walkenbach, John. 2010. Excel 2010 Bible (Excel Bible).

8. (9.) Psychological foundations of eLearning

ECTS credits: 1,5

Type of the course: elective

Hours per week: 15 lectures , 0 seminars

Assessment form: ongoing assessment

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. Prof. Dr. Malinka Ivanova, Department of Pedagogy; Head Assistant Prof. Teodor Gergov, PhD

tel: 0895589951, e-mail: m_ivanova@mail.bg; tel: 0878337317, e-mail: teodor@swu.bg

Annotation:

This course introduces students to perception and the processing of visual-spatial information of the human brain and how this influences the learning and remembering processes. Topics include the presentation of visual-spatial information, selective attention of children, objects discern and categorization, formation of visual images in the memory, supporting learning and remembering through visual-spatial images.

Content of the course:

Organization and processes of human visual system. Models for perceiving of visual-spatial information. Recognition of visual objects – theories and problems. Recognition of components and prediction of their properties through the detached parts. A process of visual information discerning and its relation with other senses like hearing and touch. Attention to visual objects – definitions.

Not paying attention to the changes in visual objects. Disorders in the visual perception of information. Searching and finding of visual objects. Formation of visual images in memory. Connection of concepts at different levels. Concepts visualization in multidimensional space. Long term memory - structure and kinds. Decisions making – theories, models, effects. Individual characteristics. Learning through problem solving. Cognitive processes and mechanisms determining spatial orientation and human behavior.

Recommended reading:

1. Laura Schulz, Infant and Early Childhood Cognition - lecture notes, MIT OpenCourseWare, <http://old.mak.ac.ug/courses/brain-and-cognitive-sciences/9-85-infant-and-early-childhood-cognition-fall-2005/lecture-notes/>
2. Benjamin Balas, Sensation and Perception - lecture notes, MIT OpenCourseWare, <http://old.mak.ac.ug/courses/brain-and-cognitive-sciences/9-35-sensation-and-perception-spring-2009/lecture-notes/>
3. Anthony Wagner, Human Memory and Learning - lecture notes, MIT OpenCourseWare , <http://old.mak.ac.ug/courses/brain-and-cognitive-sciences/9-081-human-memory-and-learning-fall-2002/index.htm>
4. Edward Gibson, Joshua Tenenbaum, Pawan Sinha, The Brain and Cognitive Sciences II - lecture notes, MIT OpenCourseWare, <http://old.mak.ac.ug/courses/brain-and-cognitive-sciences/9-012-the-brain-and-cognitive-sciences-ii-spring-2006/index.htm>
5. Mark Steyvers, Cognitive Science – lecture notes, University of California, Irvine, Department of Cognitive Sciences, <http://psiexp.ss.uci.edu/research/teachingP140C/>

6. Claudia J. Stanny, Memory and Cognition – chapters, University Parkway, USA,
<http://uwf.edu/cstanny/website/MemoryCognition.htm>

8. (9.) Information Technology in education of students with special educational needs (SEN)

Semester: **1 semester**

Type of Course: **lectures.**

Hours per week – **1 hours lectures and 1 hours tutorials in computer lab/ spring semester.**

Credits Numbers: **1,5 credits**

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturers: Assoc. Prof. Daniela Tuparova, PhD

Department: Informatics, Tel.: +359 73 588 532

Course Status: Elective course in curriculum of major Information technology in primary school, Master degree.

Course description:

The course provides knowledge and skills in area of ICT and assistive technologies for learners with SEN. Main topics are directed to hardware and software assistive technologies for different educational needs and.

The course is developed with help of assoc. prof. Ludmila Yashkova, dep. Education in Informatics, University Komenski, Bratislava and with support of Slovak Academic Information Agency.

Objectives:

The student should obtain knowledge of:

- Identify appropriate technologies for education of students with different educational difficulties.
- Adapt educational resources to different educational needs;
- Apply game based teaching;
- Choice of suitable resources and technologies for education of students with SEN.

Methods of teaching: lectures, tutorials, discussions, project based method.

Pre- requirements: Pedagogy, Psychology, ICT in education and work in digital environments

Assessment and Evaluation

Project- 70%, Performance and defense of the project - 30%

The course is successful completed with at least 51% of all scores.

