

**INFORMATION BOOKLET**

**Doctoral Study Programme  
3<sup>rd</sup> Cycle**

**EDUCATION OF TEACHERS  
AND  
EDUCATIONAL SCIENCES**

**Study year 2025/26**

## INFORMATION ON THE STUDY PROGRAMME

Course title:	<b>EDUCATION OF TEACHERS AND EDUCATIONAL SCIENCES</b>
Type and level of qualification:	Third Cycle (Doctoral Study Programme)
Official length:	4 years
ECTS:	240
Mode of study	Part-time study
Option of Study:	<p>Third cycle Doctoral Study Programme <i>Education of Teachers and Educational Sciences</i> has two study options (education of teachers; educational sciences) and ten scientific or study areas.</p> <p>Scientific or study areas of study options:</p> <p>- Study option <i>education of teachers</i>:</p> <ul style="list-style-type: none"><li>- teaching, learning, and education;</li><li>- teaching Slovene language and literature;</li><li>- teaching mathematics, computing, natural sciences and technical studies;</li><li>- teaching social sciences and the humanities;</li><li>- teaching in the area of art.</li></ul> <p>- Study option <i>educational sciences</i>:</p> <ul style="list-style-type: none"><li>- social education;</li><li>- special and rehabilitation education;</li><li>- preschool education;</li><li>- educational policies;</li><li>- supervision, organisation and personal counselling.</li></ul>
Obtained academic title:	<p>Doktorica / doktor znanosti (DR)</p> <p>According to <i>Act on professional and academic titles</i> academic and professional titles are not translated into foreign language.</p> <p>Scientific or study area and study option are not part of academic title, but it is recorded in Diploma of Doctoral Study Programme.</p>

### Programme objectives

The doctoral study programme Education of Teachers and Educational Sciences will primarily facilitate the realisation of the following goals:

- a deepening of the understanding of theoretical and methodological concepts in the area of the education of teachers and educational sciences;
- equipping the candidates for the independent development of new knowledge and for solving the most difficult professional and scientific problems in an interdisciplinary perspective;
- the development of critical reflection and ethical responsibility in research, as well as social and communication competences for leading professional and research work;
- equipping the candidates for the critical monitoring (testing, improving) of known factors and for forming new solutions for the scientific discipline field and for practice;
- equipping the candidates to independently lead scientific research and/or professional projects and the most demanding work systems.

## **General competencies**

Drawing on the Dublin descriptors, the findings and recommendations of the EUA, the findings of the TUNING Project, and the results of the development work at the Faculty of Education of the University of Ljubljana the doctoral study programme allows for the acquisition or achievement of the following generic competencies:

- In-depth understanding of the theoretical concepts of the field - philosophical, sociological, psychological, pedagogical and anthropological aspects;
- Superior understanding and mastery of different research approaches in the field of science;
- Ability to establish, develop and conduct a comprehensive research process;
- Ability to independently develop new knowledge, skills, techniques, practices and materials with research work;
- Solving the most difficult problems in testing and improving the known solutions, and by the creation of the new ones;
- Responding to abstract problems that extend and redefine the existing procedural knowledge or practice;
- Ability to conduct original research, the production of which is a contribution extending the boundaries of knowledge, which is valued at the national and international level;
- Ability to critically analyze, evaluate and synthesise complex ideas;
- Ability to identify problems and find solutions;
- Participation in critical dialogues; management and promotion of complex social processes within the professional field; the ability of criticism and self-criticism;
- Ability to manage the most complex work systems and scientific-research projects of broad technical and scientific fields;
- Ability to notify colleagues and the wider scientific community and society in general of one's area of expertise;
- Ability of public presentation and defense of scientific studies;
- Ability to promote social and cultural progress of the knowledge-based society in academic and professional environments;
- Ability of creative thinking and problem solving;
- Knowledge of the ethics of the research work and acting in accordance therewith.

## **Subject-specific competencies**

- Systematic understanding of the theory and theoretical clusters, of scientific paradigms and of the development in the field of teacher education and educational sciences;
- In-depth understanding of quantitative and qualitative research methods and the ability to apply them appropriately in research in this field;
- Acquisition and understanding of a broad body of knowledge that is at the forefront of the selected study area;
- Personal responsibility and largely autonomous initiatives in complex and unpredictable situations, in professional or related environments that are connected with education in the broad and narrow sense in the subject area;
- Criticism regarding the broadest implications of the use of knowledge in concrete educational and professional environments;
- Detailed analysis and reflection on social norms and relationships within specific areas, which will be the subject of the doctoral student, management of activities for their modification and mediation between academic research and social environment;
- Ability to identify practical problems of the subject area that can be solved with the methods and instruments of the academic research;
- Ability to conduct original research in the chosen field;
- Ability to carry out independent, original and publishable research;
- Ability of collaborative learning, creative communication in a research setting, of problem solving and collaboration in interdisciplinary research teams.

## **Admission requirements**

The doctoral study programme Education of Teachers and educational Sciences is open to those who have concluded:

A study programme on the second level.

1. A study programme that educates the candidate for a profession, determined by directives of the European Union, if the study programme is evaluated with 300 ECTS or another unified masters programme that is evaluated with 300 ECTS.
2. A previous study programme for gaining university education (programmes prior to the Higher Education Act of 03. 09. 2004).
3. A previous study programme for gaining a specialisation, prior to which a specialist higher education programme has been completed. Prior to enrolment in the study programme the faculty can determine additional obligations for these candidates, to the extent of from 30 to 60 ECTS.
4. A previous study programme for gaining a master of science or a specialisation after concluding a study programme for gaining university education. In a third level doctoral study programme these candidates are credited with study obligations to the extent of at least 60 ECTS.
5. Graduates from foreign universities can also enrol in doctoral study. The equivalence of previously gained education abroad is determined by the procedure of acknowledging foreign education for the continuation of education, in accordance with the statutes of the UL.

## **Criteria for selection of candidates in case of enrolment limitations**

In the case that more applications are received for the programme than the available enrolment places, the selection of candidates for enrolment in the doctoral study programme will, in accordance with article 41 of the Higher Education Act, be based on the candidate's success in the selection exam.

The candidate can substitute 50 % of the grade achieved in the selection exam with the grade of his or her scientific and professional work to date in the selected field of the study programme. The principal measures for scientific and professional work are publications, such as articles published in journals or monographs (or exhibitions, concerts), active participation in Slovene and international research projects, the University Prešeren Prize, recognised international prizes or awards in the area of teacher education and educational science, the Faculty Prešeren Prize, the Ferbar Prize or other recognised prizes and awards in the area of teacher education and educational science, etc.

The Faculty shall adopt the decision on limited enrollment if the number of candidates who meet the general enrollment prerequisites significantly exceeds the number of available study places. In this case, the selection of candidates shall be undertaken on the basis of the selection examination and the achievements of the candidates in scientific and technical fields (personal bibliography; awards; active international cooperation). The candidates who have achieved the higher number of points shall be accepted.

Individual elements of the selection shall be assessed as follows (in the case of co-authorship, the proportional division of points shall be taken into account):

Selection exam (the candidate shall prove to be well-versed in research in the field of teacher education and educational sciences); assessment under the applicable grading scale of the University of Ljubljana	Score 6 x 0,5 Score 7 x 1 Score 8 x 2 Score 9 x 3 Score 10 x 4
Articles published in journals and monographs (or exhibitions, concerts), scored according to the criteria of the Habilitation Commission of the University of Ljubljana	Points x number of units x 2
The Prešeren Prize, awarded by the University, a prominent international prize or the recognition in the field of teacher education and / or educational sciences	10
The Prešeren Prize, awarded by the Faculty, the Ferbar prize or other prominent awards or prizes in the field of teacher education and / or educational sciences	5
Active participation in an international project (eg. Erasmus, Comenius, etc.).	to 5 per project

## **Criteria for recognizing knowledge and skills acquired prior to the enrollment in the program**

Recognition of knowledge and skills acquired prior to enrollment in the programme shall be carried out on the basis of the specific Rules of the Faculty of Education (adopted by the Senate of the Faculty of Education of the University of Ljubljana at its session of 18 May 2006, and is published on the website of the Faculty). The key principles thereof are as follows:

- Each candidate has the opportunity to apply for the recognition of the informally acquired knowledge and experience,
- The candidate shall submit all the evidence necessary to assess the informally acquired knowledge and experience,
- Assessment of the competences achieved is based primarily on the educational goals and on the entry conditions of the study programme, in which the candidate would like to enroll
- Acquired proven competencies, which are duly documented and relevant, shall be recognized regardless of where and how the candidate has acquired them,
- The methods used provide for a reliable assessment,
- Results of the assessment shall be documented by issuing the relevant certificate.

