

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Programming – practicum				
Head of course	PhD Marin Kaluža, College Professor				
Study programme	Professional undergraduate study Information Science				
Status of a course	Obligatory				
Year of study	3.	Semester	V	ECTS credits	5
Teaching plan (L + E + S+ Pr)	1L+3E				
Goals of a course					
Acquiring knowledge of data model optimization procedures. Acquiring knowledge and competences that enable the development and maintenance of project documentation of an information system. Acquiring knowledge and competences in the field of application of software tools for designing and developing information system. Acquiring knowledge and competencies in the field of application of software tools for rapid software development.					
Conditions for enrolling course					
Data and Process Modelling, Database Systems, Information Systems Development					
Learning outcomes on a level of a study programme which includes course					
Outcome 2: Apply business information system design methods. Outcome 4: Develop an application solution for the Internet and desktop environment. Outcome 6: Apply appropriate business information system protection techniques. Outcome 7: Design and produce digital multimedia materials needed in business systems. Outcome 11: Apply mathematical and statistical methods in information science. Outcome 12: Apply engineering methods and principles in information science.					
Expected learning outcomes on a level of a course					
1. Use methods to model processes and data, and model optimization procedures in the design of project documentation for IS. 2. Develop project documentation for IS development. 3. Explain and distinguish user interface modelling methods and use them in IS development. 4. Use rapid software development tools and create software for engineered IS. 5. Explain CASE, and distinguish the application areas of CASE and RAD tools. 6. Explain the application software architecture, and distinguish layers of application software.					
Content of a course					
Access to more complex forms of programming. Principles of structured program modelling. Techniques of programming, interactive work with a computer, operations with numbers, principles of selection and conditioned procedures. Programming language Visual Basic. Introduction into Visual Basic. Working environment. Application booting. Basics of programming languages. Modules. Procedures. Declaration of variables and types of data. Operators. Visual Basic controls. Menus. Accelerators. Visual effects. Working with dialogs. Graphics and graphical methods. Print methods. Interactions with environment. Databases. Bugs. Projects. MIDI application tables. Databases access. Communication between applications. Optimization.					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					

Grading, evaluation and monitoring of students' work continuously during lectures and exams

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

Continuous check-up:

Outcomes	Theoretical exam	Practical exam 1	Practical exam 2	Project	Threshold	Max
Outcome 1				5%	2,5%	5%
Outcome 2				20%	10%	20%
Outcome 3	5%			15%	10%	20%
Outcome 4		15%	15%	5%	17,5%	35%
Outcome 5	10%				5%	10%
Outcome 6	10%				5%	10%
Percentage of ECTS	1,25	0,75	0,75	2,25		
Total	25%	15%	15%	45%	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Theoretical part	Practical part	Max
Outcome 1		5%	5%
Outcome 2		20%	20%
Outcome 3	5%	15%	20%
Outcome 4		35%	35%
Outcome 5	10%		10%
Outcome 6	10%		10%
Percentage of ECTS	1,25	3,75	
Total	25%	75%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

Materials used in lectures and exercises from the course Programming Practicum; available on Moodle.

Additional literature