Registration for the Course: by request at the end of the current semester

Registration for the Exam: coordinated with the lecturer and the Student Service Office

References:

1. J Edwards, Alistair D.N., at all, ICT IN EDUCATION FOR PEOPLE WITH SPECIAL NEEDS, Specialised training course, UNESCO Institute for information technology in education, Moscow, 2006
2. Замфиров, М., Обучение на ученици със зрителни затруднения по математика, София 2018
3. Софтуер за ученици с увреждания, <http://signlanguage-bg.com/index.php?static=1>

8. (9.) Mobile learning and virtual reality

ECTS credits: 1,5

Academic hours per week: 1+0+0

Type of the course: Elective

Hours per week: 1 lecture

Assessment form: exam / continuous assessment

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assistant Prof. Radoslava Krалеva, PhD

e-mail: rady_kraleva@swu.bg

Annotation: This course is a practical introduction to interactive mobile applications development and to using of the virtual reality for learning of children. During the lectures, students will learn about different application development environments for mobile devices and obtain basic theoretical knowledge and skills for this purpose. The process of designing and development an adaptive interface suitable for different screen sizes of mobile devices, appropriate for the children's abilities and knowledge will be discussed.

Content of the course: Using of the mobile technologies as a learning tool. Advantages and limitations of mobile learning. Hardware on mobile devices. Integrated development tools of the mobile applications for mobile devices - Visual Studio, Xamarin, RAD Studio, and others. Programming languages used in IDE for mobile applications. Types of interface controls used to create mobile apps. Development of the applications interfaces appropriate for children. Development of a simple cross-platform mobile application for children. Gesture processing. Navigation between pages in one application. Working with images and text. Network and cloud mobile technologies. Security of mobile applications. Virtual reality. Virtual Worlds. Integrating Virtual Reality into a Learning Process. Platforms for developing virtual learning environments.

Education technology: Evaluating the student shall be carried out in the sixth grad scale – 2, 3, 4, 5, 6. Evaluation of current control is obtained by taking the average of the assessment of coursework and paper. Students who have a minimum average estimate /3/ of the current control is not allowed to test the regular session. They must present additional development and evaluation after receiving at least medium /3/ be admitted to the written examination of supplementary or liquidation session. The final estimate is derived from the average of the current control and evaluation of the written exam.

8. (9.) INFORMATION TECHNOLOGIES IN THE INITIAL SCHOOL EDUCATION

ECTS credits: 1.5

Academic hours per week: 1+0+0

Semester: first

Type of the course: Elective

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. Prof. Snezhana Popova, Department of Pedagogy,

e-mail: snejy_popova@swu.bg

Annotation:

The subject "Information Technology in Extra-Curricular Activities" covers issues that are too topical and relevant to public practice. As an insufficiently developed but extremely important area of pedagogical knowledge and as a discipline, it occupies an essential place in the professional training of future pedagogues.

Course content:

A general characteristic of extracurricular and out-of-school activities; Content and tasks of extracurricular and out-of-school activities; Main directions of extracurricular and out-of-school activities; Organizational, verbal and complex forms of extracurricular and out-of-school activities; Theater and non-theatricalized complex forms of extracurricular and out-of-school activities; The complex approach in the use of information technologies in extracurricular activities at the primary school level; Implementation of the new information technologies in the educational process at the primary school level; Development of motivation for learning and achievement through the use of information technologies in extracurricular activities at the primary school level; Development of the individual possibilities of the students through information technologies in extracurricular activities at the primary school level.

Teaching and assessment technology:

The following methods of student education are used: discussion, discussion, discussion, discussion, presentation, group discussion, heuristic discussion, brainstorming, checklist, debating method, associative method, experimentation, testing, modeling, demonstration, discussion, analysis and discussion problem situations, staging of problem situations, etc.

The evaluation of the achieved results in the training process is in compliance with the requirements of Ordinance No 21 of the Ministry of Education and Science of September 30, 2004, for the implementation of a system for accumulation and transfer of credits.

11. Didactics of ICT in Primary School

(Name of the course)

ECTS credits: 6

Type of the course: compulsory

Hours per week: 2 lectures, 0 seminars, 4 labs

Assessment form: exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: **assoc. prof. Daniela Tuparova, PhD**, Department of Informatics

tel: 0898441341, e-mail: ddureva@swu.bg

Annotation:

The course provides didactical background of the Primary ICT teachers. During the study students will master skills for plan class activities, prepare assessment and didactical resources.