## **Assessment**

The curricula of the Faculty's study programmes present the grading method; at the end of each semester, the Office for Students' Affairs prepares an analysis of the completed study assignments (students' achievements in credit points after the end of an exam period). Heads of departments are informed about the analysis. They discuss the achievements with university teachers, associates and students, and make a plan to improve the situation. Every student can access the analysis of exam during office hours. The document about the promotion of quality (<http://www.pef.uni-lj.si/index.php?id=508>) is available at the Faculty's website. Teachers publish the results of written exams at the website or VIS, enabling students to compare their results with results of others, whilst ensuring privacy protection with student numbers.

## **Conditions for progression through the programme**

Students can only progress to the second year of their doctoral studies once they have been awarded the minimum of 40 credit points from the organized doctoral studies of the first year.

The requirements for progression to the third year of the doctoral studies are as follows:

- All fulfilled obligations of the organized doctoral studies of the first and second year,
- Successful presentation of the doctoral dissertation topic, and
- Approved doctoral dissertation topic by the competent committee, confirmed by the Senate of the Faculty of Education of the University of Ljubljana.

Students can only progress to the fourth year of their doctoral studies once they have fulfilled all the study obligations of the first three years, and have been approved the doctoral dissertation topic by the competent university authority.

## **Conditions for transferring between programmes**

In addition to the conditions set out in the Criteria for Transferring between Study Programmes (Official Gazette no. 95/2010) and in the Act amending the Criteria for Transferring between Study Programmes (Official Gazette No.: 17/11) the student shall fulfill the conditions for the enrollment in the study programme to which he is transferring.

The applications for transfer to the doctoral study Teacher Education and Educational Sciences shall be individually addressed by the Programme Council in accordance with the Criteria for Transferring between the Study Programmes, with the Rules of the Faculty of Education, and with the Statute of the University of Ljubljana.

At transferring it can be recognized as follows:

- Comparable study obligations that the student fulfilled in the first study programme,
- Informally acquired comparable knowledge.

The student shall demonstrate his previously acquired knowledge by the submission of the relevant documentation thereto.

The recognition of informal knowledge and skills acquired prior to enrollment shall be decided on by the Senate of the Faculty of Education upon the proposal of the Programme Council and on the basis of the written application of the student, of the enclosed written certificates and other documents attesting to the acquired knowledge and the content thereof, and in accordance with the Rules of Procedure and the Criteria for the Recognition of Informally acquired Knowledge and Skills, adopted by the Senate of the University of Ljubljana at its meeting on 29 May 2007, and with the Rules of Procedure and Criteria for the Recognition of Informally Acquired Knowledge and Experience, as adopted at the meeting of the Senate of the Faculty of Education on 18 May 2006.

### **Conditions for completion of the study programme**

Requirements for completing the studies and obtaining the science doctorate title (PhD) are as follows:

- All fulfilled obligations of the organized doctoral studies in the scope of 60 ECTS credits, as well as the obligations of the individual research work for the doctoral dissertation in the scope of 180 ECTS credits,
- Presentation of the research results,
- At least one original scientific article from the doctoral dissertation contents published or approved for publication in accordance with the doctoral studies provisions of the Rules of the University of Ljubljana, and
- Successfully defended doctoral dissertation.

### **Requirements for completing individual parts of the program, if applicable**

The program does not contain such parts.

#### **Obtained academic title (male):**

- Doktor znanosti (DR)

#### **Obtained academic title (female):**

- Doktorica znanosti (DR)

#### **Scientific title**

- dr.

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1<sup>st</sup> year

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0073673	Theoretical Concepts in the Field of the Teacher Education and Educational Science	Pavel Zgaga	10	15	0	0	0	125	150	5	1st semester	no
2.	0073674	Research Approaches in the Field of the Teacher Education and Educational Science	Janez Jerman, Janez Vogrinc	10	15	0	0	0	125	150	5	1st semester	no
3.	0073675	Doctoral Seminar I	Janez Vogrinc	0	30	0	0	0	120	150	5	1st semester	no
4.	0073682	Study Orientation Module I		10	15	0	0	0	125	150	5	1st semester	no
5.	0073679	Elective Modul 1		10	15	0	0	0	125	150	5	1st semester	no
6.	0073677	Module of individual research work		0	0	0	0	0	150	150	5	1st semester	no
7.	0073676	Contemporary Trends in Research in the Field of	Janez Krek	10	15	0	0	0	125	150	5	2nd semester	no

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		the Teacher Education and Educational Science											
8.	0073678	Doctoral Seminar II	Janez Vogrinc	0	30	0	0	0	120	150	5	2nd semester	no
9.	0073680	Elective Modul 2		10	15	0	0	0	125	150	5	2nd semester	no
10.	0073681	Elective Modul 3		10	15	0	0	0	125	150	5	2nd semester	no
11.	0073683	Study Orientation Module II		10	15	0	0	0	125	150	5	2nd semester	no
12.	0076847	Module of individual research work		0	0	0	0	0	150	150	5	2nd semester	no
Total				80	180	0	0	0	1540	1800	60		

**2<sup>nd</sup> year**

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0073684	Doctoral Seminar III	Janez Vogrinc	0	30	0	0	0	120	150	5	1st semester	no
2.	0073685	Module of individual research work		0	0	0	0	0	600	600	20	1st semester	no
3.	0073686	Elective Modul 4		10	15	0	0	0	125	150	5	1st semester	no
4.	0076853	Module of individual research work		0	0	0	0	0	900	900	30	2nd semester	no
Total				10	45	0	0	0	1745	1800	60		



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**3<sup>rd</sup> year**

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0073687	Module of individual research work		0	0	0	0	0	900	900	30	1st semester	no
2.	0076855	Module of individual research work		0	0	0	0	0	900	900	30	2nd semester	no
		Total		0	0	0	0	0	1800	1800	60		

**4<sup>th</sup> year**

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0138193	Module of individual research work							900	900	30	1st semester	no
2.	0138194	Module of individual research work							900	900	30	2nd semester	no
		Total		0	0	0	0	0	1800	1800	60		

**Elective modules 1<sup>st</sup>, 2<sup>nd</sup> year** \* Student choose four modules from list below (1-60) up to 4 x 5 ECTS (20 ECTS together). Student can choose elective modules from other faculties of University of Ljubljana.

