

**EMPHASIS ON DEVELOPING AND
UPGRADING OF COMPETENCES
FOR ACADEMIC TEACHING (EDUCA-T)**

**HANDBOOK FOR TEACHING
COMPETENCE ENHANCEMENT
IN HIGHER EDUCATION**



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HANDBOOK FOR TEACHING COMPETENCE ENHANCEMENT IN HIGHER EDUCATION

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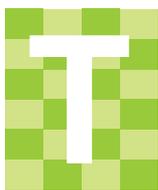
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The role of a higher education teacher is just one of the dimensions of the academic profession. Anyone who has appropriate qualifications and is engaged in academic activity is expected to take a series of professional roles throughout his/her career, including those of a teacher, researcher, manager and community contributor. During the course of an academic career, these roles gradually develop and grow increasingly rich, permeate and influence each other, but also vary in prominence through different stages of career development. Although correlated and interlocked, each of these roles imposes specific requirements on academic professionals in terms of their fulfilment. The successful accomplishment of tasks specific to each role requires mastery of an appropriate set of professional competences which form the competence profile of that role. In this context, professional competence is defined as a dynamic assembly of conceptual, procedural and factual knowledge, cognitive and practical skills, and beliefs and values whose application in an adequate academic context enables efficient action. When it comes to the academic profession, these competences are acquired and developed along the whole career path, relying on all forms of lifelong learning: formal, non-formal and informal.

The Educa-T Project focuses on developing a competence profile relevant to the role of a teacher in the academic profession. From an historical perspective, although the role of a teacher underpins the academic profession and is common both to those engaged in research and teaching and those active solely in teaching, the development of teaching competences has most often been limited to informal learning and, only to a lesser extent, to non-formal forms of learning. Global social, economic and technological changes that have taken place over the past 50 years or so have created new expectations and complex requirements for higher education, especially when it comes to competence outputs among students of all profiles and levels. These new expectations and requirements, in combination with a growing number and diversity of students, have prompted many higher education institutions in developed countries to design a more systematic and stronger support to the development of teaching competences among their academic staff.

In the 21st century, this area has seen a major shift from non-formal forms of support towards formal training programmes as part of lifelong learning schemes. In the European higher education context, an important contribution to changes in the understanding of and approach to the implementation of the teaching process has been made by the establishment of a system for the external and internal evaluation of higher education institutions, as well as recent insights gained by educational sciences about higher education (ESG, 2015).¹ These empirically founded insights have largely set the course of efforts to define quality standards on learning outcomes, curriculum planning and the process of learning, teaching and outcome assessment as part of the system for the external evaluation of higher education institutions.

Relying on these basic tenets which nowadays define the framework for the role of a teacher (Ledić & Turk, 2016)² in the academic profession, having analysed the needs and situation in the Croatian context, having consulted local and international experts and practitioners, and reflecting on their own teaching experience, the expert working group of the Educa-T Project has, in keeping with the project objectives:

- drafted a proposal for the competence profile for higher education teachers;
- prepared a proposal for the curriculum framework for teaching competence enhancement in higher education;
- formulated recommendations for implementation.

Prof. Vlasta Vizek Vidović, Ph.D.

We owe a debt of gratitude to Prof. Vlasta Vizek Vidović, Ph.D., for her unwavering and wholehearted belief in the success of this project. Her final thoughts on the importance of enhancing teaching competences in higher education are presented above. Therefore, the authors and the Educa-T project team dedicate this handbook to her.

¹ ENQA (2015) Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) – translation by AZVO http://www.enqa.eu/indirme/esg/ESG%20in%20Croatian_by%20ASHE.pdf.

² Turk, M. i, J. Ledić. J. (2016). Kompetencije akademske profesije, *Fata volentem ducunt, nolentem trahunt*. Rijeka: Filozofski fakultet Sveučilišta u Rijeci

ABOUT THE PROJECT

The *Educa-T* (Emphasis on Developing and Upgrading of Competences for Academic Teaching) Project was designed and implemented in the period from June 2016 to June 2018 with a view to creating conditions for improving the quality of learning teaching in Croatia's higher education.

The Project received grant co-financing under the EU's Erasmus+ programme – Key Action 3/KA3/ - Support to the Implementation of the EHEA Reforms.

