

2021



Teacher of Engineering MA

STUDY PROGRAM

UNIVERSITY OF DUNAÚJVÁROS

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Programme description

Teacher of Engineering MA (Specialisation of Mechanical Engineering, Specialisation of IT Engineering)	
Institution responsible for the programme	University of Dunaújváros
ID number of the institution	FI60345
Address	2400 Dunaújváros, Táncsics Mihály u. 1/A
Leader in charge	Dr. habil András István rector
Leader responsible for the programme	
Institute responsible for the major	Teachers' Training Centre
Head of the institute (name, position)	Dr. Bacsa-Bán Anetta
Responsible for the major (name, position)	Dr. Kóvári Attila
Responsible for the teachers' training	Dr. Bacsa-Bán Anetta
Name of the specialisations, name and position of the person responsible for the specialisation	
Specialisation of Mechanical Engineering	Dr. Kóvári Attila
Specialisation of IT Engineering	Dr. Kóvári Attila
Programme details	
Conditions for admission	BSc qualification, with an engineering qualification corresponding to the given specialisation. Completion of the material of pedagogical and psychological knowledge, which has a credit value of at least 10 credits forming the basis for teacher training and helps career awareness and career orientation.
Level of the training	Master's
Qualifications	Master's Degree (MA)
The name of qualification in the diploma in Hungarian	Tanári [mérnökstanár [gépészet-mechatronika]] Tanári [mérnökstanár [informatika]]

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The name of qualification in the diploma in English	Teacher of Engineering (Mechanical and Mechatronical Engineering) Teacher of Engineering (Information Technology)
Training period	In undivided training: 10 semesters In divided training: <ul style="list-style-type: none"> - after BSc qualifications: 3 - 4 semesters - after MSc qualifications: 2 semesters - after earlier teachers' training or Vocational Technical Instructor training: 2 - 4 semesters
The number of credits to be obtained	In undivided training: 300 credits In divided training: <ul style="list-style-type: none"> - after BSc qualifications: 90 - 120 credits - after MSc qualifications: 60 credits - after earlier teachers' training or Vocational Technical Instructor training: 60 - 120 credits
The educational aim of the programme	The aim of the programme: the training of teachers in the fields of technology and informatics in the preparatory years of school education in order to obtain a vocational qualification in vocational secondary school, in vocational grammar school, in school-based and out-of-school education, in retraining and further training of adults, and in vocational training specified in the National Training Register; the training of teachers capable of performing the pedagogical tasks of a school, pedagogical research, planning, development tasks in the field of technical and IT vocational training, as well as capable of managing the problems of the age group taking part in vocational training and also capable of meeting the requirements of students in special needs. A further aim of the programme is to prepare the participants to continue their studies in doctoral programmes.
The condition(s) of choosing specialisation	The students take a specialisation when applying for the programme.
Professional practice-continuous pedagogical practice	On the one hand, the professional practice part of the teacher training consists of lesson observations, teaching practice taking place in parallel with the studies, and on the other hand, an individual continuous school practice after the studies.

	<p>The school practice is implemented in co-operation with the partner vocational institutions selected according to the teacher's majors.</p> <p>The individual continuous school practice - depending on the employment of the student participating in the training as a teacher, can be completed in one's own institution or in an external partner institution.</p> <p>The individual continuous school practice can be completed in vocational grammar school training, in a vocational training institution with a vocational training portfolio in the field of the given teacher's qualification, and in an institution providing adult education.</p> <p>At the practice venue the students perform their individual continuous teaching practice under the guidance of a mentor appointed by the vocational institution and the instructor responsible for the teaching practice at DUE Teacher Training Center, in the 2nd or the 3rd and the 4th semesters of the training, depending on the training time.</p> <p>There are group or individual consultations, seminars in the higher education institution connected to the individual continuous teaching practice.</p> <p>The individual continuous teaching practice is related to different forms, areas and activities of the vocational training in the institution (including theoretical lessons, laboratory practices, professional practices, professional competitions, exams, events, keeping contact with the representatives of the world of work, chambers, keeping contact with parents, participation in the preparation of tenders and tender projects, etc.).</p> <p>The final teaching is part of the individual continuous school practice, which is a demonstration lesson that concludes the practice. The mentor teacher, the representative of the school providing internship, and the representative of the higher education institution participate in this lesson, and they jointly evaluate the candidate's performance. During the individual continuous school practice, the students compile a portfolio demonstrating their own professional development and connected to their research topic.</p>
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<p>The conditions of issuing the absolutorium</p>	<p>DUE Examination and Study Regulations, 36. §</p> <p>„(1) The absolutorium confirms that the examinations specified in the study program have been successfully passed - except language examinations passed and theses (diploma theses) prepared - , other study requirements fulfilled and the credits specified in the education and graduation requirements or qualification requirements (within this, all the credits associated with the compulsory subjects and those compulsory to be selected) acquired, to certify without qualification and evaluation that the student met the study- and examination requirements specified in the study program in full.”</p>
<p>Thesis (in undivided training)</p>	<p>The thesis is a solution of a task in a specific field or the elaboration of a research task that can be completed in two semesters under the guidance of the internal and external consultants, based on the knowledge acquired by the students during their studies and by studying additional pieces of special literature.</p> <p>By the thesis, the candidates prove that they have acquired the sufficient skills in the practical application of the learned knowledge, are able to perform the tasks of an IT Engineer and are proficient in the special literature other than the course material, which they are able to apply in a value-adding way.</p>
<p>Teacher's portfolio</p>	<p>The teacher's portfolio is a collection of documents that presents the candidate's preparation and evaluates their own self-development. It contains the scientific presentation, analysis and evaluation of the experiences from an educational point of view. The portfolio proves that the student is able to give a self-reflection, to integrate and apply the knowledge acquired in different areas of the training, to consider the scientific results that are important for their work, and to evaluate the effectiveness of teaching or pedagogical tasks.</p>
<p>The condition(s) for admission to the final exam</p>	<p>The condition for admission to the final exam is the absolutorium and the thesis and portfolio (in undivided training), only portfolio (in divided training) accepted by the referee.</p>
<p>Final examination</p>	<p>The final examination is to test and assess the</p>

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	knowledge, skills and abilities necessary to obtain a diploma, during which the students must also demonstrate that they can apply the acquired knowledge. The final examination consists of the presentation and defense of the portfolio, the defense of the thesis (in case of undivided training) and the complex oral examination of the required subjects.
Subjects of the final exam	PPSMCE - Pedagogy - Psychology - Subject Methodology complex examination
Average of diploma	The result of the diploma must be calculated as follows: $(FE + P + WAA) / 3$. The arithmetic average of the marks of the final examination subject(s) (FE), thesis and/or portfolio (P) grade given by the Final Examination Committee and the weighted academic average (WAA) concerning all credit points obtained during the entire study period, except for the preparation of the thesis.
Qualification of diploma	excellent 4,51 - 5,00; good 3,51 - 4,50; average 2,51 - 3,50; satisfactory 2,00 - 2,50
The condition of issuing the certificate	To obtain a Master's degree in teaching (exit requirement), at least one state-recognized intermediate level (B2) complex type language examination or a secondary school leaving certificate or diploma equivalent to it in one of the official languages of the European Union and the United Nations (UN) is required.
Training schedule	Full-time; Corresponding

The teacher competences that can be obtained in teachers's training: the areas of knowledge, skills, abilities, attitudes (in more details: 8/2013. (I.30.) decree of the Human Resource Ministry):

1. Development of the student's personality, the use of individual treatment

1.1. Knowledge

The qualified teachers have basic psychological, pedagogical and sociological knowledge of views on personality traits and development, socialization and personalization, disadvantaged learners, personality development disorders, causes of behavioural problems, talent development and the methods of health development. They are aware of the role and possibilities the subject plays in the personal development of the students.

1.2. Abilities

They are able to form a realistic picture of the world of students, the possibilities of education and the development of student's personality. They are able to create pedagogical situations that promote students' intellectual, emotional, social and moral development, taking into consideration the individual needs of the students. They are able to select, plan and apply appropriate methods for student's learning and developing students with different qualities, abilities and prior knowledge. They are able to recognize, effectively educate and provide differentiated treatment to talented students, students with learning difficulties or with special educational needs, as well as disadvantaged, multiple disadvantaged students. They are capable of giving professional self-reflection and making self-correction.

1.3. Attitudes

They are open to mastering a variety of methods of personality development. They respect the personality of the students, are able to see the values in everyone and to approach all the students with positive emotions. They are sensitive to students' problems, aim at providing the conditions of healthy personality development for all students.

1.4. Autonomy and responsibility

They are able to perform their tasks independently in the field of developing the student's personality, using individual treatment under the professional support of the university lecturers (Pedagogy-Psychology, Professional Methodology) and the mentor teacher participating in vocational training or adult education.

2. Facilitate and develop the formation of student groups and communities

2.1. Knowledge

Teacher trainees know the psychological, sociological, and cultural characteristic features of a group, group development, and communities. They know the most significant exploring methods referring to the social situations of students and student groups, as well as the pedagogical methods of formulating and developing communities.

2.2. Skills

Qualified teachers are able to create pedagogical situations that guarantee the group developing to be a community and functioning properly. They apply methods supporting cooperation and motivating students both in teaching professional subjects and during free time activities. They are capable of effectively handling conflicts. They support the formulation of group members' commitment towards the community, the acquisition of the responsible and active participation in democratic society. They are able to contribute to create tolerant and open atmosphere in the school and the classroom.

2.3. Attitudes

Qualified teachers are committed to basic democratic values, they can be characterized by social sensibility and helpfulness. They work as a teacher without any prejudice. They are committed to national values and national consciousness, open towards educating for democratic thinking and behaviour, as well as eco- and environment-consciousness. In the

world of school, they consciously strive to accept various value systems, they are open towards getting to know and respecting others' opinions and values.

2.4. *Autonomy and Responsibility*

They are capable of independently doing their tasks in supporting and developing student groups and communities with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

3. Subject and subject methodology

3.1. *Knowledge*

They know the basics of their own discipline, the specialities to learn it, its logics and terminology, as well as its relation to other disciplines and subjects. They know the national and international results, the literature, and the up-to-date questions of subject methodology; the goals and the tasks of teaching the subject in order to develop students' personality. They know the curriculum of the subject, as well as the learning specialities, the methods, and the structure of the learning material of the subject. They know student's books, both paper and digital ones, that could be used in the teaching-learning process, learning tools, learning organizational methods, significant methods, and teaching-learning strategies.

3.2. *Skills*

They are capable of applying disciplinary as well as various teaching methods acquired in the general pedagogical-psychological training in teaching the subject. They are able to integrate knowledge from the field of discipline, subject methodology, subject, learning theory and curriculum, to creatively use information, library and information communication technology. They are capable of accomplishing the opportunities of teaching-learning the subject in the lessons and out of the school in different scenes. Regarding their preparedness of the subject, they are capable of self-reflexion and self-correction.

3.3. *Attitudes*

Qualified teachers are committed to continuously developing students' knowledge and learning abilities. They strive to arouse and maintain students' desire to learn and create and their need for self-improvement.

3.4. *Autonomy and Responsibility*

They are capable of independently doing their tasks in the field of subject knowledge and subject methodology with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

4. Plan the pedagogical process

4.1. *Knowledge*

Qualified teachers know documents essential in pedagogical activity, the types of curricula, and realize their role in the content regulation of education. They know the disciplinary,

pedagogical-psychological and subject methodological viewpoints of selecting and systematizing the learning material, as well as the correlation between education and teaching.

4.2. Skills

They are able to plan their own pedagogical work (curriculum, thematic plan, lesson plan, process plan) by creating the correspondence among the Pedagogical Program of the school, the goals of the curriculum to develop students' personality, students' age, the specific attributes of knowledge that should be acquired by students, the available education tools, and the pedagogical environment. They are capable of defining teaching-learning strategies, defining the education process suitable for both pedagogical goals and students' specialities based on their age, selecting efficient methods, organizational forms and tools for a particular age group and in the framework of adult education.

4.3. Attitudes

Qualified teachers consider significant to prepare thoroughly, to plan and to accomplish plans in a flexible way. During planning, they cooperate with their colleagues and students, they are ready to take into account the specific features of a particular group of students, such as, students' motivation, preliminary knowledge, skills, social attitude).

4.4. Autonomy and Responsibility

They are capable of independently doing their tasks in the field of planning pedagogical processes with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

5. Facilitate, organise and manage the learning process

5.1. Knowledge

Qualified teachers know the special viewpoints and opportunities of applying the methods and procedures acquired in the general pedagogical-psychological training and the methods of how to develop special competences that should be formulated in students. They possess the knowledge of how to create the suitable conditions for the physical, emotional, social, and learning specialities of the learner-centred environment. They know the effect of various learning environments on the effectiveness of learning. They know the opportunities and the scenes of teaching and learning the subject in the lessons and out of the school. They are informed about how to select and apply differentiating pedagogy, adaptive learning organisation, and educational strategies and methods. They know the significance of preparing for life-long learning.