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0643427	Current contents of Home Economics education	Francka Lovšin Kozina, Stojan Kostanjevec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
2..	0073656	An Analysis of Good Teaching Practice in Teaching Physics	Jerneja Pavlin	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
3..	0075578	English in Education	Karmen Pižorn	15	30	0	0	0	105	150	5	1st semester, 2nd semester	yes
4.	0073640	Diagnostics in Education	Alenka Kobolt	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
5.	0073631	The Ethics of Educational Research	Janez Krek, Janez Vogrinc	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
6.	0073649	The Geometrical and Functional Modelling of Mechanical Elements, Machines and Devices	Stanislav Avsec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
7.	0073668	Informational Methods in Chemistry and Chemistry Education	Vesna Ferk Savec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
8.	0073647	Inclusive Work in Education	Irena Lesar, Mojca Peček Čuk	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
9.	0073641	Institutional and Extra-Family Education	Darja Zorc Maver	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes

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10.	0075184	Intelligent Tutoring Systems	Irena Nančovska Šerbec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
11.	0073671	An Interdisciplinary Approach to the Teaching of Selected Natural Science Content	Iztok Devetak	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
12.	0073654	The Interpretation of Literary Texts in Pedagogical Practice (Fairytale Telling)	Milena Mileva Blažič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
13.	0074647	Selected Chapters from Analysis	Marko Slapar, Tadej Starčič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
14.	0073670	Selected Chapters from Inorganic Chemistry in Chemistry Education	Barbara Modec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
15.	0074789	Selected Chapters from Geometry and Topology	Dušan Repovš	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
16.	0073665	Selected Chapters from Interdisciplinary Content Connected with Physics	Ambrož Kregar, Jerneja Pavlin	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
17.	0073657	Selected Chapters from Classical and Modern Physics	Ambrož Kregar, Gregor Bavdek, Sonja Jejčič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
18.	0073658	Selected Chapters from Contemporary Physics	Ambrož Kregar, Jerneja Pavlin, Sonja Jejčič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
19.	0075155	Educational Information Systems	Irena Nančovska Šerbec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
20.	0073633	Cognitive Science,	Urban Kordeš	10	15	0	0	0	125	150	5	1st semester,	yes

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		Learning and Teaching										2nd semester	
21.	0073630	Conceptualisations of the University and Research Space	Pavel Zgaga	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
22.	0075652	Conceptualizations of Justice and Equality in education	Slavko Gaber	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
23.	0643434	Visual art expression as language	Jurij Selan	15	10	0	0	0	125	150	5	1st semester, 2nd semester	yes
24.	0073642	Youth in the Postmodern	Špela Razpotnik	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
25.	0073632	Planning, Acquisition and Leadership of Projects in the Area of Education and Research	Slavko Kocijančič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
26.	0642783	Advanced statistical analysis in educational research	Janez Vogrinc	5	0	20	0	0	125	150	5	1st semester, 2nd semester	yes
27.	0075678	Design strategies and research of personal art language	Bea Tomšič Amon	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
28.	0073651	Optimising the Efficiency of Technical Education	Janez Jamšek	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
29.	0075634	Aspects of otherness of Pupils/Students and of the School/Kindergarten Culture	Irena Lesar	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
30.	0073628	Writing Scientific Articles and Presenting Research Results	Janez Vogrinc	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
31.	0643437	Arts therapy in various educational settings	Robert Potočnik	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
32.	0073655	Teaching Intercultural Youth Literature	Milena Mileva Blažič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
33.	0075253	The spatial Context of	Bea Tomšič	10	15	0	0	0	125	150	5	1st semester,	yes

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		the Educational Process	Amon									2nd semester	
34.	0073977	The Computer Supported Natural Science Laboratory in Education	Slavko Kocijančič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
35.	0075186	Computer Support of Forms of Cooperative Learning	Jože Rugelj	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
36.	0643440	Exploring experience	Toma Strle, Urban Kordeš	10	10	10	0	0	120	150	5	1st semester, 2nd semester	yes
37.	0075254	Researching the Teaching of Visual Arts Activities	Bea Tomšič Amon	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
38.	0643452	Research in Education for Sustainable Development	Iztok Devetak	15	0	10	0	0	125	150	5	1st semester, 2nd semester	yes
39.	0643449	Research in STEM Education	Iztok Devetak	15	0	10	0	0	125	150	5	1st semester, 2nd semester	yes
40.	0075252	Researching the Role of Theatrical Forms in the Curriculum	Helena Korošec, Vesna Geršak	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
41.	0643454	Understanding school reform	Janez Krek	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
42.	0073669	The Development of New Experiments for the Qualitative Knowledge of Chemistry	Vesna Ferk Savec	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
43.	0073666	The Development and Verification of the Efficiency of Teaching New Content in Physics	Jerneja Pavlin	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
44.	0073689	The Development of Natural Science Concepts and Approaches in Childhood	Gregor Torkar	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes

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45.	0075154	Representation and Mathematics Instruction	Tatjana Hodnik	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
46.	0075150	Symmetry	Aleksander Malnič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
47.	0073643	Social In/Exclusion and Social Minorities	Špela Razpotnik	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
48.	0073650	Contemporary Technical Education	Janez Jamšek	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
49.	0073646	Counselling Processes	Alenka Kobolt	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
50.	0643455	Students with special needs in higher education	Milena Košak Babuder	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
51.	0073645	Gender Studies and Education	Špela Razpotnik, Veronika Tašner	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
52.	0075662	Research Trends in Natural Science Education	Iztok Devetak	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
53.	0075655	Learning and Individual Differences	Mojca Juriševič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
54.	0075666	Early Foreign Language Learning and Teaching	Karmen Pižorn	30	15	0	0	0	105	150	5	1st semester, 2nd semester	yes
55.	0073644	Participative Research in Social Pedagogy	Urban Kordeš	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
56.	0073648	Administrative Legal and Organisational Administration Aspects of Executing Preschool Education	Sanja Berčnik	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
57.	0075251	Multi-Conceptualisation in Education	Jože Rugelj	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
58.	0073629	Higher Education Didactics	Milena Valenčič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes

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			Zuljan										
59.	0075575	Visualisation in Research	Jurij Selan	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
60.	0643456	Integrating movement into the teaching process	Vesna Štemberger	5	0	20	0	0	125	150	5	1st semester, 2nd semester	yes
61.	0073652	The Inclusion of Themes about New Technologies in Technical Education	Slavko Kocijančič	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
62.	0643459	Leadership and management in education	Marjan Šimenc	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
63.	0075671	Content and Language Learning (CILL) in English as a Foreign Language	Karmen Pižorn	15	30	0	0	0	105	150	5	1st semester, 2nd semester	yes
64.	0073639	Moral Education in the State School	Irena Lesar, Mojca Peček Čuk	10	15	0	0	0	125	150	5	1st semester, 2nd semester	yes
65.	0643460	Evidence based approaches in speech-language pathology	Damjana Kogovšek	10	15	0	0	0	125	150	5	1st semester, 2nd semester	no
Total				680	945	60	0	0	8065	9750	325		

**Orientation modules** \* Student chooses one orientation (I. and II.) module up to 10 ECTS

Educational Science (scientific field)  
Direction has no subjects.

Educational policies (direction/track)

				Contact hours									
University	Course title	Lecturers		Lectures	Seminar	Tutorials	Clinical	Other	Individual	Total	ECTS	Semesters	Elective

*Faculty of Education University of Ljubljana, Doctoral Study Programme  
EDUCATION OF TEACHERS AND EDUCATIONAL SCIENCES, 3<sup>rd</sup> Cycle*

*Study year 2025/26*

	Course Code						tutorials	forms of study	student work	hours			
1.	0076547	Educational Policies I	Slavko Gaber	10	15	0	0	0	125	150	5	1st semester	no
2.	0076549	Educational Policies II	Slavko Gaber	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

Preschool education (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076557	Preschool Education I	Sanja Berčnik	10	15	0	0	0	125	150	5	1st semester	no
2.	0076558	Preschool Education II	Sanja Berčnik	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

Social education (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076560	Social Education I	Darja Zorc Maver	10	15	0	0	0	125	150	5	1st semester	no
2.	0076596	Social Education II	Špela Razpotnik	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

Special and rehabilitation education (direction/track)

				Contact hours									
	University	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical	Other	Individual	Total	ECTS	Semesters	Elective



*Faculty of Education University of Ljubljana, Doctoral Study Programme  
EDUCATION OF TEACHERS AND EDUCATIONAL SCIENCES, 3<sup>rd</sup> Cycle*

*Study year 2025/26*

	Course Code						tutorials	forms of study	student work	hours			
1.	0076605	Special and Rehabilitation Education I	Mojca Lipeč Stopar	10	15	0	0	0	125	150	5	1st semester	no
2.	0076607	Special and Rehabilitation Education II	Mojca Lipeč Stopar	10	15	0	0	0	125	150	5	2nd semester	no
Total				20	30	0	0	0	250	300	10		

Supervision, organisation and personal counselling (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076608	Supervision, Personal and Organizational Counselling I	Tomaž Vec	10	15	0	0	0	125	150	5	1st semester	no
2.	0076609	Supervision, Personal and Organizational Counselling II	Tomaž Vec	10	15	0	0	0	125	150	5	2nd semester	no
Total				20	30	0	0	0	250	300	10		

Teacher Education (scientific field)

Direction has no subjects.