Content of the course:

The content covers next basic topics:

Objectives of teaching ICT in primary school level.

ICT syllabuses and state requirements in 1-4 school grade.

Basic educational rules and their implementation in ICT education in primary school.

Implementation of teaching and learning methods in ICT education in primary school.

Assessment and evaluation in ICT education in primary school.

Planning of educational activities – development of curricula, lessons preparing etc.

Implementation of cross-subject relations in ICT lessons.

Final exam of the course consists of online test and development of lesson's plan about topic from the learning content in ICT. The components of final grade are individual assignments, participation in discussion forums during development of annual schedule and achieved results during the final exam. Project based approach in primary school through ICT.

Recommended reading:

1. E-Learning course at www.e-learning.swu.bg
2. Allen J., J. Potter, J. Sharp, K. Turvay, Primary ICT: Knowledge, Understanding and Practice (Achieving QTS), Learning Matters, UK, 2007
3. Steve Weeler (Ed), Transforming Primary ICT, Learning Matters, UK, 2005
4. Bridget Somehc Pedagogy and Learning with ICT: Researching the Art of Innovation, Taylor & Francis, 2007

12. INCLUSIVE EDUCATION

ECTS credits: 1

Weekly workload: 1 lectures

Type of the course: compulsory

Form of Assessment: exam

Type of exam: written

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer:

Assoc. prof. Pelagia Mihaylova Terziyska, PhD. Department "Pedagogy"

E-mail: pelagia.terziyska@swu.bg

Annotation:

The course includes the study of basic problems of inclusive education. Clarifying of the inclusive education as a key policy related with the implementation of huge changes and rethinking of the traditional educational models; as a process of change of the school environment based on the respect and acceptance of the other person.

The aim is to introduce the students to the challenge inclusive education; to present basic documents regulating its practical realization; to reveal the diversity of the educational needs that require an adequate response for coping with diversity and individual peculiarities and for recognition of the need of inclusive policies to overcome social and educational exclusion.

Course content:

Basic accents: inclusive education as a dominating paradigm nowadays; prerequisites for the emergence of the idea for inclusive education; conceptual basics; subjects, principles, conditions and factors of the inclusive education; strategies for teaching and supporting of the students in the conditions of the inclusive classroom; prevention of dropping out of students at the inclusive school.

Teaching and assessment:

The course includes lectures and exercises. Knowledge is acquired in a system by using interactive methods - case studies, discussions, debates, role-plays. During the training sessions to demonstrate examples of successful practices of inclusive education in the country and abroad. There are strict criteria for the development of essays, which are transmitted within a certain time and then check on them is discussed. The final mark is the result of continuous assessment and examination assessment.

Recommended readings:

1. Ainscow M., Booth T. (2003) *The Index for Inclusion: Developing Learning & Participation in Schools*. Bristol: Center for Studies in Inclusive Education
2. Bowe, Frank. (2005). *Making Inclusion Work*. Merrill Education/Prentice Hall.
3. Beattie, J., L. Jordan, B. Algozzine (2006). *Making Inclusion work. Effective Practice for ALL teachers*. Corwin Press, California
4. Bridges, S. (2005). "Inclusion and how to do it. Meeting SEN in primary classrooms", London: David Fulton.
5. Jorgensen, C., Schuh, M., & Nisbet, J. (2005). *The inclusion facilitator's guide*. Baltimore: Paul H. Brookes Publishing Co.
6. Terziiska, P. (2005). *Integrated education for children with special educational needs*.
7. Robert Holland (06/01/2002). "Vouchers Help the Learning Disabled: Lesson from 22 countries: Special-education students thrive in private schools". The Heartland Institute.

13. (14) Interdisciplinary training

ECTS credits: 1; 2-nd semester

Type of the course: elective

Hours per week: 15 lectures, 0 seminars, 0 practical exercises

Assessment form: ongoing assessment

Type of the exam: written exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Leading department: Faculty of Pedagogy, Department of Pedagogy

Lecturer: Assoc. prof. D.Sc. Lidiya Cvetanova - Churukova

Tel. 0888492612; e-mail: lidycveta@mail.bg

Annotation: The integrated education in the totality of its forms of practical realization, and most - the integrated lesson – an effective and active means of overcoming information's satiation and children's loading, as at the same time preserve the qualities of active training and educational systems. The accent in the training is marked on acquiring of skills to build integrated forms of education in primary school by rational usage of contemporary information technologies.