5.2. Skills

Qualified teachers can select and accomplish methods and organisational forms that are suitable for different goals, suit to elaborated strategies, support motivation, differentiation, and students' activity, and assist to develop students' thinking, problem-solving, and cooperating abilities, as well as they can organise the learning environment that supports effective learning. They can continuously maintain students' interest and

attention, recognise and handle learning difficulties. They can professionally apply traditional and digital learning materials and establish the ability system of life-long learning.

5.3. Attitudes

They acknowledge that, for the suitable learning atmosphere, they must consider students' special needs, ideas, and initiatives for the effectiveness of the learning process. They strive to apply teaching-learning strategies and methods that are suitable for students' age, their individual and group specialities, support activity, interactivity, and differentiation, and to create positive attitudes connected to learning.

5.4. Autonomy and Responsibility

They are capable of independently doing their tasks in the field of facilitating, organising, and managing the learning process with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

6. Evaluation of students and pedagogical processes

6.1. Knowledge

Qualified teachers have professional knowledge about the functions, process, forms, and methods of evaluation. They are aware of the basic rules and the correlations of measurement and measurement methods. They know the specific methods that are suitable for measuring and assessing the knowledge and competences acquired through teaching and learning the subject.

6.2. Skills

Qualified teachers are able to identify the suitable forms and methods of the various goals and levels of the assessment, to use the results of the assessment, to regulate the pedagogical process, to develop students' personality, and the forms and methods for self-evaluation. They are capable of selecting the measurement tools corresponding to their goals or preparing individual tools. They are capable of interpreting the results of national and local assessments.

6.3. Attitudes

They reasonably assess teacher's role in the process of developing evaluation. They are committed to evaluation that supports learning.

6.4. Autonomy and Responsibility

They are capable of independently doing their tasks in the field of evaluating learning processes and students with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

7. Communication, professional cooperation, and career identity

7.1. Knowledge

Qualified teachers know the specialities of classroom communication. They are informed about the mode of cooperation with parents, different experts supporting their

pedagogical work, and professional institutions. They are informed about the information sources and organisations connected to their teacher profession.

7.2. Skills

Qualified teachers can create the system of connections based on mutual respect and trust with students, mutually form the principles and the forms of cooperation, as well as have them accepted. In professional situations, they are able to communicate with students, parents, representatives of their disciplines, and colleagues within and out of the school in a professional, obvious, open, and authentic way. They properly orient in pedagogical and subject literature, they can analyse and interpret the research and development result of these fields, they are aware of the specialities of pedagogical research, development, and innovation. They can apply simple pedagogical research methods.

7.3. Attitudes

Qualified teachers are able to cooperate in pedagogical situations. They are ready to cooperate with the teachers of the same and other subjects, they take part in activities in accordance with the development of and innovations in their subjects. They keep the legal and ethical norms of the teaching profession. They are open towards the positive criticism referring to their pedagogical activities.

7.4. Autonomy and Responsibility

They are capable of independently doing their tasks in the field of communication, professional cooperation, and career identity with the support of university professors (from the disciplines of pedagogy-psychology and professional subject methodology), as well as mentor teachers working in vocational education and adult education.

8. Autonomy and Responsibility

Qualified teachers can independently think over general, foundational professional questions in accordance with the teaching-learning process of their subject and occupation and elaborate the suitable answers based on authentic sources. They take on, with responsibility, the views that form the base of the disciplines referring to their occupation and subjects. They can be characterized by cooperation and responsibility in connection with their occupation, field of work, and their representatives. Qualified teachers have significant independence in accordance with mentioning, elaborating, representing professional views, and explaining general and specific questions of their job. They take on, with responsibility, the initiation role in creating professional cooperations. They participate as equal partners in professional cooperations.

Curriculum

Full-time training

Subject code:	Name of subject:	Credits	Requirements	Semesters - number of classes per week												Prerequisites			
				1			2			3			4						
				lec	sem	lab	lec	sem	lab	lec	sem	lab	lec	sem	lab				
DUEN-TKK-152	Psychology 1.	5	E	2	1	0													
DUEN-TKK-153	Psychology 2.	5	E	2	1	0													
DUEN-TKK-119	Historical and Theoretical Basics of Education	5	E	2	1	0													
DUEN-TKK-210	Didactics	5	M	2	2	0													
DUEN-TKK-135	Digital Pedagogy	5	M	1	1	2													
	Optional Professional	5	E/M	2	1	0													
DUEN-TKK-151	Research Methodology of Education	5	E				2	2	0										
DUEN-TKK-115	Subject Methodology 1.	5	M				1	1	1										
DUEN-TKK-214	Subject Methodology 2.	5	M				0	2	1										
DUEN-TKK-215	Measuring of Knowledge and Competences	5	M				2	2	0										
	Optional Pedagogy-Psychology	5	E/M				2	1	0										
	Optional Professional	5	E/M				2	1	0										
DUEN-TKK-113	Individual School Practice 1.	20	M							0	3	12							
DUEN-TKK-116	Subject Methodology 3.	5	M							0	3	4							
DUEN-TKK-213	Pedagogical Seminar I. (Portfolio+Pedagogy+Methodology)	5	M							0	3	1							
DUEN-TKK-212	Individual School Practice 2.	20	M										0	3	12				
DUEN-TKK-216	Pedagogical Seminar II. (Portfolio)	5	M										0	3	1				
	Optional Pedagogy-Psychology	5	E/M										2	1	0				
		120					11	7	2	9	9	2	0	9	17	2	7	13	
	Total number of contact lessons						20			20			10			10			

E=exam; M=midterm mark

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Optional Pedagogy-Psychology Subjects

Subject code:	Name of subject:	Credits	Requirements	Semesters - number of classes per week												Prerequisites
				1			2			3			4			
				lec	sem	lab	lec	sem	lab	lec	sem	lab	lec	sem	lab	
DUEN-TKK-110	Adult Education	5	M				2	1	0				2	1	0	
DUEN-TKK-250	Economy and Vocational Education	5	E				2	1	0				2	1	0	
DUEN-TKK-904	Conflict Management	5	M				1	2	0				1	2	0	
DUEN-TKK-906	Basics of Teacher Profession	5	M				1	1	1				1	1	1	

* Can be validated for those working in the pedagogical field

Optional professional

Subject code:	Name of subject:	Credits	Requirements	Semesters - number of classes per week												Prerequisites
				1			2			3			4			
				lec	sem	lab	lec	sem	lab	lec	sem	lab	lec	sem	lab	
DUEN-ISF-112	Internet Technologies	5	M	0	0	3										
DUEN-TKM-120	Multimedia	5	M	2	0	2										
DUEN-ISF-253	Web programming	5	E				0	0	3							
DUEN-ISF-217	IT project 1.	5	M				1	0	2							

Programme syllabus

Psychology 1.

(General and Developmental Psychology)

Title of subject:		Hungarian:		Pszichológia 1.				Code:	DUEL-TKK-152		
		English:		Psychology 1.					DUEN-TKK-152		
Institute:				Teacher Training Centre							
Compulsory pre-subject:				-				Code:	-		
Type		Number of lessons per week						Requirements	Credit	Language of teaching	
		Lecture		Seminar		Practice/Laboratory					
Full-time	150/39	Week	2	Week	1	Week	0	semester grade	5	English	
Part-time	150/15	Term	10	Term	5	Term	0				
Teacher responsible for the subject				name:		Dr. Levente Zsolt Juhász			job:	college associate professor	
Purpose of the subject (content, outcome, place in the curriculum)				<p>Short purposes:</p> <p>Getting to know and acquiring the basic concepts, theories and methods of modern scientific psychology. Informed orientation in the psychological literature, its creative application.</p> <p>Preliminaries of the course, goals of development built on it.</p> <p>No knowledge beyond necessary for high school graduation is needed..</p>							
Typical lesson types				Lecture:				Lecture with computer and projector.			
				Seminar:				School practice: Apply theoretical studies in school environment in several different educational situations.			
				Laboratory				-			
				Other:							
Requirements (in learning outcomes)				<p>Knowledge</p> <p>Basic knowledge of theories and processes of general and developmental psychology.</p> <p>Background knowledge for examining and recognition of students.</p> <p>Psychological base of educational/pedagogical methods and processes.</p> <p>Ability</p> <p>Autonomy.</p> <p>Cooperation. Participating in teamwork, projects.</p> <p>Independent opinion forming, reasoning, arguing in discussions.</p> <p>Independent learning management, self-regulated learning. autonomy.</p>							

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	<p>Empathy, sensitivity to others'(the pupils') problems.</p> <p>Attitude</p> <p>Openness (towards new knowledge and others)</p> <p>Interest, curiosity</p> <p>Acceptance of others, tolerance</p> <p>Critical stance in professional topics.</p> <p>Autonomy and responsibility</p> <p>Self-directive, taking responsibility.</p> <p>independent desision-making</p>
Short description of subject content	<p>The Nature of Psychology. Introduction</p> <p>Biological Foundations of Psychology</p> <p>Psychological Development</p> <p>Sensory Processes</p> <p>Perception</p> <p>Consciousness</p> <p>Learning and Conditioning</p> <p>Memory</p> <p>Language and Thought</p> <p>Intelligence</p>
Forms of student activity	<p>Interpretation of texts</p> <p>Processing information in teams and independently.</p> <p>Contrasting and comparing opinions.</p> <p>Arguing and reasoning.</p> <p>Cooperative work.</p> <p>Assertive behaviour.</p> <p>Observation and analysis.</p>
Compulsory literature	<p>Nolen-Hoeksema, Fredrickson, Loftus, Wagenaar (2009): Atkinson & Hilgard's Introduction to Psychology, 15th Edition. Wadsworth.</p>
Optional literature	<p>Myers, DeWall (2015): Psychology. Worth Publishers</p> <p>Goldstein, Brockmole (2016): Sensation and perception. Cengage Learning</p> <p>Zimbardo, Johnson (2013) Psychology: Core Concepts. Pearson</p> <p>Goldstein (2020): Cognitive Psychology: Connecting Mind, Research, and Everyday Experience. Cengage Learning</p>

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	Keil (2013): Developmental psychology. W. W. Norton & Company Ormrod, Anderman (2019): Educational psychology. Pearson
Compulsory tasks during semester	Essay writing: a pedagogical/psychological assessment of a pupil. Presentation - ppt slides.
Midterm tests and their timing	-7th week. Short written exam - 13th week: Short written exam.

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Psychology 2.

(Social, Personality and Education Psychology)

Title of subject:		Hungarian:		Pszichológia 2.				Code:	DUEL-TKK-153		
		English:		Psychology 2.					DUEN-TKK-153		
Institute:				Teacher Training Centre							
Compulsory pre-subject:				-				Code:	-		
Type		Number of lessons per week						Requirements	Credit	Language of teaching	
		Lecture		Seminar		Practice/Laboratory					
Full-time	150/39	Week	2	Week	1	Week	0	semester grade	5	English	
Part-time	150/15	Term	10	Term	5	Term	0				
Teacher responsible for the subject				name:		Dr. Levente Zsolt Juhász			job:	college associate professor	
Purpose of the subject (content, outcome, place in the curriculum)				<p>Short purposes:</p> <p>Getting to know and acquiring the basic concepts, theories and methods of modern scientific psychology. Informed orientation in the psychological literature, its creative application.</p> <ul style="list-style-type: none"> - Preliminaries of the course, goals of development built on it. - Psychology 1. No knowledge beyond it and that is necessary for high school graduation is needed.. 							
Typical lesson types				Lecture:				Lecture with computer and projector.			
				Seminar:				School practice: Apply theoretical studies in school environment in several different educational situations. Assessment of a class community: sociometry.			
				Laboratory				-			
				Other:							
Requirements (in learning outcomes)				<p>Knowledge</p> <p>Basic knowledge of theories and processes of general and developmental psychology.</p> <p>Background knowledge for examining and recognition of students.</p> <p>Psychological base of educational/pedagogical methods and processes.</p> <p>Ability</p> <p>Autonomy.</p>							