Teaching social sciences and the humanities (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076616	Teaching Social Sciences and the	Janez Krek	10	15	0	0	0	125	150	5	1st semester	no

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*Study year 2025/26*

		Humanities I											
2.	0076618	Teaching Social Sciences and the Humanities II	Janez Krek	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

Teaching mathematics, computing, natural sciences and technical studies (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076619	Teaching Mathematics, Natural Sciences, Computing and Technical Studies I	Tatjana Hodnik	10	15	0	0	0	125	150	5	1st semester	no
2.	0076620	Teaching Mathematics, Natural Sciences, Computing and Technical Studies II	Tatjana Hodnik	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

Teaching in the area of art (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076622	Teaching in the Area of Art I	Bea Tomšič Amon	10	15	0	0	0	125	150	5	1st semester	no
2.	0076623	Teaching in the Area of Art II	Bea Tomšič Amon	10	15	0	0	0	125	150	5	2nd semester	no
		Total		20	30	0	0	0	250	300	10		

*Faculty of Education University of Ljubljana, Doctoral Study Programme  
EDUCATION OF TEACHERS AND EDUCATIONAL SCIENCES, 3<sup>rd</sup> Cycle*

*Study year 2025/26*

Teaching Slovene language and literature (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076631	Teaching Slovene Language and Literature I	Igor Saksida	10	15	0	0	0	125	150	5	1st semester	no
2.	0076632	Teaching Slovene Language and Literature II	Igor Saksida	10	15	0	0	0	125	150	5	2nd semester	no
Total				20	30	0	0	0	250	300	10		

Teaching, learning and education (direction/track)

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0076639	Teaching, Learning and Education I	Mojca Juriševič	10	15	0	0	0	125	150	5	1st semester	no
2.	0076640	Teaching, Learning and Education II	Mojca Juriševič	10	15	0	0	0	125	150	5	2nd semester	no
Total				20	30	0	0	0	250	300	10		

## **SHORT DESCRIPTION OF MODULES**

### **OBLIGATORY MODULES**

#### **Theoretical Concepts in the Field of Teacher Education and Educational Science**

Participants in this module gain an insight into the diversity of theoretical concepts on which research work in the area of teacher education and educational sciences is based, as well as acquiring the skills for the interdisciplinary, multidisciplinary and transdisciplinary treatment of research problems. The module includes an in-depth examination of certain specific disciplinary perspectives, and builds upon these with an orientation towards broader problem perspectives. Thus participants are equipped to recognise the broader problems and dilemmas that from this perspective connect them with the wider context of the themes of their doctoral dissertation, while at the same time seeking new conceptual solutions to the problems set.

#### **Research Approaches in the Field of Teacher Education and Educational Science**

The aim of this subject is to round off the methodological and statistical knowledge already gained, and then broaden and deepen this knowledge with methods and approaches that are particularly relevant to research in the area of teacher education and educational sciences. The goal of the module is to equip participants to independently plan and execute empirical research: from the appropriate conceptualisation and survey of the current situation in a particular field, through the setting of theoretically-based research questions and the selection of appropriate research approaches and methods, to the analysis and interpretation of data and the forming of conclusions important for implementation in the educational process.

#### **Contemporary Trends in Research in the Field of Teacher Education and Educational Science**

The goal of this subject is the study and analysis of contemporary trends in research in the area of teacher education and educational sciences. Participants analyse specific Slovene and international empirical or theoretical research, both completed and in progress, relevant to their individual research work: its theoretical assumptions, research questions, questions of implementation and interpretation, as well as the publication and use of results. Within the framework of the module participants develop the ability to integrate theoretical conceptions, research-methodological knowledge and practical experience, as well as developing a capability for (self)reflection on and (self)criticism of research work.

#### **Doctoral Seminar I, II and III**

In this module students gain the basic knowledge and skills required to successfully plan and execute the disposition of the doctoral dissertation and the subsequent research work. The goal of the module is the development of interdisciplinary dialogue, the creative and collaborative solution of problems, and the development of critical approaches to one's own research work.

## **STUDY ORIENTATION MODULES**

### **Teaching, Learning, and Education I and II**

The goal of this module is a deeper knowledge of and reflection on the pedagogical, psychological, sociological, and philosophical aspects of teaching, learning and education. Participants become familiar with, analyse and reflect upon theories, concepts, facts, perceptions and conceptions in these areas, with an emphasis on the classroom and school as institutions, and on the social, educational, ethical and value aspects of the educational process.

### **Teaching Slovene Language and Literature I and II**

Participants in this module undertake an in-depth examination of contemporary conceptions of language and of literature and literature education. They develop a capacity for critical reflection upon contemporary linguistic-didactic and literature-didactic concepts and upon the role of the teacher in these. They gain a deeper understanding of the theoretical points of departure for the description of the reading experience and the process of reading, the connection of activities and goals in the development of reading (the interconnectedness of attitudes towards reading, reading ability and literary knowledge), as well as contemporary forms of school interpretation of various genres and types of youth literature.

### **Teaching Mathematics, Natural Sciences, Computing and Technical Studies I and II**

Participants in this module gain an insight into the historical, developmental and conceptual context within which has taken place and continues to take place the development of methods, approaches and implementation of themes in the teaching and learning of content in biology, physics, chemistry, mathematics, natural sciences, computing and technical studies.

### **Teaching Social Sciences and the Humanities I and II**

Within the framework of this module students become familiar with the didactics of social sciences as a synthesis of pedagogical knowledge from individual or integrated social science disciplines, and gain a knowledge of the applicative significance of the didactics of social sciences from the perspective of the competence of the pupils. They undertake an international comparison of the development of social science curricula, with an emphasis on the primary grade level and the current problems of social science instruction in Slovenia, as well as approaches to the solution of these problems. Participants become familiar with the common European heritage of political, cultural, moral and spiritual values upon which civilised society is founded, and gain a knowledge of the historical development of the notion of human rights and liberties, the ethics of human rights and the value basis of the state school.

### **Teaching in the Area of Art I and II**

Participants in this module gain an insight into the historical and conceptual context of the treatment of art in the school curriculum and acquire an ability to recognise specific problems and dilemmas connected with the research of pedagogical work in the area of art. They deepen and connect their knowledge of theoretical concepts in the education and research of art; they develop their capacity for critical reflection on the field of art; they develop an ability to recognise and solve ethical questions in the pedagogical-arts field and to form their own identity in the university and pedagogical arts research sphere.

### **Social Education I and II**

Participants in this module gain an insight into the development, key themes, context and discourse of social education as a scientific discipline and research science, and are equipped for the substantive/conceptual positioning and understanding of social education in the field of sociological in other disciplines. The purpose of the module is to develop a broad multidimensional, multiperspectival view of social problems and the role of social education as a science in contemporary postmodern society, and to develop a critically reflective understanding of contemporary society. Participants gain a deep insight into the individual areas, fields and foci of social education work and the specifics of their content. The key goal of the module is to contribute to the development and formation of appropriate social education responses to the various problems of individuals and groups, and to establish the conditions for the prevention, reduction and elimination of these problems.

### **Special and Rehabilitation Education I and II**

The purpose of this subject is to acquaint participants with contemporary trends in inclusive educational practice and in research in the area of special and rehabilitation education, specifically for the research area that is the topic of interest of the individual candidate; to enable participants to increase the quantity, quality and innovativeness of scientific research and development work in the area of special and rehabilitation education, in partnership with the users; and to equip participants for implementing individual research and for cooperating in interdisciplinary research teams in the area of education and rehabilitation.