Content of the course: General theoretical conceptual approaches for interpretation of integration in the scientific knowledge. European and national normative basis to develop integrated educational strategies and technologies. Historical integration flashback in the primary education system. Contemporary integrative educational technologies. Aims, peculiarity and specificity of integrated education in the primary grades. Inner links, correlations and trans connections in the educational content. Interaction of the content in a subject educational system and general cultural educative knowledge fields. Kinds and levels of systematization, integration and differentiation in the education. Integrated forms of education in the primary grades. Variety of classificational schemes. Characterization of integrated lesson in the education from 1-st to 4-th grade. Didactic analysis of the forms "integrated day", "integrated week", "integrated courses with an elective character", "integrated exams", "integrated consultations" and etc. in the primary education system. Directions for a project activities' organization in the primary grades.

Educational technology: Examination's evaluation is formed on the basis of successful or unsuccessful defense of prepared plan-synopsis with elaborated integrated educational form in the primary grades (or portfolio) by using information technologies and practical realization of the same.

Recommended reading:

1. Experience in usage of integrated forms of training in primary grades in the Bulgarian schools (Text) / L.Z. Cvetanova – Churukova // Educational psychology in the multicultural space – Elets, 2010 № 3.- T.1-2.;

2. Cvetanova – Churukova L.Z. Integrated education in primary grades. Monograph. – Blagoevgrad: SWU "N.Rilski", 2010 + CD; Toihurst, W. & group Using The Yinternet, Yndianopols, 1996.

3. Education trends in perspective: Analysis of the world education indicators. – 2005 ed. – Paris: UNESCO, 2005. – 229 p.
4. The encyclopedia of comparative education and national systems of education / Ed. By T. Neville Post lethwaite. – Oxford:Pergamon Press, 1988. – XXVIII, 778 p.
5. Global education digest 2004: Comparing education statistics across the world. – Montreal: UNESCO inst. for Statistics, 2004. – 153 p.
6. Bruner, Jerome Seymour The culture of education. – Cambridge, Mass: Harvard Univ Press, 1996. – XVI, 224 p.
7. E-LEARNING and training in Europe: A survey into the use of e-learning in training and professional development in the European Union. – Luxembourg: Office for office. Publ. of the Europ. Communities, 2002. – VI, 65 p.
8. INTERNATIONAL mobility of the highly skilled: OECD proceedings. – Paris: OECD, 2002. – 348 p.
9. NATIONAL action to implement lifelong learning in Europe. – Brussels: Eurydice, 2001. – 151 p.
10. WHAT schools for the future? Schooling for tomorrow. – Paris: OECD, 2001. – 250 p.
11. CHANG, Gwand-Chol et al. Educational planning through computer simulation / G. – C.Chang, M.Radi – Paris: UNESCO, 2001. – [VIII], 85 p.
12. Learning to bridge the digital divide: schooling for tomorrow. – Paris: OECD, 2000. – 137 p.
13. LEARNING to change: the experience of transforming education in South East Europe, Ed. By Terrice Bassler. – Budapest etc.; Centr. Europ. Univ. Press, 2005. – XIX, 220 p.
14. Marty Nicole Informatique et nouvelles pratiques d ecriture. – Paris: Nathan,2005. - 256 p.
15. Charlier Bernadette, Peraya Daniel Technologie et innovation en pedagogie. Bruxelles: De Boeck & Larcier s.a.; Editions De Boeck Universite, 2003. – 230 p.

13. (14) MODERN INFORMATION EDUCATIONAL TECHNOLOGIES

ECTS credits: 1.0

Week workload: 1+0+0 academic hours

Evaluation: written exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. prof. Nikolay Tsankov, Ph.D.

E-mail ntzankov@swu.bg

Course description:

The current stage of education development is undoubtedly directly linked to the development and capabilities of digital technologies. Information education technologies are part of the modern educational vision and offer real opportunities for enhancing the quality of the educational product. Information and communication technologies and the opportunities for their adequate use are an integral part of the functional literacy of modern primary school teachers. The emphasis in the training in the discipline is on the acquisition of skills for designing the educational environment for primary school education through the priority use of information and communication technologies. This will contribute to building learners' self-esteem about the relevance of acquired competencies in real situations in educational institutions.