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	<p>Cooperation. Participating in teamwork, projects.</p> <p>Independent opinion forming, reasoning, arguing in discussions.</p> <p>Independent learning management, self-regulated learning. autonomy.</p> <p>Empathy, sensitivity to others'(the pupils') problems.</p> <p>Attitude</p> <p>Openness (towards new knowledge and others)</p> <p>Interest, curiosity</p> <p>Acceptance of others, tolerance</p> <p>Critical stance in professional topics.</p> <p>Autonomy and responsibility</p> <p>Self-directive, taking responsibility.</p> <p>independent desision-making</p>
<p>Short description of subject content</p>	<p>Motivation</p> <p>Emotion</p> <p>Personality</p> <p>Stress, Health, and Coping</p> <p>Psychological Disorders</p> <p>Treatment of Mental Health Problems</p> <p>Social Influence</p> <p>Social Cognition</p>
<p>Forms of student activity</p>	<p>Interpretation of texts</p> <p>Processing information in teams and independently.</p> <p>Contrasting and comparing opinions.</p> <p>Arguing and reasoning.</p> <p>Cooperative work.</p> <p>Assertive behaviour.</p> <p>Observation and analysis.</p>
<p>Compulsory literature</p>	<p>Nolen-Hoeksema, Fredrickson, Loftus, Wagenaar (2009): Atkinson & Hilgard's Introduction to Psychology, 15th Edition. Wadsworth.</p>
<p>Optional literature</p>	<p>Myers, DeWall (2015): Psychology. Worth Publishers</p> <p>Zimbardo, Johnson (2013) Psychology: Core Concepts. Pearson</p> <p>Goldstein (2020): Cognitive Psychology: Connecting Mind, Research, and Everyday Experience. Cengage Learning</p>

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	<p>Ormrod, Anderman (2019): Educational psychology. Pearson Smith, Mackie), Claypool (2014): Social psychology. Psychology Press Larsen, Buss(2017) Personality psychology. McGraw-Hill Education Rosenberg, Kosslyn (2014): Abnormal psychology. Worth Publishers Taylor (2020). Health psychology. McGraw-Hill Education</p>
Compulsory tasks during semester	<p>Essay writing: a sociometry. Presentation - ppt slides.</p>
Midterm tests and their timing	<p>-7th week. Short written exam - 13th week: Short written exam.</p>

Historical and Theoretical Basics of Education

Title of subject:		magyarul:	Neveléstan					Code:	DUEL-TKK-119		
		angolul:	Historical and Theoretical Basics of Education						DUEN-TKK-119		
Institute:			Teacher Training Centre								
Compulsory pre-subject:								Code:			
Type		Number of lessons per week						Requirements	Credit	Language of teaching	
		Lecture		Seminar		Practice/Laboratory					
Full-time	150/39	Week	2	Week	1	Week	0	Examination	5	English	
Part-time	150/15	Term	10	Term	5	Term	0				
Teacher responsible for the subject			name:		Dr. Csilla Marianna Szabó			position:	associate professor		
Purpose of the subject (content, outcome, place in the curriculum)			Short purposes:								
			<p>The subject Pedagogical studies is taught in the 4th semester of the full-time program, and in the 1st semester in the part-time program.</p> <p>The purpose of the subject so that students acquire the basic concepts and knowledge regarding education, get to know the coherence of education, socialization, and enculturalization; acquire knowledge about different scenes of education, institutions, problems, questions, and on the basis of this knowledge they must be capable to plan individual educational activity.</p> <p>Students get to know the most significant historical-educational paradigms, especially the tendencies of reform pedagogy at the beginning of 20th century, as well as educational aims and duties in the 21st century. At the end of the course, students get to know cognitive, emotional, and esthetic aspects of primary and secondary school pupils that should be developed, and they will become capable of recognizing and developing pupils with learning problems. Student could be able to recognize and develop suitable teacher-student relationship, and could be able to handle conflicts between teachers and students. Students get to know pupils with special needs and learning disabilities, and become able to develop these pupils.</p> <p>Pre-studies, Developing purposes following the subject:</p> <p>Pre-studies in non-divided study program: Introduction into pedagogy, Psychology I., Psychology II.</p>								
Typical lesson types			Lecture:		Lecture with coputer and projector.						
			Seminar:		Students presenattions regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.						
			Laboratory								
			Other:								
Requirements (in learning outcomes)			<p>Knowledge</p> <p>They know the basic concepts of education and their ceherence.</p> <p>They know the most significant historical-pedagogical theories, their advantages and disadvantages.</p>								

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	<p>They are aware of the significance of both family and school education, their positive and negative effects, as well as their mechanism.</p> <p>They know the most important factors influencing personality development, such as family, school, peers, and media.</p> <p>They are aware of highlighted educational duties, the influence of teachers belonging to different personality types, some school behavioral problems, school conflicts, and their possible managing methods.</p> <p>They know how to form groups, communities, and the pedagogical methods how to develop them.</p> <p>Ability</p> <p>They are able to organize and coordinate educational activities on their own.</p> <p>They are able to communicate effectively as a teacher, to recognize conflicts and handle them, making effort to win-win solutions.</p> <p>They help to form commitment to community feeling.</p> <p>They are able to deal with pupils with special learning abilities, such as talented, learning problems, or with special needs).</p> <p>They are able to communicate with the most important members of education, with parents.</p> <p>They are able to form pedagogical situations taht support pupils' emotional, social, and etical development.</p> <p>They are able to form their own opinions, and defend them in a debate regarding topics of general social themes, as well as theory of education.</p> <p>They are able to organize their own learning progress, find and use different learning sources, both printed and electronic.</p> <p>Attitude</p> <p>They are open for others' opinions and solutions.</p> <p>They have empathy towards people having attitudes different from their own ones.</p> <p>They are ready to help peersand pupils.</p> <p>They are open for educational theories different from their own ones.</p> <p>They regard education as a complex process with many members.</p> <p>They are aware of acquaring several different values, they are open for kowing others' opinions, values, and they respect these.</p> <p>Autonomy and responsibility</p> <p>They have the ability to direct people.</p> <p>They decide on their own in educational questions.</p> <p>They are responsible for their pupils and decisions.</p> <p>Developing communication abilities, empathy, and tolerance, forming critical thinking and unbiased way of thinking, developing knowledge on basic social and peadgogical themes.</p>
Short description of subject content	<p>The course includes two big fields: history and theory of education.</p> <p>The most important periods of history of education: Ancient Greek education: Sparta and Athens.</p> <p>Influence of Enlightenment on education: educational theories of Rousseau. Herbart and his influence</p>

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	<p>on European education. The two waves of reform pedagogies (Montessori, Dewey, Steiner and Waldorf-pedagogy, Freinet) and their effect on pedagogical practice.</p> <p>The concept of education, the nurture vs. nature debate. Education, socialization. Agencies of education: primary (family) and secondary (school, peers, media) agencies and their influence on children's behaviour and their personality. Forming behaviour in education. Conflicts and conflict management in families and schools. Behavioural disorders. Negative effect of family and school on children's behaviour. Social viability, key competencies and life-long learning.</p>
Forms of student activity	<p>Understand and revise written texts.</p> <p>Work out information.</p> <p>Individual research work, present its results.</p> <p>Active participation in group debates and discussions.</p> <p>Techniques of debating and arguing.</p> <p>Work in a team.</p>
Compulsory literature	<p>History: http://history-world.org/history_of_education.htm</p> <p>http://www.public-library.uk/ebooks/07/56.pdf</p> <p>http://ascd.com/ASCD/pdf/journals/ed_lead/el_199110_barnes.pdf</p> <p>https://files.eric.ed.gov/fulltext/ED464766.pdf</p> <p>Nurture or nature: https://www.simplypsychology.org/naturevsnurture.html</p> <p>Education as socialization: http://www.greatbooksojai.com/the-agma-foundation_rorty_education_as_socialization_and_as_individualization.pdf</p> <p>agencies of education , socialization: https://courses.lumenlearning.com/sociology/chapter/agents-of-socialization/</p> <p>Motivation: https://pdfs.semanticscholar.org/a95d/0a3115c7fab7d4437d311737d2baef34196d.pdf</p> <p>https://www.sciencedirect.com/science/article/pii/S1877042813008288</p> <p>Human behaviour: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3013474/</p> <p>School conflicts: https://www.communicationandconflict.com/schools.html</p> <p>http://www.umich.edu/~psycours/561/ingersoll.pdf</p> <p>Behavioural problems: https://patient.info/doctor/common-behavioural-problems-in-children</p> <p>Negative effects of family: http://educationnext.org/how-family-background-influences-student-achievement/</p> <p>https://pdfs.semanticscholar.org/dfbb/cec88a7637c8761446ce21fea65c4509da03.pdf</p> <p>Key competencies: https://ec.europa.eu/education/policy/school/competences_en</p>
Optional literature	<p>Agencies of education , socialization:</p> <p>https://ac.els-cdn.com/S1877042813008288/1-s2.0-S1877042813008288-main.pdf?_tid=67d1ffd3-85af-4374-bc8b-eaf1915fd62e&acdnat=1521668490_daed9426f7b5970cab01f094c426b87b</p> <p>School conflicts:</p> <p>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.926.6633&rep=rep1&type=pdf</p>

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	Negative effects of family: https://www.thoughtco.com/issues-that-negatively-impacts-student-learning-3194421
Compulsory tasks during semester	Select two topics. From the first topic: Write an essay (3-5 pages) in the basis of literature, or film. From second topic: Prepare and hold a presentation (14-15 slides).
Midterm tests and their timing	-

Didactics

Name of subject:		in Hungarian: Didaktika (Oktatásmélet és szervezés)		Code:		DUEL-TKK-210				
		in English: Didactics				DUEN-TKK-210				
Responsible educational unit:				Teacher Training Centre						
Type		Weekly number of classes						Requirements	Credit	Language of teaching
		Lecture		Seminar		Lab				
Full-time	150/52	/week	2	/week	2	/week	0	Exam	5	English
Corresponding	150/20	/semester	10	/semester	10	/semester	0			
Course co-ordinator's name:				Dr. Andrea Tóth				position:	college associate professor	
Teaching objectives (contents, output place in the curriculum)				<ul style="list-style-type: none"> - Brief objectives: The foundation of professional methodological studies. To make students familiar with didactical concepts and principles. To make students familiar with progressive learning-teaching strategies for their subsequent innovative work, for its individual planning, organisation, management and evaluation. The students are going to get familiar with the organisational structure and culture of a school. - Prerequisites, add-on development aims: Pedagogy, Psychology. Serves as foundation for professional methodological subjects. 						
Forms of instruction				Lecture:		Powerpoint supported lectures for all students in lecture halls.				
				Seminar:		Introducing the practical use of theoretical knowledge in small groups.				
				Lab:						
				Other:						
Requirements (expressed in academic record)				<p>Knowledge</p> <ul style="list-style-type: none"> • Knows the methods to get to know his/her students, is aware of the role the subject they teach plays in personality development. • Knows the characteristics of learner groups, the social processes, multiculturalism. • Knows the documents defining pedagogical activities, knows their role in the regulation of educational content. • Knows the methods of differentiation. • Has professional knowledge about the up-to-date evaluation methods. • Is well-informed about the professional organisations connected to his/her professional field. <p>Ability</p> <ul style="list-style-type: none"> • Able to use the appropriate methods to develop learners with different characteristics, abilities, knowledge. • Able to enhance group development, able to manage conflicts. • Able to use the appropriate methods, digital devices, organisational modes. • Able to use various evaluation methods, able to interpret measurement data. • Able to gather information from pedagogical literature, able to use simple research methods. <p>Attitude</p> <ul style="list-style-type: none"> • Open to the various methods of personality development. • Dedicated to national values and democratic thinking. 						