### **Preschool Education I and II**

Within its framework this module treats traditional and contemporary concepts of childhood and education from the perspective of various sciences, the comparative analysis of research from the area of childhood, indicators of quality childhood and preschool education in kindergarten, findings from the study of early childhood and their implementation in preschool practice, kindergartens as a space of ethical and political practice, socio-cultural interaction between children and between children and adults in kindergarten, and the linking of kindergarten with other institutions in which children are included.

### **Educational Policies I and II**

The participants deepen their understanding of the relationship between various academic disciplines and educational policies as practices and their disciplinary and interdisciplinary conceptualisations, evaluations and reflections. Participants deepen and connect their knowledge of theoretical concepts and theoretical paradigms in education and research by reflecting on concrete areas of educational policies (preschool education, primary school, secondary school, adult education, language policies, the design of specific curricula, policies dealing with inequality, special needs, violence, etc.) and develop a capacity for critical reflection on the relationship of the academic sphere to educational policies, and of educational policies to theoretical conceptualisations of the school sphere.

### **Supervision, Personal and Organisational Counselling I and II**

Participants in this module broaden and upgrade the competences already gained with regard to the understanding and implementation of processes of supervision and personal and organisational counselling. They acquire competences for the in-depth analysis and evaluation of, and scientific reflection on, (personal, empirical, quantitative, qualitative) processes that unfold in supervision and personal and organisational counselling, as well as coaching. They are also equipped to position these processes in various working contexts.

## **ELECTIVE MODULES**

### **1. Current contents of Home Economics education**

The course is intended to acquaint students with the current contents of Home Economics education: Current content in Home Economics education, e.g. financial literacy, nutrition and health, self-care, home and family, textiles; Sustainable aspects of Home Economics education. Students deepen the understanding of the importance of Home Economics formation in modern society for the quality of life. They develop creativity and critical thinking in presenting/innovating strategies to solve current problems in various areas of the field of Home Economics education. They research and are able to critically evaluate various learning approaches, methods, forms from the perspective of effectiveness in addressing selected content in the area of Home Economics education. They know how to define a research problem, plan and conduct research. They critically evaluate the results of solving theoretical and practical problems in the field of current contents of Home Economics education.

### **2. An Analysis of Good Teaching Practice in Teaching Physics**

Participants in this module gain a familiarity with selected examples of efficient procedures and effective demonstrational and laboratory experiments from more demanding physics and interdisciplinary content. Participants become acquainted with selected effective teaching approaches in the teaching of physics content; they are made familiar with selected appropriate demonstrational and laboratory experiments and their role in the teaching and learning of physics content; they develop an ability to critically reflect upon specific teaching procedures; they develop a capacity to recognise and solve cognitively problematic questions; they form their own identity in the research space of specialist didactics of physics.

### **3. English in Education**

The purpose of the course is to enable the course participants to understand and use English in an ESP context. The participants become aware of the general features of the English language in the spoken and written discourse in educational disciplines and the special features of English in an ESP educational context. The students also become aware of the language use in English spoken and written texts, special features of academic and research based vocabulary, the use and the production of the written discourse etc. in educational contexts (including instructional, academic and research texts). The participants develop the skills of monitoring, noticing and understanding of academic and research based spoken and written texts in English in educational contexts, develop the skill of writing academic texts in English in educational contexts, and focus on their selected educational discipline(s), develop the skill of producing spoken texts in English in educational contexts and focus on their selected educational discipline(s), develop the skill to foster intercultural dialogue and contribute to understanding and respecting of intercultural differences and uniquenesses in academic and research based contexts.

### **4. Diagnostics in Education**

Participants in this module broaden and upgrade their competences gained in the diagnosis, understanding and evaluation of the individual's life situation, social context, individual characteristics, obstacles, disturbances/difficulties, as well as skills, competences, sources and strengths. They broaden/deepen their competences for the analysis of the interactive aspect of the emergence and persistence of learning, emotional, behavioural and other difficulties/disturbances in the pedagogical and educational field. They evaluate the significance of the differentiation of evaluation and treatment, and become familiar with the scientific basis of evaluation and intervention.

### **5. The Ethics of Educational Research**

Students acquire a basic knowledge of the ethical problems connected with scientific research. They become familiar with paradigmatic examples of ethical dilemmas faced by researchers in natural science, social science and above all educational research. On the successful completion of the module it is expected that students will have a knowledge of the principal ethical theories within the framework of which they recognise and attempt to solve the moral dilemmas of research; that they will know how certain professional ethical codices, international declarations, laws and ethical commissions attempt to ensure the ethical incontestability of research; and that they will know how to identify, describe and explain the diverse moral dilemmas that are characteristic of various types of research.

**6. The Geometrical and Functional Modelling of Machine Elements, Machines and Devices**

Participants in this module select one technical area and research the possibility for the inclusion of the selected content in educational practice on one or more levels from primary school to undergraduate study at universities or tertiary technical schools. Participants gain a state-of-the-art overview of various technical areas, they deepen their knowledge of the selected technical area, they seek relevant connections between the selected technical area and their IRW, they plan and initiate the transfer of content and knowledge from the selected technical area to education in the area of technical studies and technology, taking into account the level(s) of education.

**7. Informational Methods in Chemistry and Chemistry Education**

This module is aimed at a familiarity with and application of heuristic approaches to the synthesis, visualisation and evaluation of chemistry knowledge. Participants develop the following competences: a familiarity with and application of the basic techniques of the representation of knowledge; the flexible use of tools for the synthesis of knowledge and representation with conceptual networks; an understanding of the significance of visualisation for the development of the visual memory and spatial conception of learners; the development of methods for the self-evaluation of knowledge and an ability to assess the significance of structures of knowledge in chemistry education.

**8. Inclusive Work in Education**

Participants in this module acquire and develop an understanding of, and an ability to implement, inclusivity in the entire field of education. They deepen and connect their knowledge of the concept of inclusivity and the conditions that ensure inclusive processes; they develop a capacity for critical reflection on processes, attitudes, situations and other factors that enable (or disable) and/or encourage (or inhibit) inclusivity; they influence the processes that create the conditions for cooperation, equal opportunity, equal access and fairness in the school system and educational institutions; they reflect upon the conditions that contribute to ensuring non-discriminatory work, taking into account diversity, and they develop practical processes of inclusive work.

**9. Institutional and Extra-Family Education**

Students deepen their knowledge of the area of institutional and extra-family education, they deepen and connect their knowledge of innovations in research in the areas of the various institutions in which social pedagogy is located (kindergartens, schools, student homes, educational institutes, penal institutions, old people's homes, chronically ill, etc.), they develop an ability to critically reflect upon the activities of this profession, and to develop the profession in the area of extra-family education and methods.

**10. Intelligent Tutoring Systems**

Participants in this module gain an insight into the concept of intelligent tutoring and an overview of supporting technologies, above all semantic technologies. They gain a knowledge of the theoretical conceptual spheres of knowledge in education. They develop an ability to connect previously gained knowledge from various areas, to cooperatively solve pedagogical problems in the context of adaptive systems and to adapt learning environments to specific educational contexts.

**11. An Interdisciplinary Approach to the Teaching of Selected Natural Science Content**

Participants deal with the significance of informational methods in structuring knowledge, conceptions of networks, approaches to the interdisciplinary treatment of natural science content, and methods of including research achievements in the treatment of selected content in school practice. Within the framework of the module they also deal with a range of natural science content, such as the circulation of matter in nature and organisms in nature.

**12. The Interpretation of Literary Texts in Pedagogical Practice (Fairytale Telling)**

This module is aimed at equipping doctoral candidates for research of the spoken and written interpretation of youth literature texts and youth texts by non-youth authors, for the comparative analysis of literary texts and their reworking in various media and arts (illustrations, music, cartoons, film, fairy tale circles, the telling of fairy tales, etc.), for the comparative analysis of translations of the same motive and its equivalents in various



cultures, media and reworkings. Within the framework of the module participants are equipped for the spoken and/or written interpretation of folk, original and contemporary fairy tales in various pedagogical practices.