Course content:

Modern Information Technologies and their Influence on Society and Education. Globalization, information society, learning society, knowledge-based economy, lifelong learning and their relationship to technology development. European and national trends for the development of information education technologies. National strategy. Basic concepts of educational technologies. Characteristics of educational technologies. Main Components. Types of educational information technologies. Place of innovative and authoring educational technologies. Factors determining the selection of educational technologies: educational paradigm, forms, methods, resources, learning content, subjects. Modern Information Education Technologies and the link "Interactivity", "Communication", "Educational Environment". Virtual Classrooms. Microsoft Mouse Mischief - as a modern information education technology. Enrique de Nimer and the opportunities for primary school education. The interactive board as a means of realizing modern educational information technologies. Software and hardware specifics. The familiar software applications and their ability to combine with the interactive whiteboard. Design of methodical variants and didactic tools for interactive board training. Interactive Board Techniques - "Magic Writing", "What's Missing?", "Visual Impulses", "Short-Term Memory Training"; "Learning or Workstations", "Movie Episode", "Witnesses of the Time - Detective Game", "Timer", "Interactive Dice", "Magnifier", "Illumination". Multimedia technologies (hypertext, multimedia, hypermedia) as educational technologies. The specifics of their application in education. Design and implementation of multimedia applications in training. Educational software and multimedia. Extended and Added Reality.

Technology and organization of the course:

The course combines both theoretical and practical approach and provides opportunities for development and improvement of intellectual and practical skills of students for work in a digital environment. A number of problems and practical tasks related to the content aims at developing future teachers' professional competence. Students' achievement is regularly assessed and the results are organized in a personal portfolio as a prerequisite for the final

grading. The training also provides opportunities to move from standard educational content to shared knowledge via technologies.

13. (14) INTERNET BASED EDUCATIONAL ENVIRONMENT

ECTS credits: 1.0

Week workload: 1+0+0 academic hours

Evaluation: written exam

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assoc. prof. Nikolay Tsankov, Ph.D.

E-mail ntzankov@swu.bg

Course description:

The development of information and communication technologies provokes the constant search for opportunities for their integration in almost all spheres of public life. The Internet as an undeniable discovery of humanity is successfully used in various aspects of being, particularly in education, making the traditional educational environment extremely attractive and providing a number of opportunities for its enrichment. The Internet - the learning environment is a challenge not only for students but also for their teachers in need of continuous training and lifelong learning in order to be able to meet the requirements regarding their professional competence dictated by the dynamic development of information and communication technologies. Master's program preparation enables the development of the skills and competencies of primary school teachers for the successful integration of the Internet into their activities, as well as enriching their capabilities to design a provocative, attractive and productive learning environment.

Course content:

Contemporary trends in the development of information and communication technologies in education. Technological Achievement Internet - Essence and Characteristics. The Internet Information Society and the development of education. Internet as an educational technology. Internet educational resources. Principles of Learning through the Internet. Teaching and learning based on sources and materials from the Internet. Virtual libraries. The Internet as a Learning Environment. Internet and classroom. Using Video Conferencing for Learning. Educational features of the Internet - educational environment. Internet educational technologies. Email. Design of an Internet educational environment. Distance learning and e-learning. Models of electronic distance learning with the Internet. E-Learning Resources. Curriculum management systems as part of the Internet - educational environment. Developing online courses - principles, content, resources. Live @ Edu - as an Internet educational technology, opportunities for designing the educational environment. Didactic Requirements to the Internet - Educational Environment. Levels of application of Internet technologies in the activity of primary school teachers. Searching information on the Internet - viewing pages via a web browser; navigating in the Web space via hyperlinks or by setting an address; using programs and sites to search for the necessary information. Real-time file transfer and communication - use of file-receiving and sending utilities; making use of real-time communication capabilities over the Internet.

Technology and organization of the course:

The course combines both theoretical and practical approach and provides opportunities for development and improvement of intellectual and practical skills of students for work in a digital environment. A number of problems and practical tasks related to the content aims at developing future teachers' professional competence. Students' achievement is regularly

assessed and the results are organized in a personal portfolio as a prerequisite for the final grading. The training also provides opportunities to move from standard educational content to shared knowledge via technologies.