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	<ul style="list-style-type: none"> • During planning co-operates with his/her colleagues, takes the characteristics of the learner group into consideration. • Open to life-long learning. • Devoted to the evaluation supporting learning. • Able to communicate effectively in pedagogical situations, strives to improve his/her activity in a reflective way. <p>Autonomy and responsibility</p> <ul style="list-style-type: none"> • Able to develop the learner's personality. • Is responsible for his/her profession and co-operative with his/her colleagues.
Short description of study content	The place of Didactics in Social Sciences. The concept and functions of Didactics. The aim, methods and aids of teaching. Curriculum theory - curriculum. Factors influencing the content of the curriculum. Competences and key competences in education. Learning theories. The psychological and social factors determining the efficiency of learning. Motivation. Individualisation and co-operation in education. The planning, methods and tools of the teaching process. Quality assurance in education. The basics of legal background in education (the rights of teachers, parents, students). The role and social responsibility of schools.
Forms of student's activities	<ul style="list-style-type: none"> • Processing lectures by taking notes. • Instructed systematisation of information <p>Individual processing of tasks 20%</p>
Compulsory literature and availability	<ul style="list-style-type: none"> •
Optional material and availability	<ul style="list-style-type: none"> •
Description of home assignments/measurement protocols, other testing	<p>During the semester, students have to write 2 midterm papers according to the schedule. The time for writing the midterm papers can be changed by one week each. The minimum requirement of the midterm papers is 51% in accordance with the regulations.</p> <p>During the semester, students are obliged to prepare a home assignment. The length of the home assignment should be at least 6000 characters without spaces. The deadline for submitting the home assignment is the 11th week, which can be changed according to the schedule of the semester.</p>

Digital Pedagogy

Name of subject:		in Hungarian:		Digitális pedagógia				Code:	DUEL-TKK-135		
		in English:		Digital Pedagogy					DUEN-TKK-135		
Responsible educational unit:				Teacher Training Centre							
Type		Weekly number of classes						Requirements	Credit	Language of teaching	
		Lecture		Seminar		Lab					
Full-time		/week	1	/week	1	/week	5	M	5	English	
Corresponding		/semester	5	/semester	5	/semester	10				
Course co-ordinator's name:				Dr. László Kadocsa				Position:	college professor, Professor emeritus		
Teaching objectives (contents, output place in the curriculum)				<p>The basic goal of the subject is to develop in the student a modern ICT approach imbued with the Digital Education Strategy, as well as practical knowledge in order for the students to</p> <ul style="list-style-type: none"> - be able to select tools, produce information carriers and apply them in practice, and that - be able to use traditional and new information and communication technologies to create an effective and stimulating learning environment. <p>It builds on what has been learned in psychology and pedagogy and lays the foundation for professional methodologies and teaching practices.</p>							
Forms of instruction				Lecture:		presentation, interactive tasks, discussion					
				Seminar:		Presentation and discussion of the prepared presentations and electronic study materials					
				Lab:		Use of information and communication technical means, selection of information carriers, resp. preparation and application.					
Requirements (expressed in academic record)				<p>Knowledge</p> <ul style="list-style-type: none"> • Knows the accumulated knowledge of effective (written, oral and ICT) communication • Knows the system and characteristics of teaching aids and the components of creating a "stimulating environment and atmosphere", • Knows how to implement the Digital Education Strategy (DOS), • Knows the aspects of selecting teaching aids • Knows the theoretical background of the application of ICT in the teaching-learning process, the possibilities of its application in classroom and extracurricular activities • Knows the values, subcultures and relationship of students to ICT. <p>Ability</p> <ul style="list-style-type: none"> • Able to design an stimulating learning environment, • Able to choose teaching aids and procedures for effective learning • Able to design and create individual teaching aids (ppt, animation, video, online curriculum, 3D visualization). • Able to use modern ICT tools • Able to implement Digital Education Strategy (DOS) <p>Attitude</p> <ul style="list-style-type: none"> • He / she is open to meeting students' ICT expectations • Positive attitude to create a "stimulating learning environment and atmosphere" • Striving to use ICT to increase the effectiveness of teaching and learning 							

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	<ul style="list-style-type: none"> • He / she is committed to implementing DOS. <p>Autonomy and responsibility</p> <ul style="list-style-type: none"> • He / she is able to solve his / her activity independently under the guidance of the practice teacher, • He / she is characterized by cooperation and responsibility in the course of one's own and others' activities (task solutions).
Short description of study content	<ul style="list-style-type: none"> - Concept of education technology, system of teaching aids, aspects of tool selection. Selection, design, preparation and application of information carriers, management of traditional and modern educational technical devices, methods of their application for educational purposes. - Presentation techniques. Capture still and moving images. (synapse, screenplay, filming and editing, sound) Making computer presentations, giving an independent presentation, compiling the device system (notebook, projector, document camera) sound system and using a microphone. Use of interactive tools (interactive whiteboard) for educational purposes. Develop simple computer animations. - The concept of multimedia. Hyper-text and hypermedia features. Multimedia building blocks: text, image, graphics, illustration, sound, animation, film. Tools for creating multimedia. Application of multimedia programs, analysis of multimedia programs. - The concept of distance learning and electronic learning (e-learning), its place in the education system. Use of the Internet for educational purposes. Characteristics of virtual and e-learning environments. The role and characteristics of electronic learning materials, the process of their development. Methodological issues of electronic curriculum processing. Issues in the design, production and application of e-learning materials. - Objectives and implementation of the Digital Education Strategy (DOS) in public education and vocational training institutions. 3D visualization, virtual reality (VR and AR), virtual learning spaces and their development. The 3D printer and programmable robots.
Forms of student's activities	Processing lectures with notes, solving interactive tasks, discussions, discussions; Device selection and ICT exercises; Giving a lecture; Electronic curriculum preparation practice; Groupwork
Compulsory literature and availability	<ul style="list-style-type: none"> • Learning materials in Moodle
Optional material and availability	https://educationaltechnology.net/
Description of home assignments/measurement protocols, other testing	<ol style="list-style-type: none"> 1. Making a presentation and giving a lecture on specific topics. (25%) 2. Development of electronic curriculum for a subject topic individually, in pairs or max. In groups of 3 people, the planning and preparation of its tool system and learning environment justified on the basis of its content characteristics: media elements, animation (s), video (s), ICT tools, interactive applications, etc. (75%)

Research Methodology of Education

Subject name		In Hungarian			Pedagógiai kutatómódszertan			Szintje	MA	
		In English			Research Methodology of Education			DUEN-TKK-151 DUEL-TKK-151		
Subject code										
Responsible educational unit		Teacher Training Centre								
Name of Mandatory Preliminary Study										
Number of Lessons					Requirements		Credits (ECTS)	Language of Education		
		Lecture		Seminar		Laboratory				
Full-time	150/52	2	2	0	Examination		5	English		
Correspondence	150/20	10	10	0						
Teacher responsible for the course			Name		Dr. Levente Zsolt Juhász		Position	college associate professor		
Educational goals			<p>The goal of the subject is to prepare for being able to acquire basic research methods, to discover social phenomena and correlations.</p> <p>The second goal of the subject is to acquire the usage of various pedagogical research methods in practice.</p>							
Typical delivery methods			Lecture		In a classroom with the use of projector or computer in each lecture.					
			Seminar		Preparing research plans and carrying out social researches, and presenting the results in team work or individually.					
			Laboratory							
Requirements (expressed in learning outcomes/competencies to be acquired)			<p>Knowledge</p> <ul style="list-style-type: none"> Students know the goals of pedagogical researches and their functions in education. Students are aware of the ethics of research and researchers' ethical attitude. Students know the way of defining the research problem. Students know the difference between the concept of population and sample, and they know different sample techniques. Students know the suitable sources for finding authentic literature. Students know the concept of hypothesis. Students know the different research methods, their opportunities of application, their advantages and disadvantages in research process. Students know how to analyze research data, they know both quantitative and qualitative methods of analysis. Students know the rules of the publication of research results. <p>Ability</p>							

	<p>Students will be able to:</p> <ul style="list-style-type: none"> • define a research problem; • operationalize concepts and define hypothesis; • select the most suitable sample technique, and to select a representative sample; • select and apply the most suitable sample research method; • statistically analyze data; • do qualitative analysis on textual data <ul style="list-style-type: none"> • Attitude • They are committed to learn educational phenomena. • They are open to cooperate with others. • They are open to discover educational correlations. • They have objective and unbiased attitude towards research subjects and research data. <p>Autonomy and responsibility</p> <ul style="list-style-type: none"> • They are responsible for keeping the ethical requirements of pedagogical research. • They defend subjects participating in the research. • They publicate research results in a correct way, taking responsibility for experienced and publicated research results and correlations.
<p>Brief description of the subject content</p>	<p>The concept and the types of pedagogical researches. Typical features of pedagogical research. Scientific conditions of research: validity, reliability, and objectivity. Study the research problem with the help of scientific literature. Planning and timing of the research. Analysis of documents and sources. Formulating the hypothesis of the research. Generalization of the results. Selecting the sample, different sampling techniques. Empirical research methods. Application of observation, its types and recording techniques. Methods of surveying: questionnaire and interview. Role of experiment, its types, planning and carrying out.</p> <p>Analysis of research results with computer. Basic of SPSS. Different statistical analysis. Analysis of qualitative data.</p>
<p>Activity forms of students</p>	<p>Do research plan and pilot research. Conduct a small research in team work or individually: carry out survey research (questionnaire or interview) in real life situations. Presenting research results.</p>
<p>Compulsory reading and its availability</p>	<p>BABBIE, Earl (2007): The Practice of Social Research. Thomson Higher Education. Belmont, USA.</p>
<p>Recommended reading and its availability</p>	<p>Berg, L. Bruce (2004): Qualitative Research Methods for Social Sciences. Pearson Education. USA</p> <p>Crawley, M. J. (2002): Statistical computing: an introduction to data analysis using S-Plus.</p>
<p>Hand-in Assignments/ measurement reports</p>	<p>Students have to do a research plan and carry out a small research, analyze the data, and present the whole process and the results of the research.</p>
<p>Description of midterm tests</p>	<p>Present research plan – 4-5. week of the semester.</p> <p>Present the research instrument</p>

Subject Methodology 1.

Title of subject:		Hungarian: Szakmódszertan 1.		Code:		DUEN-TKK-115 DUEL-TKK-115				
		English: Subject Methodology 1.								
Responsible educational unit:		Institute of Teacher Training								
Compulsory pre-subject:						Code:	-			
Type		Number of lessons per week						Requirements	Credit	Language of teaching
		Lecture		Seminar		Practice/Laboratory				
Full-time	150/39	Week	1	Week	1	Week	1	M (midterm mark)	5	English
Part-time	150/15	Term	5	Term	5	Term	5			
Teacher responsible for the subject		name:		Dr. Gyula Gubán				Position:	college professor, professor emeritus	
Purpose of the subject (content, outcome, place in the curriculum)		<p>Short objective: Students should be able to plan the teaching and learning process of basic IT subjects and prepare their pedagogical documents. Gain experience in observing, analyzing, and applying individual methodological procedures. Gain experience in defining teaching-learning strategies, thematic plans, lesson plans</p> <p>The student should be able to determine the functions of assessment in accordance with the pedagogical goals and pedagogical situations, and to consciously select the applicable assessment strategies and models.</p> <p>Training history, development goals It builds on what has been learned in psychology, pedagogy and basic IT subjects and lays the foundation for teaching practices.</p>								
Typical lesson types		Lecture:		Lecture with computer and projector.						
		Seminar:		Students presentations regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.						
		Laboratory		Observing lessons in groups in schools.						
Requirements (in learning outcomes)		<p>Knowledge They know the basics of IT basics subjects:</p> <ul style="list-style-type: none"> - its content peculiarities, pedagogical documents, system of tools - the process of planning the educational process (thematic plan), the possible ways of its implementation, - the characteristics of the organizational framework, forms of work and specific methodological procedures and the aspects of their implementation, and - have a well-founded knowledge of modern evaluation strategies and how to implement them. <p>Ability Teacher candidates participating in the training process should be able, based on the pedagogical documents of the IT subject group (NAT, framework curricula, textbooks, etc.), for a thematic unit (10-12 lessons):</p> <ul style="list-style-type: none"> - to define a system of goals and requirements, to formulate the expected learning outcomes and competencies (Knowledge, Ability, Attitude) characterized by the level of autonomy and responsibility, - to explore the knowledge and activity system of the curriculum (curriculum analysis), - preparation of a tool (worksheet) suitable for measuring the basic prior knowledge (and ability) - to choose the organizational framework, forms of work, teaching-learning strategy and methods of education, - to select the required device system, resp. (animations, ppt., videos, etc.) 								

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	<ul style="list-style-type: none"> - to develop diagnostic and formative and summative evaluation strategies and tools (worksheets) of the topic, - to compile thematic plans, lesson plans, - to implement certain methodological procedures among their peers in the framework of micro-teaching, - to prepare a report during class visits (based on observation criteria), to critically evaluate what was seen. <p>Attitude An open personality towards students, learning, the profession, and pedagogical innovation. Striving to develop a student-centered, learning-centered approach.</p> <p>Autonomy and responsibility He/She is able to carry out his / her activity independently with the participation of the subject teacher and the head teacher. He/She is characterized by cooperation and responsibility in his own and his partner's activities.</p>
Short description of subject content	<p>The challenges of the information / knowledge-based society and the connections between basic IT training. Peculiarities of vocational education pedagogy, methodological peculiarities of adult vocational education. Vocational qualifications belonging to the professional group corresponding to the specialization are the main content elements of vocational orientation, professional foundation and subjects preparing for vocational qualification.</p> <p>The aim, tasks, content peculiarities and relationship system of the teaching of basic IT subjects. Pedagogical documents of education.</p> <p>Planning the educational process, thematic planning: defining the system of goals and requirements; curriculum analysis; organizational frameworks, methods, tools of teaching and learning, e-learning; the teaching-learning process; measurement evaluation, editing and evaluating worksheets.</p> <p>Preparation for the lessons: preparation of the curriculum, lesson plan, PP presentation, elaboration of the thematic plans of the individual IT basics subjects. Detailed elaboration and presentation of each lesson of the thematic plan in the form of micro-teaching. (Methodological analysis of video recordings of micro-teaching.) Observation and analysis of the teaching and learning procedures, methods and use of tools used by the head teacher in the framework of group school exercises and class visits. Quality issues of vocational training and the teaching of vocational and technical subjects.</p>
Forms of student activity	<p>Processing lectures with notes processing of literature (mandatory and recommended) preparation of minutes during class observations preparation of thematic plans, lesson plans implementation of micro-teachings among peers</p>
Compulsory literature	<ul style="list-style-type: none"> - Learning materials in Moodle system. - Péter Szlávi, László Zsakó: Informatics education - electronic curriculum http://tamop412.elte.hu/tananyagok/infokt/index.html
Optional literature	<p>Methodological and professional literature in printed and online content.</p>

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Compulsory tasks during semester	<p>Compilation of a subject portfolio:</p> <ol style="list-style-type: none"> 1. Development of a thematic unit of a basic IT subject (50% of the ticket) <ol style="list-style-type: none"> 1.1. Compilation of a system of goals and requirements 1.2. Curriculum analysis 1.3. Worksheet suitable for assessing the level of prior knowledge 1.4. Strategy, planning of work forms and methods 1.5. Compilation of device system, selection and preparation of media (pictures, diagrams, videos, animations, ppt.) 1.6. Breakdown into lessons, elaboration of lesson plans 1.7. Defining the forms of monitoring and evaluation (formative and the final task sheet) 2. Development of lesson plans (development of lesson plans presenting 3-5 different methodological procedures) (20%) 3. Micro-teaching (20% of the ticket): Presentation of a lesson in 15-20 minutes using a key methodological procedure. 4. Clock analysis according to a given system of criteria. Compilation of hourly attendance reports (20% of the ticket). <p>Organize tasks into a portfolio.</p> <p>Design of the grade: 0-50% is insufficient 51-60% is sufficient 61-70% medium 71-80% good 80% - significant</p>
Midterm tests and their timing	-

Subject Methodology 2.