**13. Selected Chapters from Analysis**

Participants in this module gain a comprehensive insight into the basic concepts of mathematical analysis. They become familiar with the historical context of relevant problem issues, as well as with modern methods in mathematical analysis. Participants deepen and connect professional and specialised didactic knowledge about new concepts in analysis. They deal with selected fundamental topics in the area of the development of basic mathematical analysis, with an emphasis on connections with other branches of mathematics.

**14. Selected Chapters from Inorganic Chemistry in Chemistry Education**

Participants gain an in-depth knowledge of selected areas of inorganic chemistry. They actively participate in research: examining relevant literature, planning the synthesis of compounds, becoming familiar with various methods of characterising compounds and the practical application of these methods.

**15. Selected Chapters from Geometry and Topology**

Participants in this module gain an insight into the historical and conceptual context in which the development of the methods, approaches and implementation of topics from geometry and topology and their teaching has taken place and continues to take place. Participants deepen and connect professional and specialised didactic knowledge about new concepts in geometry and topology. They develop an ability to critically reflect upon specific teaching processes, and to recognise and solve cognitively problematic questions in this field.

**16. Selected Chapters from Interdisciplinary Content Connected with Physics**

In this module participants become familiar with the scientific treatment of selected research that is current in the science of physics, as well as the conceptual and recognised cognitive problems of this research. Selected interdisciplinary themes are treated in which physics content is important, with a particular emphasis on the specialist didactic treatment of these themes.

**17. Selected Chapters from Classical and Modern Physics**

Participants in this module become familiar with the scientific treatment of selected complex content in the area of classical and modern physics, and its conceptual and recognised cognitive problems. They deepen and connect their professional and specialised didactic knowledge about selected complex concepts of classical and modern physics, and develop an ability for critical reflection on specific teaching procedures linked with this content.

**18. Selected Chapters from Contemporary Physics**

In this module participants become familiar with the scientific treatment of selected research that is current in the science of physics, as well as the conceptual and recognised cognitive problems of this research. Participants gain a knowledge of selected new scientific findings in the area of physics, they work through selected case studies of the transfer of recent scientific findings to teaching physics and they develop a capacity for critical reflection on specific teaching procedures connected with this content.

**19. Educational Information Systems**

Participants in this module gain an insight into the concept of the operation, development and application of information systems. Particular emphasis is placed on information systems for educational purposes. Participants deepen and connect their knowledge of the theoretical concepts of information systems by becoming familiar with practice; they deepen and connect their knowledge of professional and didactic concepts of the application of information systems; they develop an ability to critically evaluate information systems and to critically reflect upon the achieved goals of the application of information systems.

**20. Cognitive Science, Learning and Teaching**

The goal of this module is to enable an insight into the most contemporary interdisciplinary procedures in the research of learning and teaching, and into the application of the findings of cognitive science and the science of learning in education and in the informal and formal learning environment.

**21. Conceptualisations of the University and Research Space**

Participants in this module gain an insight into the historical and conceptual context in which the development of academic institutions, particularly universities, has taken place and continues to take place, and they are equipped to recognise specific problems and dilemmas connected with the roles of researcher and/or pedagogue within these institutions. Participants deepen and connect their knowledge of theoretical concepts in education and research. They develop an ability to critically reflect on the academic space, and to recognise and solve ethical questions in this space.

## **22. Conceptualizations of Justice and Equality in education**

The module participants gain an insight in the creation of the concept of equality and justice in education. The participants deepen and broaden knowledge and understanding of various conceptual formulations of the problem issues, develop abilities to reflect on creating the concepts, develop abilities to recognize and solve ethical issues in this area, establish their own research identity and delve into understanding the issue of professional ethics, find relevant connections between the addressed topic with their individual research work and confront their findings with the findings of other group members.

## **23. Visual art expression as language**

The course is aimed at learning about and researching current issues in the field of visual art expression, artistic development and visual art language: Complexity, structure and specifics of visual art language: visual art competence as linguistic competence; double articulation in artistic language; breakdown and levels of artistic language; comparison between artistic language and other forms of linguistics; differences between everyday and poetic language. Semiotic theories about visual art language: models and artifacts; semantic and aesthetic information; denotation and exemplification; complexity and entropy in the arts. Contemporary theories in the field of visual art language development in children: artistic syntax as a form; two levels of art syntax (art space and composition); depth and surface structure of artistic syntax, relationships between forms and between forms and format in artistic space and artistic composition. Forming a research problem and preparing a research plan in the field of visual art expression and visual art language.

## **24. Youth in the Postmodern**

Participants develop a deeper insight into theoretical approaches to the research and conception of youth. They acquire contemporary paradigms of the understanding of young people and youth – identity policies, the collage of identities, cyclical passing on, the postponement of maturity, etc. They understand the diversity of responses of young people to risk, globalisation and post-industrial modernisation, as well as to individualisation, which demonstrates an ambivalent picture – from psychosocial demoralisation to altruistic individualism. They develop a critical insight into the significance of the institutional barriers of contemporary society (risks) that represent obstacles to young people on the path to independence.

## **25. Planning, Acquisition and Leadership of Projects in the Area of Education and Research**

Participants in this module gain an insight into the opportunities available for acquiring various national and international projects in the area of development and research. They are equipped for planning, leading and evaluating projects. Participants seek out relevant information important for acquiring national and international projects; they develop the leadership, financial-administrative and professional capabilities necessary for planning and leading projects in a team; they study various methods of evaluating and assessing project proposals and already completed projects; and they assess and evaluate selected case studies of project applications and reports about already concluded projects.

## **26. Advanced statistical analysis in educational research**

Participants will learn to distinguish between different complex statistical methods of multivariate analysis, which are applied in the field of the educational research. Students will gain knowledge for independent data analysis using advanced multivariate statistical methods in SPSS program.

The aim of the course is to round off the already acquired statistical knowledge, and to expand and deepen it with methods that are especially relevant for research in the field of teacher education and educational sciences and in the field of educational research.

## **27. Design strategies and research of personal art language**

Participants at own and foreign art works refresh and deepen knowledge in the field of fine arts formal analysis, identify more and less productive links between art expression means, plan and realize their own

design strategies, critically evaluate their own and foreign results and design strategies that generated them, develop the capacity for critical reflection in fine-art and civilization within the widest possible cultural area, explore procedures for the application of independent artistic planning in primary and secondary school, find relevant links between the subject matter and their individual research plans.

**28. Optimising the Efficiency of Technical Education**

Within the framework of this module a brief survey is undertaken of the history of technical education, its role and the necessity to optimise its efficiency; selected characteristic topics regarding the optimisation of the efficiency of technical education are analysed; emphasis is placed on the teaching of specific current content; selected examples of effective new teaching techniques are analysed along with selected examples of the development of the most demanding demonstrational and laboratory experiments.

**29. Aspects of otherness of Pupils/Students and of the School/Kindergarten Culture**

Participants of the module learn various aspects of otherness of children/pupils/students and the impact of these on cultivating the school/kindergarten culture, as well as on direct pedagogical work. They develop ethical responsibility in social and communication responses to children/pupils/students who are different, and are qualified to improve the known solutions and propose the new ones. They are able to define and formulate the research problem, which contributes to greater inclusion of those who are different in education and to cultivate a respectful school culture. They develop ethical responsibility at work with people and at conducting research.

**30. Writing Scientific Articles and Presenting Research Results**

The purpose of this subject is to equip participants for writing scientific texts and presenting these texts to the professional audience. Participants become familiar with the general characteristics of scientific writing and with the specifics of individual disciplines in the area of teacher education and educational sciences. They become acquainted with the Slovene and foreign journals that are indexed by SCI-Expanded, SSCI and A&HCI and are relevant to the individual discipline, as well as with other databases. They apply the theoretical foundations to the practical creation of a scientific text in the selected discipline and content area.