13. (14) Educational Software for the Primary Grades

ECTS credits: 1.0

Academic hours per week: 1+0+0

Type of the course: Elective

Hours per week: 1 lecture

Assessment form: exam / continuous assessment

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assistant Prof. Radoslava Krалеva, PhD

e-mail: rady_kraleva@swu.bg

Annotation: This course aims to develop knowledge and skills to work with education software appropriate for students in elementary school and as a subject in computer modelling lessons in elementary school. Upon completion of the course, students are expected to know and to can use the block-based programming environment like as Scratch, Code.org, Kodu Game Lab and Minecraft Education Edition; to create authoring programming applications; to create and detailed describe algorithms; be able to build algorithmic thinking for programming to the students in elementary school.

Content of the course: Analysis and classification of software appropriate for the students in primary grades. Types of digital computer devices and their management in primary grades. The fundamentals of block-based programming languages. Algorithms and algorithmic thinking for young students. Visual programming languages. Working with text and sound with visual programming languages. Working with datasets with visual programming languages. Animation with visual programming languages. Creating games with visual programming languages. Development of an independent course project.

Education technology: Evaluating of the student shall be carried out in the sixth grad scale – 2, 3, 4, 5, 6. Evaluation of the current control is obtained by taking the average of the assessment of coursework and their work during the sessions. Students who have a minimum average estimate /3/ of the current control is not allowed to test the regular session. They must present additional development and evaluation after receiving at least medium /3/ be admitted to the written examination of supplementary or liquidation session. The final estimate is derived from the average of the current control and evaluation of the written exam.

13. (14) eTextbooks - designing and structuring

ECTS credits: 1.0

Academic hours per week: 1+0+0

Type of the course: Elective

Hours per week: 1 lecture

Assessment form: exam / continuous assessment

Leading department: Faculty of Pedagogy, Department of Pre-School and Primary School Pedagogy

Lecturer: Assistant Prof. Radoslava Krалеva, PhD

e-mail: rady_kraleva@swu.bg

Annotation: This course aims to provide deep knowledge of the theory and practice on designing and creating of the eTextbooks. The students will learn about the methods for digital image processing, to create vector graphics, and to the graphical designs of electronic learning materials. The main goal is the students to acquire skills for applying the means and to using of the modern information technologies in the creation of e-learning material

Content of the course: eTextbooks and e-learning materials as an innovative tool for the electronic, distance and mobile learning of the elementary school pupils. Methodologies for designing and developing eTextbooks. Types of eTextbooks according to the levels of their interactivity. Types of multimedia information. Typography and fonts. Creating and processing the raster and vector graphics. Design and development of static eTextbooks. eTextbooks in .docx and .pdf files formats. Design and development of e-learning materials with some interactive tools with Microsoft PowerPoint. Design and creation of electronic textbooks with a high level of interactivity using web technologies. Creating eTextbooks with a high level of interactivity. Using multimedia technologies and added virtual reality. Copyright of eBooks, eTextbooks and Creative Commons.

Education technology: Evaluating of the student shall be carried out in the sixth grad scale – 2, 3, 4, 5, 6. Evaluation of the current control is obtained by taking the average of the assessment of coursework and their work during the sessions. Students who have a minimum average estimate /3/ of the current control is not allowed to test the regular session. They must present additional development and evaluation after receiving at least medium /3/ be admitted to the written examination of supplementary or liquidation session. The final estimate is derived from the average of the current control and evaluation of the written exam.

STUDENT PRACTICE

ECTS credits 6;

Weekly hours: 0l+0se+6pr

Form of evaluation: ongoing assessment

Methodological guide:

Department “Pedagogy”, Faculty of pedagogy

Lecturer:

Assistant Radoslava Topalska, PhD

Annotation:

This practice is the final stage in acquiring pedagogical qualifications by students, assisting their future realization in the teaching profession. Participation in it allows students to get involved in real school activities, organize and implement the learning process themselves. It helps develop students' skills in setting up and conducting lessons through the use of contemporary technologies.

Content of subject:

The discipline includes the organization of the entire educational process, the methods, tools and technologies of the initial stage of basic education; planning, developing and independently conducting a number of lessons; as well as a detailed description of the practice.

Technology of education:

In the process of education the students demonstrate skills for self-organization and conducting of the educational process; acquire and show excellent theoretical knowledge, skills to select an appropriate system of teaching methods; enrich and consolidate their knowledge of the specifics of learning at an early stage of the primary education.