Subject name		In Hungarian	Szaktémakör 2. (IT)					Level	MA	
		In English	Subject Methodology 2. (IT)					DUEN-TKK-214 DUEL-TKK-214		
Responsible educational unit		Institute of Teacher Training								
Name of Mandatory Preliminary Study										
Number of Lessons							Requirements	Credits (ECTS)	Language of Education	
		Lecture		Seminar		Laboratory				
Full-time	150/39	Week	0	Week	2	Week	1	M (midterm mark)	5	English
Correspondence	150/15	Term	0	Term	10	Term	5			
Teacher responsible for the course		Name		Dr. Péter Ludik			Position	college associate professor		
Educational goals		<p>- Short objective:</p> <p>Students should get acquainted with the main issues, methods and tools of teaching and accounting for the basics of IT (hardware, software), algorithmics, programming tools, information society, information network services.</p> <p>- Training history, development goals</p> <p>It builds on what has been learned in psychology, pedagogy and basic IT subjects and lays the foundation for teaching practices.</p>								
Typical delivery methods		Lecture		Lecture with computer and projector.						
		Seminar		Students presentations regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.						
		Laboratory		Observing and teaching lessons in groups in schools						

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<p>Requirements (expressed in learning outcomes/competencies to be acquired)</p>	<p>Knowledge</p> <p>Knows the basics of IT basics subjects:</p> <ul style="list-style-type: none"> - its content peculiarities, pedagogical documents, system of tools - has a well-founded knowledge of modern evaluation strategies and how to implement them. <p>Ability</p> <p>Teacher candidates participating in the training process should be able to meet the special challenges of the IT subject group, to determine:</p> <ul style="list-style-type: none"> - What should the teacher teach? - What should the student learn? - What do you ask for? - What kind of knowledge should you ask for? <p>Attitude</p> <ul style="list-style-type: none"> - Open personality towards learners, learning and discipline and pedagogical innovation, - Striving to develop a student-centered, learning-centered approach <p>Autonomy and responsibility</p> <ul style="list-style-type: none"> - the subject teacher is able to carry out his / her activity independently with the help of an instructor and a leading teacher - is characterized by cooperation and responsibility in its own and its partner's activities.
<p>Brief description of the subject content</p>	<p>The professional methodology of informatics, the concept of informatics. Detailing the knowledge of informatics, its connection with other subjects. Key concepts and teaching methods of informatics</p> <p>Software selection, device use.</p> <p>Possible types of accountancy from informatics</p> <p>Special issues of algorithmization and programming.</p> <p>Basics of virtual reality and infocommunication</p>
<p>Activity forms of students</p>	<ul style="list-style-type: none"> - Processing lectures with notes - processing of literature (mandatory and recommended) - preparation of thematic plans, lesson plans

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	- implementation of micro-teachings among peers
Compulsory reading and its availability	Learning materials in Moodle system. Péter Szlávi, László Zsakó: Informatics education - electronic curriculum http://tamop412.elte.hu/tananyagok/infokt/index.html
Recommended reading and its availability	Methodological and professional literature in printed and online content.
Hand-in Assignments/ measurement reports	<p>1. Development of a thematic unit of a basic IT subject (40% of the ticket)</p> <ol style="list-style-type: none"> 1. Compilation of a system of goals and requirements 2. Curriculum analysis 3. Worksheet suitable for assessing the level of prior knowledge 4. Strategy, planning of work forms and methods 5. Compilation of a system of tools, selection and preparation of media (pictures, diagrams, videos, animations, ppt.) 6. Breakdown into lessons, elaboration of lesson plans 7. Defining the forms of control and evaluation (formative and the final task sheet) <p>Presentation of the completed course (30% of the mark) Evaluation of the presented units (30% of the mark)</p> <p>Design of the mark: 0-50% is insufficient 51-60% is sufficient 61-70% medium 71-80% good 80% - significant</p>
Description of midterm tests	-

Measuring of Knowledge and Competences

Title of subject:		Hungarian: Tudásszint- és kompetenciamérés				Code:	DUEN-TKK-215 DUEL-TKK-215			
		English: Measuring of Knowledge and Competences								
Institute:		Teacher Training Centre								
Compulsory pre-subject:		-				Code:	-			
Type		Number of lessons per week				Requirements	Credit	Language of teaching		
		Lecture		Seminar					Practice/Laboratory	
Full-time	150/52	Week	2	Week	2	Week	0	semester grade	5	English
Part-time	150/20	Term	10	Term	10	Term	0			
Teacher responsible for the subject		name: Dr. Levente Zsolt Juhász				job:	college associate professor			
Purpose of the subject (content, outcome, place in the curriculum)		<ul style="list-style-type: none"> - Short purposes: <ul style="list-style-type: none"> Formulation of the approach and the process of modern assessment strategies. - Preliminaries of the course, goals of development built on it. <ul style="list-style-type: none"> It is based on the theoretical pedagogical and psychological subjects and founds the subjects of Professional Methodology and School practices. 								
Typical lesson types		Lecture:		Lecture with computer and projector.						
		Seminar:		Students presentations regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.						
		Laboratory		-						
		Other:		School practice: Apply theoretical studies in school environment in several different educational situations.						
Requirements (in learning outcomes)		<p>Knowledge</p> <p>They know the formative, diagnostic, and summative functions of assessment and their methods to do it.</p> <p>They know the methodology of preparing and assessing tests.</p> <p>They know Hungarian and international competence measurement. their typical attributes, and their main results.</p> <p>Ability</p> <p>They are able to prepare and evaluate school tests.</p> <p>They are able to plan diagnostic, formative and summative assessment forms.</p> <p>They are able to accomplish modern assessment strategies.</p> <p>They are able to draw conclusions about students, teaching-learning process, and evaluation from the results of assessment.</p> <p>They are able to accomplish electronic assessment and self-assessment.</p> <p>Attitude</p> <p>They are aware of the personality forming role of assessment and its significance.</p> <p>They are committed to accomplish modern assessment strategies.</p> <p>Autonomy and responsibility</p> <p>They are able to develop and accomplish assessment processes and tools on their own.</p>								
Short description of subject content		Measurement and assessment. The concept, typical features, and forms of assessment. Scientific conditions of assessment: objectivity, validity, reliability. Types of assessment: developing –								

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	<p>qualifying – cooperative, diagnostic – formative – summative, norm-oriented – criteria-oriented, holistic – analytic.</p> <p>The Bloom-taxonomy. Assessment in writing: tests. Classical test theory. The process of preparing a test. Writing tasks: given options and no-options tasks. Typical features, advantages and disadvantages of various tasks. Probation of tests, the process of standardization. Assessment of tests, giving points, weighting.</p> <p>Assessment of oral presentations. New types of assessment: assessment with digital applications, and in online learning materials. New types of assessment: assessment of project work, group work, and with a portfolio.</p> <p>The concept of competence. Key competences: their definitions, typical features. Key competences in details. International and national (Hungarian) competence measurements and their results.</p>
Forms of student activity	<p>Understand and revise written texts.</p> <p>Work out information.</p> <p>Individual research work, present its results.</p> <p>Active participation in group debates and discussions.</p> <p>Techniques of debating and arguing.</p> <p>Prepare, present and evaluate school tests</p> <p>School observations: assessment strategies</p> <p>Essay writing on the process and the results of an international (e.g. PISA) competence test.</p>
Compulsory literature	<p>Marcos, Clarenz: Measurement and Evaluation in Education. https://www.academia.edu/34793647/Measurement_and_Evaluation_in_Education_PDE_105_UNIT_ONE_THE_CONCEPTS_OF_TEST_MEASUREMENT_ASSESSMENT_AND_EVALUATION_IN_EDUCATION</p> <p>Lunenburg, Fred C. (2010): Measurement and Assessment in Schools. In: SCHOOLING VOLUME 1, NUMBER 1. http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg,%20Fred%20C%20Measurement%20and%20Assessment%20in%20Schools%20Schooling%20V1%20N1%202010.pdf</p> <p>Revised Bloom's Taxonomy. https://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/</p> <p>Eyal Liat (2012): Digital Assessment Literacy — the Core Role of the Teacher in a Digital Environment. In: Educational Technology & Society, 15 (2), 37–49. https://pdfs.semanticscholar.org/ce82/cfa38c7cfd73614521cc53f1a4a76ef43147.pdf</p> <p>Kastberg, David – Chan, Jessica Ying – Murray, Gordon (2016): Performance of U.S. 15-Year-Old Students in Science, Reading, and Mathematics Literacy in an International Context. https://files.eric.ed.gov/fulltext/ED570968.pdf</p> <p>COUNCIL RECOMMENDATION of 22 May 2018 on key competences for lifelong learning. In: Official Journal of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN</p>
Optional literature	<p>EVALUATION AND ASSESSMENT FRAMEWORKS FOR IMPROVING SCHOOL OUTCOMES https://www.oecd.org/education/school/46927511.pdf</p> <p>Fox, Anne: (2018): Digital assessment https://annefox.eu/2018/11/07/digital-assessment</p> <p>Klieme, Eckhard (2016): TIMSS 2015 and PISA 2015 How are they related on the country level?</p>

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	<p style="text-align: center;">https://pisa.dipf.de/de/pdf-ordner/Klieme_TIMSS2015andPISA2015.pdf</p> <p>Halász, Gábor (2011): The background of the improvement of PISA results in Hungary – the impact of the EU funded educational development programs. http://halaszg.ofi.hu/download/Trendy.pdf</p> <p>Balázsi, Ildikó – Szepesi, Ildikó (2018): Comparing results of TIMSS and the Hungarian National Assessment of Basic Competencies. In: ORBIS SCHOLAE, 2018, 12 (2) 65–76. https://karolinum.cz/data/clanek/6484/OS_12_2_0065.pdf</p>
Compulsory tasks during semester	<ol style="list-style-type: none"> 1. Prepare a knowledge measurement school test, make students do it, correct the test, and evaluate the results. 2. Present in a ppt presentation the test, the results, their evaluation – with self-reflection. <p>Essay writing: present the results of an international competence test (focusing on Hungarian or students’ national results), analysing and evaluating the results.</p>
Midterm tests and their timing	3. -

Individual School Practice 1-2.