**31. Arts therapy in various educational settings**

Knowledge and recognition of the possibilities of dealing with content according to the user group. Creating appropriate art therapy activity in different educational environments. Creative process and its meaning (preparation, incubation, illumination, evaluation). Methods based on psychotherapeutic approaches.

**32. Teaching Intercultural Youth Literature**

Participants upgrade their reading, analysis and assessment of contemporary world and Slovene youth literature; they develop the ability to research literary science, literary history and literary theory; they critically assess the (lack of) autonomy of contemporary youth literature and the significance of cultural connections; they undertake individual scientific research and apply the theoretical findings and didactic principles of intercultural youth literature in practice.

**33. The Spatial Context of the Educational Process**

Participants in this module gain an insight into the historical and conceptual treatment of architectural space as a context for the educational process, and are equipped to recognise specific problems and dilemmas connected with the organisation and use of space in school.

**34. The Computer Supported Natural Science Laboratory in Education**

Participants in this module select themes from the area of natural sciences, with an emphasis on physics, chemistry or biology, and research the possibility for the inclusion of the technology of computer supported measurement and guidance in educational practice on one or more levels from primary school to undergraduate study. Participants gain an overview of various areas of computer supported measurement and guidance, and deepen their knowledge of the selected natural science area.

**35. Computer Support of Forms of Participative Learning**

Within the framework of this module participants treat participative learning and teamwork in the use of ICT in education. They deal with distance learning with ICT, with technology for supporting communication and

participation from a remote location, with synchronous and asynchronous forms of team communication, and with virtual classrooms and other environments for group work.

**36. Exploring experience**

The course presents the field of empirical investigation of lived experience, and trains students in the skill of researching experience, mainly through hands on research practice. It focuses on teaching first-person research approaches and important findings, emphasising those related to education sciences. The subject addresses contemporary scientific methods of researching experience, which will enable students to engage in competent and independent research work. The subject aims to redirect the focus towards lived human experience (experience as it manifests) and towards understanding the individual and individual's perspective.

**37. Researching the Teaching of Visual Arts Activities**

Participants in this module gain an in-depth insight into research work in the area of teaching the visual arts, and into leading activities for following such research work. They become familiar with specific research approaches, with discovering and solving the most demanding pedagogical and professional problems, and with leading pedagogical research projects in the area of the arts.

**38. Research in Education for Sustainable Development**

Participants get acquainted with the relevant scientific literature of the research on Education for Sustainable Development. Students analyze scientific literature, define the research problem and pose research questions, drawing on their own research interests.

Students get to know to the key elements of Education for Sustainable Development, analyze relevant scientific literature (magazine articles, monograph chapters, conference presentations, web resources) of research on Education for Sustainable Development, review of the scientific literature of the selected area and producing the critical report on the examined literature, create a specific research problem and pose research questions, drawing on the analyzed scientific literature, and integrate own research interests in the conducted analysis; produce the final critical report on the performed work and present the report to other group members.

**39. Research in STEM Education**

Students actively participate in the elective module and analyze the relevant scientific literature taking into account their research interest; their findings are justified in a critical dialogue with other participants; they draw the final report in form of a scientific report, based on their presentation and the discussion; the lecturer of the module provides immediate feedback information.

**40. Researching the Role of Theatrical Forms in the Curriculum**

Through theory and research, participants in this module broaden and deepen their knowledge of the development, concept and role of the teaching and learning of art in education; they deepen their knowledge of the basic theoretical concepts of art in education, with an emphasis on researching the role of performance art; they develop capabilities for the research and solving of scientific, professional and pedagogical problems from the area of art in education both in Slovenia and abroad;

they develop an ability to critically follow the most recent development of theory and practice in the area of the role of art in the curriculum of the primary school, the kindergarten and in the area of social-pedagogical work.

**41. Understanding school reform**

The module provides students with a description of the understanding of the function and processes in the dimension of school reform. The module deals with the problem of understanding the development of the education system by addressing the specifics of the individual, institutional and systemic level in function of the development of the quality of education and the identification of the links of intervention and the interconnection of different professional and systemic variables at school level. The application of the evidence-based approach will be modelled by the course and students will be exposed to the well-informed decision-making and policy-making process. During the module students will deal with phenomena such as regulation versus deregulation of the education system by analyzing models of different international organization of education systems that are known as good school systems according to academic literature and data generated by external international assessments. The module will help students make the connection

between relevant international indicators such as TALIS, PISA, TIMMS, and various references at the European and international level, while a strong focus of the course will be in understanding the management cycle of educational policies at the school level and teacher education. The module will address the dimensions of school culture and changing nature of teacher professionalism as two critical elements in school reform.

**42. The Development of New Experiments for the Qualitative Knowledge of Chemistry**

On the basis of a survey of the relevant literature, students develop innovative approaches to planning new chemistry experiments for various levels of schooling and independently prepare video recordings of the experiments. They study strategies for implementing experimental approaches in school in order to raise the quality of chemistry knowledge and they devise a proposal for the presentation and evaluation of the experiment.

**43. The Development and Verification of the Efficiency of Teaching of New Content in Physics**

Participants in this module are made familiar with selected case studies in the development and implementation of new teaching content in instruction (e.g., nanomaterial, polymerics, liquid crystals, etc.). At the same time, they learn about procedures for assessing the effectiveness of the presentation of new topics and for determining the achieved level of knowledge and understanding. They become acquainted with methods for assessing the effectiveness of teaching procedures (self-evaluation, forms of empirical evaluative research, the process of evaluative research, ethical standards of evaluation) and become familiar with the analysis of results of the assessment of the effectiveness of the procedures and methods treated.

**44. The Development of Natural Science Concepts and Approaches in Childhood**

Participants in this module gain an insight into how certain natural science concepts begin to develop in early childhood and into the nature of the path of this development, which is influenced by the maturity of the children, the children's experience and by the teaching of natural science. They broaden and deepen their knowledge of the development of natural science approaches (process knowledge) from early childhood to the transition from the concrete to the formal level of thinking.

**45. Representations and Mathematics Instruction**

Participants in this module gain an insight into the historical and conceptual context of the development of representations of concepts in mathematics and the significance of representations for the comprehensible teaching of mathematics. In addition, they deepen and connect their knowledge about theoretical concepts in education and about the research of representations of concepts in mathematics; they develop an ability to critically reflect upon representations in mathematics instruction, along with a capability to recognise and solve questions linked with issues related to representations.

**46. Symmetry**

Participants in this module gain an insight into the historical context in which the formal concept of the intuitive notion of symmetry developed. In addition to the specific mathematical tools necessary for the study of this phenomenon, participants are made familiar with the use and scope of this tool outside the field of mathematics. They are equipped to recognise specific problems and dilemmas connected with the role of researchers and/or teachers in this regard.

**47. Social In/Exclusion and Social Minorities**

Participants in this module gain a deeper insight into the area of social exclusion. They become familiar with the concepts, theories, research and research approaches in this field, and also with the models of professional work, towards which they develop a critical attitude. Participants deepen and connect their knowledge of theoretical concepts and research approaches in the area of social exclusion and they develop the ability to maintain a critical attitude towards the issues of the social exclusion of social minorities, marginalism and marginalisation, forms of discrimination and discriminatory professional activity.

**48. Contemporary Technical Education**

Participants deepen and connect their knowledge about theoretical concepts in technical education and research; they develop an ability to critically reflect upon specific teaching procedures; they develop an ability to recognise and solve cognitively problematic questions in this field.

#### **49. Counselling Processes**

Participants in this module gain an insight into the historical development of various counselling concepts and models of counselling work. They are equipped for reflection upon, and original research of, various problems and dilemmas connected with counselling processes in various contexts. Participants deepen and connect their knowledge of theoretical concepts in various counselling models; they develop critical reflection upon the counselling processes that are undertaken in various contexts; they develop an ability to recognise and solve ethical questions linked with processes of counselling; they build a professional identity in the role of counsellor in various contexts.