Subject name		In Hungarian	Összefüggő egyéni iskolai gyakorlat 1-2.			Szintje	MA
		In English	Individual School Practice 1-2.			DUEN-TKK-113 DUEL-TKK-113	
Responsible educational unit		Teacher Training Centre					
Name of Mandatory Preliminary Study							
Number of Lessons					Requirements	Credits (ECTS)	Language of Education
		Lecture	Seminar	Laboratory			
Full-time	600/1950		3	12	M	20	English
Correspondence	600/750		15	60			
Teacher responsible for the course		Name	Dr. Anetta Bacsa-Bán Dr. Csilla Marianna Szabó			Position	associate professor
Educational goals		<p>- Purpose of the subject: Individual school practice is built on theoretical knowledge acquired during the study program, as well as on practical experience. The practice should be accomplished in a secondary public education institute or partly in an adult education institute with the guidance of both the mentor teacher and the higher education teacher trainer. The purpose of the individual school practice is to acquire the complex teaching-educating system and tasks of the school and the teacher, and to learn the public education system, as well as the social and legal environment of school</p>					
Typical delivery methods		Lecture	In a classroom with the use of projector or computer in each lecture.				
		Seminar	Preparing research plans and carrying out social researches, and presenting the results in team work or individually.				
		Laboratory					

<p>Requirements (expressed in learning outcomes/competencies to be acquired)</p>	<p>All competences: knowledge, skills, and attitudes that should be acquired during teacher trainee program on the basis of the ministry edict 8/2013. (I.30.) EMMI</p> <ol style="list-style-type: none"> 1. development of student's personality, individual treatment of students 2. support of formulating and developing students' groups and communities 3. knowledge of subject content and methodology 4. plan pedagogical processes 5. support, organize, manage learning 6. evaluation of pedagogical processes and students' achievements 7. communication, professional cooperation, career identity 8. autonomy and responsibility <p>Fields:</p> <ol style="list-style-type: none"> 1./ activities in connection with teaching the subjects <ul style="list-style-type: none"> • lessons observation and teaching 4-5 lessons per week (from 4th week) • tasks regarding methodology: methodological innovation, up-to-date learning organization, electronic content development) (2 credits) • study and prepare pedagogical documents (National Curriculum, local curriculum, thematic plan, lesson plan) • inclusion in Digital Learning Pedagogy • teaching final lesson in the presence of mentor teacher and methodology teacher (they monitor and evaluate the lesson) 2./ teaching and educational activities – except for teaching subjects <ul style="list-style-type: none"> • lesson observation i other subject lessons and in form teacher lessons • tasks regarding pedagogical – psychological subjects (2 credits) • personal development (e.g. learning skills, communication skills, support disadvantaged students) • develop community (sociometry) • study pedagogical program of the school), participation in its implementation, • participation in other educational school activities 3./ get to know school as an institution and its supporting systems <ul style="list-style-type: none"> • presenting the institute (Vocational Centre, vocational school) • evaluation of principal, teacher, institute • get to know partners, participation in complacence surveys • teacher career model and qualification systems (e-portfolio) • quality management system of the institute
<p>Brief description of the subject content</p>	
<p>Activity forms of students</p>	<p>The same as it is described in the previous pont.</p>
<p>Compulsory reading and its availability</p>	<p>Pedagogical, psychological and methodological journals, books, literature. Documents of public, vocational, and adult education.</p>

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Recommended reading and its availability	Pedagogical, psychological and methodological papers.
Hand-in Assignments/ measurement reports	Documents proving pedagogical competences that must be collected into Teacher Portfolio. Minutes of exam teaching (evaluated)
Description of midterm tests	-

Subject Methodology 3.

Title of subject:		Hungarian: Szakmódszertan 3.		Code:		DUEN-TKK-116 DUEL-TKK-116				
		English: Subject Methodology 3. (Exercises of Professional Methodology)								
Responsible educational unit:				Teacher Training Center						
Compulsory pre-subject:						Code:		-		
Type		Number of lessons per week						Requirements	Credit	Language of teaching
		Lecture		Seminar		Practice/Laboratory				
Full-time	150/91	Week	0	Week	3	Week	4	M (midterm mark)	5	English
Part-time	150/35	Term	0	Term	15	Term	20			
Teacher responsible for the subject				name:		Dr. Attila Kóvári		job:	associate professor	
Purpose of the subject (content, outcome, place in the curriculum)				<p>Short purposes: Students should be able to plan the teaching and learning process of technical and IT subjects, to prepare their pedagogical documents. Gain experience in teaching, analysing, and applying individual methodological procedures.</p> <p>Preliminaries of the course, goals of development built on it. It is based on the theoretical pedagogical and psychological subjects and founds the subjects of Professional Methodology and School practices.</p>						
Typical lesson types				Lecture:		-				
				Seminar:		Lecture with computer and projector. Students presentations regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.				
				Laboratory		School practice: Apply theoretical studies in school environment in several different educational situations.				
				Other:		-				
Requirements (in learning outcomes)				<p>Knowledge</p> <p>They know the teaching process, diagnostic, and summative functions of assessment and their methods to do it. They know the methodology of preparing and assessing tests. They know the pedagogical documents and tools of education. They know the process of planning the educational process and the possible ways of its implementation.</p> <p>Ability</p> <p>They are able to plan and implement individual and group sessions. They are able to define a teaching-learning plan and strategy taking into account the system of output requirements. They are able to prepare and evaluate school tests. They are able to design diagnostic, formative and summative forms of assessment. They are able to accomplish electronic assessment and self-assessment.</p> <p>Attitude</p> <p>They are aware of the personality forming role of education and its significance. They are committed to accomplish modern education strategies.</p> <p>Autonomy and responsibility</p> <p>They are able to develop and implement the educational process and tools independently and collaboratively.</p>						

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Short description of subject content	The aim, tasks, content and relationship of teaching professional and IT subjects. Pedagogical documents of education. Planning of the educational process, analysis of the curriculum, teaching-learning methods, tools. Electronic learning, the teaching-learning process. Observation and analysis of methods and equipment use in real education during class visits. Preparing for teaching and teachingconducting lessons.
Forms of student activity	Understand and revise written texts. Work out information. Individual research work, present its results. Active participation in group debates and discussions. Techniques of debating and arguing. Prepare, present and evaluate school tests School observations: assessment strategies Essay writing on the process and the results of an international (e.g. PISA) competence test.
Compulsory literature	Available through Moodle system.
Optional literature	Methodological and professional literature in printed and online content
Compulsory tasks during semester	Essay, PPT presentation, other documents on a topic defined by the teacher related to the teaching practice and portfolio.
Midterm tests and their timing	According to the schedule announced for the first lesson.

Pedagogical Seminar I. – II.

Subject name	In Hungarian		Pedagógiai szeminárium I. (Portfólió+pedagógia+módszertan)			Level	MA	
	In English		Pedagógiai szeminárium II. (Portfólió)			DUEN-TKK-213 DUEL-TKK-213 DUEN-TKK-216 DUEL-TKK-216		
Responsible educational unit		Teacher Training Centre						
Name of Mandatory Preliminary Study								
Number of Lessons						Requirement	Credits (ECTS)	Language of Education
		Lecture	Seminar	Laboratory ^s				
Full-time	150/52	0	3	1		M	5	English
Correspondence	150/20	0	15	5				
Teacher responsible for the course		Name		Dr. Mariann Váczi Dr. László Kadocsa		Position	college associate professor college prof., prof.emeritus	
Educational goals		<p>Short Goal: Awareness-raising of practical knowledge and skills acquired through pedagogical practices and portfolio validation of teacher competencies (according to the level of the initial teacher). Training background, development goals It is based on the use of what they have learned in pedagogical and professional studies, and lays the foundation for the advancement of the teacher.</p>						
Typical delivery methods		Lecture						
		Seminar		presenting and evaluating activities done during school practice				
		Laboratory		Pedagogical practice conducted in public or adult education institutions or at company intern ships				
Requirements (expressed in learning outcomes/competencies to be acquired)		Knowledge Make aware and arrange in portfolio all teacher competences (1-8) and experience gained during school practice						
		Ability Make aware and arrange in portfolio all teacher competences (1-8) and experience gained during application in practice						
		Attitude Make aware and arrange in portfolio all teacher competences (1-8) and experience gained during application in practice						
		Autonomy and Responsibility Open personality towards students, leaning, profession, and pedagogical						

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	innovation.
Brief description of the subject content	<p>During the Pedagogical Seminar the activities carried out in the school practices and subject methodologies are internalized and analysed and also the documents confirming the existence of teacher competences are organised in a portfolio.</p> <p>Developing the eight competences of the Teacher Portfolio, reviewing, modifying, supplementing, improving the previously completed materials; preparing new materials, writing self-reflection on the materials to be included in the Portfolio.</p> <p>To include self-made material for all competencies. The documents to be part of the Portfolio are included in the Portfolio Guide.</p> <p>Filing the Portfolio.</p>
Activity forms of students	Compilation of portfolios (in an electronic form); based on the portfolio guide
Compulsory reading and its availability	<p>Pedagogical-psychological special methodological and specialized textbooks and literature.</p> <ul style="list-style-type: none"> • Public education and adult education pedagogical documents • A guide to creating a portfolio
Recommended reading and its availability	
Hand-in Assignments/ measurement reports	
Description of midterm tests	

Adult Education

Name of subject:		in Hungarian:		Andragógia				Code:	DUEL-TKK-110		
		in English:		Adult Education					DUEN-TKK-110		
Responsible educational unit:				Teacher Training Centre							
Compulsory prerequisite(s):								Code:	DUEL-TKK-110		
									DUEN-TKK-110		
Type		Weekly number of classes						Requirements	Credit	Language of teaching	
		Lecture		Seminar		Lab					
Full-time	150/39	/week	2	/week	1	/week	0	Midterm mark	5	English	
Corresponding	150/15	/semester	10	/semester	5	/semester	0				
Course co-ordinator's name:				Dr. Andrea Tóth				position:	college associate professor		
Teaching objectives (contents, output place in the curriculum)				Brief objectives: The objectives of the subject is to acquire the basics of adult education and to prepare for the practice of adult education.							
				Prerequisites, add-on development aims: The prerequisites are the knowledge acquired in the Pedagogical-Psychological courses or own professional experience.							
Forms of instruction				Lecture:		Ppt supported lectures for all students in lecture halls.					
				Seminar:		Solving and introducing tasks completed individually and in a team / preparing a case study and its introduction.					
				Lab:							
				Other:							
Requirements (expressed in academic record)				<p>Knowledge</p> <p>Knows the main milestones in the development of adult education, the psychological characteristics of adult learning,</p> <p>Knows the legal environment of adult education.</p> <p>Ability</p> <p>Independent</p> <p>Able to distinguish the learning situation of children and adults.</p> <p>Able to design adult education courses.</p>							

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	<p>Able to select the teaching methods appropriate for the courses they hold.</p> <p>Able to use various teaching tools and motivates learners to use them as well.</p> <p>Able to evaluate the adult learners' performance objectively.</p> <p>Attitude</p> <p>Has the appropriate level of empathy for adult learners.</p> <p>Able to handle the adult learner as a partner.</p> <p>Flexible, able to adapt to given situation.</p> <p>Objective, unbiased.</p> <p>Autonomy and responsibility</p> <p>Makes independent decisions about the content of the course material, the suggested learning methods.</p> <p>Takes responsibility for their own learners' groups.</p> <p>Makes independent decisions about the learners' evaluation, the permission to proceed or issue the course certificate.</p>
Short description of study content	<p>During the course students are going to learn about the basic concepts of adult education, the main historical milestones of the development in adult education. Besides the characteristics of the special target groups of adult education, the course is going to reveal the scenes and methods of adult learning as well as the characteristics of non-formal and informal learning. Besides the legal regulations of adult education, the course is going to discuss how to design a course in adult education. Besides discussing the learning motivations of adults, one of the main topics is going to be the teaching methods and techniques used in adult education. Finally, during the course students are going to develop the competences necessary for evaluating the adult learners' learning processes.</p>
Forms of student's activities	<p>Analysing special literature individually and in teams.</p> <p>Introducing experiences and their discussion.</p> <p>Practicing reasoning techniques and discussion skills.</p> <p>Preparing case studies.</p> <p>Micro-teaching activities.</p>
Compulsory literature and availability	
Optional material and availability	
Description of home assignments/measurement protocols, other testing	<p>Midterm paper 1. The basics of adult education</p> <p>Midterm paper 2. Teaching-learning methods</p> <p>Scheduled for the week after finishing the relevant topics.</p> <p>Make-up and improvement possibility in the last week of the semester or in the examination period.</p> <p>During the course, students are obliged to prepare a home assignment about their own experience in adult education, or by using interview materials. The length of the home assignment should be 6-8 pages.</p>

Economy and Vocational Education

Subject name		In Hungarian	Gazdaság és szakképzés				Level	MA
		In English	Economy and Vocational Education				DUEL-TKK-250 DUEN-TKK-250	
Responsible educational unit		Teacher Training Centre						
Name of Mandatory Preliminary Study								
Number of Lessons						Requirement	Credits (ECTS)	Language of Education
		Lecture	Seminar	Laboratory				
Full-time	150/39	2	1			M	5	English
Correspondence	150/15	10	5	0				
Teacher responsible for the course		Name		Dr. Gábor Budai		Position	senior lecturer	
Educational goals		Short Objective: The aim of the course is to provide students with an understanding of the interaction mechanisms of the factors affecting VET, the trends in scientific and technical development, the qualification needs of the labour market, and the changes in the role of technical teachers.						
Typical delivery methods		Lecture		In a classroom with the use of projector or computer in each lecture.				
		Seminar		work in team or individually, and case studies				
		Laboratory						
Requirements (expressed in learning outcomes/competencies to be acquired)		Knowledge						
		Knowledge of the scientific theoretical background of VET. Knowledge of economic and vocational training needs. Characteristics of vocational training and economy. Knowledge of the relationship between VET and the economy.						
		Ability						
		Use of objectivity derived from engineering spirit. recognizing economic development trends. Conscious application of economic and vocational knowledge. improving the relationship between the palce of education and the economic, labour market and social environment						
		Attitude						
		Empathy, tolerance, cooperation. Sensitivity to labour market problems. Interest in VET problems.						
		Autonomy and Responsibility						
		Independence and responsibility for their own and their companions' activities.						
Brief description of the subject content		The modern interpretation of the labour market and the current peculiarities of the development of the Hungarian economy. The economic and social determination of the human factor and the possibilities of its development. The role of vocational training in the development of the labour force and the determination of the quality of the working culture. The basic institutions of the						

	economy and the labour market and their signals towards the vocational training system. The interaction and forms of cooperation between the trainings present in the economy and labour market and the vocational training in schools. Trends in the development of the Hungarian labour market, in particular regard to the reform of vocational training.
Activity forms of students	Student Activity Types - Text Interpretation - Individual and Group Processing of Information - Collision of Opinions - Acquisition of Debate and Argument Techniques - Collaboration in a Group - Acquiring forms of advocacy
Compulsory reading and its availability	<ul style="list-style-type: none"> • Cedefop (2011). Vocational education and training in Hungary: short description. Luxembourg: • Cedefop ReferNet Hungary (2012). VET in Europe: country report Hungary. (libserver.cedefop.europa.eu/vetelib/2012/2012_CR_HU.pdf) • Eurydice (2012). Hungary: overview. In: European Commission (ed.). Eurypedia. (webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Main_Page https://www.cedefop.europa.eu/files/5540_en.pdf)
Recommended reading and its availability	<ul style="list-style-type: none"> • BENEDEK, A. (editor): Vocational Training in Hungary. Budapest: Ministry of Labour, 1996. • FEJOS, C.: Education Strategies in Hungary. Paper presented at European Training Foundation, Torino, Italy, 1996 June. • FEJOS, C.: Teacher Training in Hungary. Paper presented at the 'East-West Conference', arr. Bernhard Buck (European Training Foundation), Torino, Italy, 1997 September. • VARGA, L.: Qualification Requirements and Curricula for Technical Teacher Training in Hungary (in Some Aspects of Vocational and Technical Teacher Training, Ed. by Toth. A. 1995. ATEE. Brussels, 1995.
Hand-in Assignments/ measurement reports	<ol style="list-style-type: none"> 1. During the semester, students present the current problems of VET in a group exercise. 2. They make a study on the subject matter related to the subject. 3. They interpret and analyze their own work, jobs, and the relationship between the economy and vocational training.
Description of midterm tests	

Conflict Management

Title of subject		In Hungarian		Konfliktuskezelés			Level	MA	
		In English		Conflict Management			Code	TKK-904	
Responsible educational unit									
Mandatory preliminary studies									
Number of lessons							Requirements	Credits (ECTS)	Language of education
		Lecture		Seminar		Laboratory			
Full-time	150/39		1		2	0	F	5	magyar
Correspondance	150/15	per term	5	Per term	10	Per term 0			
Responsible instructor				Name		Dr. László Balázs	Position	Associate Professor	
Educational goals				<p>The goal is to prepare the student in theory and practice to manage conflicts in constructive way.</p> <p>The students should acquire in-depth practical and theoretical knowledge about the nonviolent communication, on the methodology of cooperative negotiation and conflict management, and on mediation. They will learn about the nature of pedagogical conflicts and their solutions as well.</p> <p>Personal competences developing during the course:</p> <p>Conflict Management (resolution), self-esteem, self-knowledge, empathy, assertivity, problem solving</p>					
Typical delivery methods				Lecture		For all students in a classroom with a projector and computer. Lecture, active note taking.			
				Seminar		In a classroom (20-30 people) suitable for project work using a flipchart or whiteboard. Teamwork and different forms of social activities.			
				Laboratory					
Requirements (expressed in learning outcomes/competencies to be acquired)				Knowledge					
				<p>He/she understands the nature of conflict and conflict management;</p> <p>knows the characteristics and resolution of intrapersonal conflicts,</p> <p>knows the dynamics and escalation phases of conflicts in groups and organizations.</p> <p>Knows the main directions, models and methods of conflict management.</p>					
				Abilities					
				He/she is able to analyze a conflict situation from multiple perspectives;					

	<p>able to identify own and the conflict partner's interests and motives; able to apply constructive conflict management methods in practice.</p> <p>Attitudes</p> <p>He/she is able to think reflectively of his own conflicting behavior, is open to constructive conflict resolution; strives to understand the conflict partner's interests and motivation</p> <p>Autonomy and responsibility</p> <p>He/she shows responsibility for his behavior in conflicts; considers important to further develop his conflict management competence; Seeks constructive resolution to his/her conflicts</p>
Brief description of the subject content	<p>During the classes the students can overview several issues of conflicts and conflict management and acquire knowledge of different types of conflicts, the intrapersonal conflicts, the conflicts in groups and organizations, etc.. Students will learn about the main schools, models, and methods of conflict management. Students will gain a deeper understanding of the theory and practice of nonviolent communication, as well as negotiated conflict management and conflict management in educational settings.</p>
The students' main activity forms	<p>Taking notes and synthesizing the heard (lectures). Participation in sensitizing, collaborative support exercises, guided role play, analysis of case studies, implementation of complex simulations (problem solving in the group, discussion of solution alternatives), implementation of experimental tasks (seminars).</p>
Compulsory reading and its availability	<p>Fisher R., William L. Ury, Ury W., Patton B. (2011): Getting to Yes: Negotiating Agreement Without Giving In. Penguin Books; 3rd Revised ed. edition.</p> <p>Rosenberg M. (2015): Nonviolent Communication: A Language of Life. Puddle Dancer Press; 3rd edition</p> <p>Sabina Valente, Abílio Afonso Lourenço and Zsolt Németh: School Conflicts: Causes and Management Strategies in Classroom Relationships. In: Interpersonal Relationships 2020/12. DOI: 10.5772/intechopen.95395 https://www.intechopen.com/online-first/school-conflicts-causes-and-management-strategies-in-classroom-relationships</p>
Recommended reading and its availability	<p>Conflict Management in Schools. The Role of the Teacher as an In loco-Parentis URL: https://www.grin.com/document/356141</p>
Hand-in Assignments/ measurement reports	<p>The processing of an deliberately chosen topic from the themes of the course. The preparation of a composition and its presentation are expected.</p> <p>Composition:</p> <p>Length: 20,000 characters</p>

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	<p>Formatting: line spaced, 1.5 spacing, 12 pt, TNR font, first line indent 9 mm.</p> <p>Deadline: Week 10, seminar</p> <p>Presentation:</p> <p>Extent: 10-12 slides</p> <p>Duration: 20-25 minutes</p> <p>Deadline: Weeks 11 and 12, by appointment.</p>
Description of midterm tests	<p>The midterm test covers contents of the lectures.</p> <p>Date: Week 13, Seminar class.</p>

Basics of Teacher Profession

Subject name		In Hungarian	Pedagógus pálya alapjai				Level	MA
		In English	Basics of Teacher Profession				Code	DUEN-TKK-906 DUEL-TKK-906
Responsible educational unit		Teacher Training Centre						
Number of Lessons						Requirements	Credits (ECTS)	Language of Education
		Lecture	Seminar	Laboratory				
Full-time	150/391	1	1	1		M	5	English
Part time	150-15	5	5	5				
Teacher responsible for the course		Name	Dr. Csilla Marianna Szabó			Position	associate professor	
Educational goals		The purpose of the subject is to prepare students for the teacher role regarding mother tongue proficiency, teacher communication, and roles of teachers.						
Typical delivery methods		Lecture	Lecture with coputer and projector.					
		Seminar	Students presenattions regarding the themes of the lectures, followed by students' debate, group discussion, and case studies.					
		Laboratory	School observations and based on the experience reports, presentations					
Requirements (expressed in learning outcomes/competencies to be acquired)		Knowledge He knows some basic concepts of pedagogy, the characteristics of the pedagogical career.						
		Ability Independent. Able to distinguish between individual teacher roles; understands the complex processes of the teaching profession. Able to distinguish between types of teacher communication and communicate expressively and correctly in writing and orally.						
		Attitude With an empathic skill, he turns tolerantly towards students, teachers, parents, ie those who come into contact with the role of a teacher. He is flexible and adaptable and pursuits objectivity.						
		Autonomy and responsibility Able to make independent decisions in his pedagogical work. He acts as a responsible educator (candidate).						
Brief description of the subject content		The science of pedagogy, the history of its formation, disciplines, its relationship with other sciences, its place in the system of sciences Basic concepts of pedagogy: education, training. The teaching profession.						

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	<p>Theory of pedagogical communication; analysis of pedagogical roles, presentation of their change and shaping from the point of view of pedagogical communication.</p> <p>Acquisition of theoretical and practical knowledge related to the teacher's communication skills and their development.</p> <p>The teacher's relationship system, actors, characteristics of the relationships, communication skills and knowledge related to the successful establishment and maintenance of relationships.</p> <p>Possible conflicts of the teacher and their management in relationships.</p> <p>Opportunities for the development of students' communication knowledge and skills and its importance. Communicative didactics, communication in the teaching-learning process. Characteristics of the Z-generation.</p> <p>Recognizing and treating behavioural and learning disorders in school.</p> <p>Modern methods of evaluation and control. Digital devices.</p>
Activity forms of students	<p>Interpretation of texts - Processing of information of the literature individually and in groups - Conflict of opinions - Acquisition of discussion skills and argumentation techniques - Cooperation in a group - Acquisition of forms of advocacy - Presentation skills orally and in writing.</p>
Compulsory reading and its availability	<p>Hobson, A. J. (2009): On being bottom of the pecking order: beginner teachers' perceptions and experiences of support. In: Teacher Development 13(4), 299-320.</p> <p>Bradshaw, R. Democratic Teaching. An Incomplete Job Description. https://democracyeducationjournal.org/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1135&context=home</p> <p>Kelly, T. E. (1986): Discussing Controversial Issues: Perspective on the Teacher's Role. In: Theory and Research in Social Education. 14 (2) pp. 113-138.</p> <p>Maor, D.: The Teacher's Role in Developing Interaction and Reflection in an Online Learning Community. Education Media International. ISSN 0952-3987 print/ISSN 1469-5790 online © 2003 International Council for Education Media. http://www.tandf.co.uk/journals. DOI: 10.1080/0952398032000092170</p>
Recommended reading and its availability	<p>Webb, N. M.: The teacher's role in promoting collaborative dialogue in the classroom. British Journal of Educational Psychology (2009), 79, 1-28</p>
Hand-in Assignments/ measurement reports	<p>Individual and group tasks based on experience gained during pedagogical exercises.</p>
Description of midterm tests	<p>1. Language proficiency paper</p> <p>2. Test paper on the basic concepts of pedagogy - pedagogical craft and teacher communication + mid-term assignments (preparation of digital curriculum, lesson plan).</p> <p>Their date: when the topic closes.</p> <p>Opportunity for correction: in the last week of the study period or during the exam period.</p>

Internet Technologies

Subject name		In Hungarian		Internet technológiák				Level	BSc	
		In English		Internet Technologies				Subject code	ISF-112	
Responsible Educational unit name				Institute of Informatics						
Name of the required preliminary study								Subject code		
Type		Study load per week (in hours)						Requirement	Credit	Teaching language
		Lecture		Practice		Lab				
Full time	150/39	per Week	0	per Week	0	per Week	3	Midterm Mark	5	English
Part time	150/15	per Semester	0	per Semester	0	per Semester	15			
Course leader				Name		Dr. Mariann Váraljai		Position	college associate professor	
Training course aims				<p>Educational goals, development objectives</p> <p>While acquiring the curriculum of Internet Technologies, students will acquire a thorough knowledge of website design.</p> <p>Students learn HTML and JavaScript language used in web design and are also acquainted with CSS technology.</p> <p>Students will be able to develop web pages.</p>						
Typical transfer methods				Lecture						
				Practice						
				Lab		<p>Students solve individual tasks on the computers, using programs, with teacher assistance in classrooms with the use of projector and computer. Computer based exercises, individual tasks.</p> <p>Online learning materials are also available during the learning process.</p>				
				Misc.						
Requirements (expressed study results)				<p>Knowledge</p> <ul style="list-style-type: none"> • While acquiring the curriculum of Internet Technologies, students will acquire a thorough knowledge of website design. • Students acquaint themselves with the HTML and JavaScript language used in web design and also learn CSS technology. Students will be able to develop web pages. 						
				<p>Ability</p> <ul style="list-style-type: none"> • Students know the HTML language and CSS stylesheets to create websites. They have JavaScript programming skills to complete the tasks. They also know the technological background of up-to-date web-design. 						