#### **50. Students with special needs in higher education**

The course aims to provide an introduction to the basic characteristics of students with special educational needs and the specifics of their general functioning in the higher education environment. Definition and characteristics of students with different special educational needs depending on the nature of the deficits, barriers or disabilities (students with sensory impairments, physical disabilities, long-term illnesses, autism spectrum disorders, speech and language disorders, specific learning difficulties). Access to effective study for students with special educational needs. Providing support for students with special educational needs. Alternative and augmentative communication. The role of information and communication technology (assistive technology) in supporting students with special educational needs. Teaching students with special educational needs in higher education - a universal design for learning (UDL). Challenges and good practises in the inclusion of students with special educational needs in higher education from the perspective of higher education teachers. Self-determination and self-advocacy skills for empowering students with special educational needs.

#### **51. Gender Studies and Education**

In the module Gender Studies and Education we will focus on, analyse and critically evaluate contemporary theoretical discourse about gender and gender difference within sociology and the broader context of social sciences and compare this discourse with the attitude of sociology to questions of gender prior to the emergence of feminist sociology. We will research the influence of gender on the position of the individual in the social structure and in everyday life practices. We will treat the (re)production and modification of gender differences in various areas, and will conceptualise various forms of violence in connection with the social construction of gender and the possibility of its modification. We will study and critically evaluate various research on gender in connection with education.

#### **52. Research Trends in Natural Science Education**

Participants get acquainted with the relevant scientific literature of the research on natural science education. Students analyze scientific literature, define the research problem and pose research questions, drawing on their own research interests. Students get to know some contemporary research trends in natural science education, analyze relevant scientific literature (magazine articles, monograph chapters, conference presentations, web resources) of research on natural science education, review of the scientific literature of the selected area and producing the critical report on the examined literature, create a specific research problem and pose research questions, drawing on the analyzed scientific literature, and integrate own research interests in the conducted analysis, produce the final critical report on the performed work and present the report to other group members.

#### **53. Learning and Individual Differences**

Reflective development of new knowledge on the basis of comprehensive understanding of theoretical concepts and research cognitions of psychology of learning, with particular emphasis of the importance of individual differences and their consideration. Identifying (practical) problems in (early) learning and teaching and proposing their solutions by employing a scientific research approach. Fostering learning and social cohesiveness. Interdisciplinary and creative communication in the scientific research area.

#### **54. Early Foreign Language Learning and Teaching**

The main aim of the course is to enable students to understand, analyze, synthesize and evaluate Early Foreign Language Learning and Teaching. The students are informed of the main features and idiosyncrasies of the teaching approaches at this age level. The students acquire and understand the concepts and the fundamentals

of early foreign language learning and teaching. The students are able to understand, analyze and evaluate the research studies on early foreign language learning and teaching. The students are able to use concepts and the research findings of early foreign language learning and teaching.

**55. Participative Research in Social Pedagogy**

The main goal of this module is to make students familiar with the concept of participative research, with the appropriate approaches, and above all with methodological and existential examples of such research. The subject also touches upon ethical content and sharpens the students' feeling for context, for the research contribution to the construction of the social situation and for seeking/building agreement through dialogue.

**56. Administrative Legal and Organisational Administration Aspects of the Implementation of Preschool Education**

Participants in this module upgrade their knowledge of interdisciplinary approaches in educational policies. They gain a comprehensive understanding of the theory of the status definition of public institutes in the area of education and of the theory of planning, as well as the theory of decisionmaking and assessment in the area of the preparation and execution of projects, policies and measures. They also develop an ability to understand and apply appropriate methodologies in educational policies.

**57. Multi-Conceptualisation in Education**

Participants in this module develop the knowledge required for devising and planning demanding forms of work with multi-conceptualisation in the area of education, along with an ability to evaluate such work. The topics treated: the cognitive theory of learning with multi-conceptualisation, models and styles of learning in virtual multi-conceptualisation learning environments, technologies to support multi-conceptualisation, the basic principles of devising more complex multi-conceptualisation teaching material, more demanding forms of the use of multi-conceptualisation (visualisations, animations, simulations, etc.), specific types of use of multi-conceptualisation in instruction in various subject areas.

**58. Higher Education Didactics**

The goal of this module is to equip participants for the considered planning, execution and assessment of the higher education study process. In a process of individual study and in the group execution of the subject participants become aware of the significance of reflection on, and evaluation and research of, their own pedagogical practice for a quality educational process and for the constant professional development of the individual higher education teacher.

**59. Visualisation in Research**

Participants in this module gain an understanding on the theoretical level of the matrix of the interactive and functional space between knowledge, science and visualisation and the action radius of visualisation in scientific research; they gain a practical understanding of the role of the imagination, relatedness and sense evidence in the formulation of scientific problems and in the planning of their solution; when undertaking scientific research they gain the ability to differentiate between the exterior and interior of the studied phenomena.

**60. Integrating movement into the teaching process**

This course is designed to teach participants the importance of integrating movement into the individual's teaching and work process. The course will include: Sedentariness as a problem of modern man, integration of movement into the educational process, integration of movement into the work process, designing the learning/working environment in a way that promotes movement. Special attention will be given to identifying and analysing the problems of modern man related to a movement-limiting lifestyle that leads to a range of health problems and, in the case of younger people (children and adolescents), cognitive, social, and emotional problems. The various ways in which exercise can be integrated into a person's daily life at work or in the workplace are presented and explained, taking into account the specifics and needs of the individual. Emphasis is also placed on the design and preparation of various environments conducive to movement in which individuals can best meet their need for movement.

**61. The Inclusion of Themes about New Technologies in Technical Education**

Participants in this module select one area of new technology and research the opportunities for the inclusion of the selected content in educational practice on one or more levels from primary school to undergraduate study. Participants gain an overview of various areas of current and new technologies; they deepen their knowledge of one area of new technology; they seek relevant links between the selected area of new technology and their IRW; they plan and initiate the transfer of content and knowledge from the area of new technology to education in the technical and technological field, taking into account the level(s) of education; they highlight the interdisciplinary character of the selected area of new technology and examine opportunities for the transfer of knowledge to various other areas; they prepare a proposal for the inclusion of new technologies in technological solutions in educational practice; they present and critically treat their proposal within the selected group.

**62. Leadership and management in education**

A student will acquire knowledge, understandings and conceptual consideration on leadership and management in education. A student will be able to connect, analyse, and synthesize key findings on leadership and management in education. A student will be able to critically evaluate/assess developmental trends. A student will be able to leadership and management in a broader social context.

**63. Content and Language Learning (CLIL) in English as a Foreign Language**

The main aim of the course is to enable students to understand, analyze, synthesize and evaluate CLIL. The students are informed with the main features and idiosyncrasies of this teaching approach. The students are able to understand CLIL principles in different social and educational environments. The students are able to understand, analyze and evaluate the research studies on CLIL. The students are able to use concepts and the research finding in CLIL.

**64. Moral Education in the State School**

Participants deepen and connect their knowledge of the achievement of the educational dimensions of the state school; they develop a capacity for critical reflection on processes, attitudes, situations and other factors that enable (or disable) and/or encourage (or inhibit) the achievement of educational goals; they reflect on the conditions and understand the processes that create the conditions for achieving educational goals on the level of working with a group or on the level of the institution as a whole.

**65. Evidence based approaches in speech-language pathology**

The course is designed to familiarise doctoral students with new findings and methods of scientific research on contemporary topics in the field of speech pathology and surdopedagogy. The course will provide an overview of the current, scientifically validated approaches and new findings in the areas of speech, language, communication, hearing and listening, and alternative and augmentative communication. Innovative approaches in communication research and new directions in the treatment of speech and language problems will be presented (e.g.: Implementation of alternative and augmentative communication using high-tech solutions - Android apps and iOS systems). The seminar will provide opportunities for doctoral students to explore, implement, and evaluate



**Individual Research Work (IRW) for the Doctoral Dissertation**

In the modules of individual research work (IRW) doctoral students, under the guidance of a mentor and co-mentor, systematically research the problem determined by the confirmed theme of the doctoral dissertation. The goal of the IRW modules is the successful creation and conclusion of the doctoral dissertation.