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	<ul style="list-style-type: none"> Students are able to create documents that can be interpreted for a web browser, to produce event-driven (dynamic) websites and web content. They are also able to apply the knowledge acquired during the course to a real web server environment.
	<p>Attitude</p> <ul style="list-style-type: none"> Students are interested in new methods for modern website design. They are opened to continually renewing HTML language and CSS technology, so therefore they strive for lifelong learning, continuous professional training, and general self-education.
	<p>Autonomy and Responsibility</p> <ul style="list-style-type: none"> Students will be independent web site designers and developers that carries out their own job tasks, thinking and developing professional questions independently. A student decides independently on the development of his own knowledge, plans and organizes it. A student is responsible for the preparation, proper appearance and operation of the website entrusted to it.
Short description of the subject content	<p>The development of World Wide Web. The development of HTML language, its basic concepts, and the use of HTML5 language through the general description of the Internet. The structure of an HTML document and the HTML instructions. The concept and use of CSS. CSS3-based content formatting. Basics and application of JavaScript programming language. Accessing objects and their use with JavaScript. Use and possibilities of jQuery JavaScript library.</p>
Forms of student activity	<p>Heard information processing by creating notes, systematization of information has led by tasks (40%) Self-processing (individual) tasks (60%)</p>
Required reading and availability	<p>[1] Elizabeth Castro and Bruce Hyslop: HTML5 and CSS3, Seventh Edition: Visual QuickStart Guide Peachpit Press, 2012 [2] Microsoft Corporation: HTML5 Step-by-step, O'Reilly Media Inc, 2011 [3] Brian P. Hogan: HTML5 and CSS3 second edition – Level up with Today's Web Technologies, Dallas Texas, 2013 [4] Danny Goodman: JavaScript™ Bible 4th Edition, Hungry Minds, Inc. New York, NY Cleveland, OH Indianapolis, IN, 2001 [5] Paul Wilton, Jeremy McPeak: Beginning Java Script 4th Edition, Wiley Publishing, Inc., 2010</p>
Recommended readings and availability	<p>Electronic literature in Moodle or in Neptun. Microsoft Office Tutorial and examples (Internet).</p>
Description of tasks/measurement procedures to be submitted	<p>Assignment: own web-development project.</p>
Description and schedule of the midterm tests	<p>Test time: Week 7., Week 12., Week 13 (re-take). During the semester, students take 2 tests: Test 1: HTML5, CSS3 – Test 2: JavaScript Their time: at the end of the certain topic. The eligibility for the semester is to achieve a result of at least 51% at each of both tests. Possibility of replacement and retake tests in the last week of the term and in the exam period.</p>

Multimedia

Subject name		In Hungarian		Multimédia				Level		BSc	
		In English		Multimedia				Subject code		TKM-120	
Responsible Educational unit name				Institute of Social Sciences Department of Communication and Media							
Name of the required preliminary study								Subject code			
Type		Study load per week (in hours)						Requirement	Credit	Teaching language	
		Lecture		Practice		Lab					
Full time	150/52	per Week	2	per Week	0	per Week	2	Midterm Mark	5	English	
Part time	150/20	per Semester	10	per Semester	0	per Semester	10				
Course leader				Name		Dr Péter Ludik		Position		college associate professor	
Training course aims				<p>Educational goals, development objectives</p> <p>Getting to know the definition and characteristic properties of multimedia. Getting to know the basic properties of media and the possibilities of their application.</p> <p>Own design and production of media elements. Creating a standalone multimedia program.</p>							
Typical transfer methods				Lecture		Lecture in a boardroom, using a projector and a computer, 34% of the hours.					
				Practice							
				Lab		Independent task solution in a computer lab in 66% of the hours.					
				Misc.							
Requirements (expressed study results)				<p>Knowledge</p> <p>The student should get to know:</p> <ul style="list-style-type: none"> • the definition and characteristics of multimedia; • the building blocks of multimedia and their relationship to each other: text, image, graphics, illustration, sound, moving image: animation, film, virtual reality elements; • a multimedia production of tools, • the basics of multimedia development programs 							
				<p>Ability</p> <p>The student should be able to define the parameters and services of software</p>							

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	<p>tools required for the production and editing of source materials (text, sound, moving and still images, graphics). Digitizes an image, creates and edits vector and raster graphics. Digitizes and edits audio and video material. Creates an animation.</p> <p>The student should be able to plan an own program and select the means necessary for its implementation, to implement their own idea.</p>
	<p>Attitude</p> <p>The student is required to be open to learning about the use of computer media, its theoretical foundations, methods, new results and innovations.</p> <p>Critical, creative and imaginative.</p>
	<p>Autonomy and Responsibility</p> <p>Capability to form an independent opinion, planning the appropriate proportion of multimedia elements.</p>
Short description of the subject content	Definition and characteristics of multimedia. The building blocks of multimedia and their relationship to each other: text, image, graphics, illustration, sound, motion picture: animation, film, virtual reality elements. Tools for creating multimedia. Create a stand-alone interactive multimedia application with optimal use of media elements.
Forms of student activity	Processing of heard text with notes 20% Organizing information with a task 20% Independent processing of tasks 60%
Required reading and availability	<i>Tay Vaughan: Multimedia: Making It Work; McGrawHill 2011</i> Materials on MOODLE
Recommended readings and availability	Student guide for using Neobook 5.0 / www.neosoft.com Authorware 7 - User Knowledge / www.adobe.com
Description of tasks/measurement procedures to be submitted	Entering hourly tasks continuously max: 30 points Independent program development with any topic max: 30 points
Description and schedule of the midterm tests	Written test from the material of the lesson (12 pieces) continuously max 20 points Written summary test from the theoretical parts max: 20 points

Web programming

Subject name		In Hungarian		Web programozás				Level	BSc	
		In English		Web Programming				Subject code	ISF-253	
Responsible Educational unit name				Institute of Informatics						
Name of the required preliminary study								Subject code		
Type		Study load per week (in hours)						Requirement	Credit	Teaching language
		Lecture		Practice		Lab				
Full time	150/39	per Week	0	per Week	0	per Week	3	Midterm Mark	5	English
Part time	150/15	per Semester	0	per Semester	0	per Semester	15			
Course leader				Name		Dr. Zoltán Király		Position	associate professor	
Training course aims				<p>Educational goals, development objectives</p> <p>The student will know the elements of web-based server-side programming and become familiar with a poorly typed language. Use and integrate previously familiar user-based scripting languages and databases into a PHP program.</p> <p>The student will know the elements of web-based server-side programming and become familiar with a poorly typed language. Use and integrate previously familiar user-based scripting languages and databases into a PHP program.</p>						
Typical transfer methods				Lecture						
				Practice						
				Lab		Exercises solving exercises during exercises. Tasks are implemented in PHP, on the University web server. Use of a projector and a teacher's machine in every class.				
				Misc.						
Requirements (expressed study results)				<p>Knowledge</p> <p>The students completing the course will</p> <ul style="list-style-type: none"> - know the basic PHP instructions. - learn how to use PHP's built-in functions. - know the basics of PHP OOP. - learn the PHP database management capabilities with MySQL and XML data. <p>Learn basic PHP security steps.</p>						

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	<p>Ability</p> <p>The students should</p> <ul style="list-style-type: none"> - be able to specify complex programs. - be able to encode complex programs in PHP, HTML, JavaScript. - be able to use databases with PHP. - be able to implement dynamic websites / portals based on a specific specification. <p>Attitude</p> <p>Interest in programming. Self-development using the available literature in Hungarian and English.</p> <p>The challenge of giving the solution (challenge).</p> <p>Autonomy and Responsibility</p> <p>Independent thinking and problem solving.</p> <p>Assess, accept, or reject the difficulty of the task.</p> <p>Standalone specification capability.</p>
Short description of the subject content	Students become familiar with the server-side PHP programming language, learn how to build complete websites / portals based on the specification, and use their experience in programming, database management, and networking technology. The course includes short and major programs. Students are required to make projects. In the theoretical classes they learn the rules of web development and in practice they learn how to create dynamic web pages.
Forms of student activity	Solving individual tasks (homeworks) outside the classroom. Finding solutions and implementing them for assigned tasks.
Required reading and availability	w3school.com <ul style="list-style-type: none"> • https://www.w3schools.com/php/default.asp
Recommended readings and availability	
Description of tasks/measurement procedures to be submitted	<p>One homework (compulsory application)</p> <ul style="list-style-type: none"> • Topic: A programming task which fits to the material of theory and practice. • Date: The homework description is given on the 12th week. It must be finished until the last week of term-time. • It must be defended in front of a committee during last week of term-time which is appointed by the leader of practice. • It cannot be replaced! • In case of unsuccessful presentation (e. g.: if the student is not aware of the operation of the presented program or it is found that the program has been copied), the application will be rejected.
Description and schedule of the midterm tests	<p>Two mid-term tests/exams.</p> <p>1st mid-term test: it is recommended on the 6th week.</p> <p>2nd mid-term test: the week before the last week during term-time.</p> <p>Replacement/Correction</p> <p>The material of the whole semester.</p>

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	<p>Invalidate the previously mid-term tests. Deadline: last week during term-time.</p> <p>Final grade (lecture total min. 61% and practice total. min. 61%):</p> <p><60%: Fail (1)</p> <p>61-70%: Pass (2)</p> <p>71-80%: Satisfactory (3)</p> <p>81-90%: Good (4)</p> <p>91-100%: Excellent (5)</p> <p>Lecture: 1. test (50 points) + 2. test (50 points) = 100 point (each min. 51%, total min. 61%)</p> <p>Laboratory: 1. test (30 points) + 2. test (30 points) + Homework (40 points) = 100 points (each min. 51%, total min. 61%)</p>
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IT project 1.

Subject name		In Hungarian		Informatika projekt 1.			Level		BSc		
		In English		IT Project 1			Subject code		ISF-217		
Responsible Educational unit name				Institute of Informatics							
Name of the required preliminary study							Subject code				
Type		Study load per week (in hours)				Requirement		Credit		Teaching language	
		Lecture		Practice							
Full time		150/39		per Week		1		per Week		0	
Part time		150/15		per Semester		5		per Semester		0	
Course leader		Name		Dr. Györgyi Strauber			Position		c. professor		
Training course aims				<p>Educational goals, development objectives</p> <p>The aim of the course is to acquire such technical and methodological knowledge, which are necessary to complete an informatical project successfully. Presentation of project control and implementation procedures to the students in the frames of project made real in groupwork with 3-4 members.</p>							
Typical transfer methods				Lecture		With the participation of every student in the large lecture hall. Lecture with projector and blackboard or online course using Teams meeting.					
				Practice							
				Lab		In classrooms with computer work-stations for every student. The teacher's computer is connected to projector.					
				Misc.							
Requirements (expressed study results)				<p>Knowledge</p> <ul style="list-style-type: none"> The student should acquire such technical and methodological knowledge, which are necessary to complete and manage an informatical project successfully. <p>Ability</p> <p>The student should be</p> <ul style="list-style-type: none"> able to take an independent role in a project, able to manage a small project, able to use the project management tools and technics <p>Attitude</p> <p>The student is required to be</p> <ul style="list-style-type: none"> interested in new methods and tools related to the field. open, inquisitive, constructive, efficient, creative. <p>Autonomy and Responsibility</p> <p>He takes responsibility, decides and manages independently in the given field</p>							
Short description of the subject content				<p>The implementation process of informatical projects: the informatical strategy, the feasibility study, the project definition plan, contract types, tendering, project control, evaluation. The life-cycle of the development.</p> <p>Project phases. Project planning. Resource handling in the projects. Resource allocation. Project realisation organisational forms.</p> <p>Cost handling of projects. Project analysis. Risk handling: risk types, risk handling methods and techniques. The documentation of the project. Handling quality in the informational projects. Project management methodologies (PRINCE 2, PMI). Softwares supporting the project management (MS Project). Making a project in the laboratory in team-work.</p>							
Forms of student activity				<p>Lecture: 30%</p> <p>Self-dependent task solving: 30%</p> <p>Teamwork: 40%</p>							
Required reading and availability				<p>Gary R. Heerkens: Project Managenet, McGraw-Hill Companies USA, 2002, Microsoft Project 2010; Step by Step, Microsoft Press, Redmond, Washington, 2010</p>							

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Recommended readings and availability	Guidelines for Managing Projects; Department for Business, Innovation and Skills, London UK, 2010 Adrienne Watt: Project Management; The Open University of Hong Kong, 2012 Wouter Baars: Project Management Handbook, Data Archiving and Networked Services, The Hague, 2006
Description of tasks/measurement procedures to be submitted	Midterm test (at the end of the semester) Evaluation of compulsory lecture quizzes and computer-based and practical tasks during the semester.
Description and schedule of the midterm tests	Theoretical evaluation: Week 12 and essays every week Practical evaluation: Week 11. Project (teamwork): Week 4, Week 12. and Status report every week.