Since the success of all reform in the higher education system depends primarily on the competences and motivation of teaching and research/ teaching staff, the Ministry of Science and Education launched the project whose outcomes highlight the importance of investment in the quality of learning and teaching and offer a framework for systematic efforts to develop teaching competences in Croatia's higher education system. As part of the Project, a Working Group was appointed as a Working Group to develop the Competence Profile for Higher Education Teachers and the Curriculum for Teaching Competence Enhancement in Higher Education, and to set forth Recommendations for Developing and Enhancing Teaching Competences at Croatian Higher Education Institutions.

Numerous project activities included Working Group meetings and workshops, focus groups with teachers from Croatia's public universities, seminars with international experts, study tours and participation in international events. This handbook contains the results of all activities undertaken.

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THE IMPORTANCE OF TEACHING AND LEARNING IN HIGHER EDUCATION

The current policies for the development of higher education at the international and national levels are focused on improving the quality and relevance of higher education, specifically with the help of numerous initiatives and activities most often tied to student-centred learning, the recognition of prior learning, mutual recognition of degrees, employability, mobility, internationalization and elevation of the social dimension of higher education.

Success in implementing new policies is to a considerable degree contingent upon the readiness and competence of the administrations of higher education institutions, but also of the teaching staff, who are expected to implement new ideas and activities in their everyday work. The empowerment and education of academic personnel in all higher education institutions and systematic work on their ongoing professional development are highlighted as vital objectives in many strategic documents. The *Communiqué of the Conference of European Ministers Responsible for Higher Education from Leuven/Louvain-la-Neuve*³ (2009) asserts the importance of the teaching mission of higher education institutions and the necessity of ongoing curricular reform geared toward the development of learning outcomes, new approaches to teaching and learning and student-centred learning. Furthermore, the *Bucharest Communiqué*⁴ (2012.) stressed the establishment of conditions that foster student-centred learning, innovative teaching methods and a supportive and inspiring working and learning environment at higher education institutions.

³ Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 2009, http://media.ehea.info/file/2009_Leuven_Louvain-la-Neuve/06/1/Leuven_Louvain-la-Neuve_Communique_April_2009_595061.pdf (accessed 4 April 2018).

⁴ Making the Most of Our Potential: Consolidating the European Higher Education Area, Bucharest Communiqué, 2012, http://media.ehea.info/file/2012_Bucharest/67/3/Bucharest_Communique_2012_610673.pdf (accessed 4 April 2018).

Improving the quality and importance of learning and teaching in higher education institutions was also underscored in the *Yerevan Communiqué*⁵ (2015): “Enhancing the quality and relevance of learning and teaching is the main mission of the European Higher Education Area, wherein it is essential to recognize and support quality teaching, and to provide opportunities for enhancing academics’ teaching competences.”

Following this acknowledged main mission of the European Higher Education Area, the *Standards and Guidelines for Quality Assurance in the European Higher Education Area*⁶ (2015) stress that higher education institutions should assure themselves of the competence of their teachers, provide opportunities for and promote the professional development of teaching staff, with special emphasis on student-centred learning and teaching. This also complies with the earlier *Report to the European Commission on Improving the Quality of Teaching and Learning in Europe’s Higher Education Institutions*⁷ (2013), which, under the motto “Teaching Matters,” indicates that by 2020 all teachers in higher education institutions must be trained for teaching work by attending certified programmes, and that permanent professional education for teaching work must become a condition/requirement for academic teaching.

The Education, Science and Technology Strategy⁸ of the Republic of Croatia also recognizes the importance of quality learning and teaching at higher education institutions and in its section on lifelong learning in objective 4, it underscores: “A problem also observed at the level of higher education is the insufficiently thorough methodical and, more broadly considered, ongoing (adult) education of higher education teachers. Namely, most teaching assistants, lecturers, assistant

⁵ Yerevan Communiqué, 2015: <http://bologna-yerevan2015.ehea.info/files/YerevanCommuniqueFinal.pdf> (accessed 4 April 2018).

⁶ Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Brussels, Belgium http://www.engq.eu/wp-content/uploads/2015/11/ESG_2015.pdf (accessed 4 April 2018).

⁷ Report to the European Commission on Improving the quality of teaching and learning in Europe’s higher education institutions, High Level Group on the Modernisation of Higher Education, June 2013, http://ec.europa.eu/dgs/education_culture/repository/education/library/reports/modernisation_en.pdf (accessed 4 April 2018).

⁸ “Strategija obrazovanja, znanosti i tehnologije,” *Narodne novine*, no. 124/2014.

professors and professors do not have such knowledge, so it would be advantageous to develop and offer suitable programmes for their additional education. Thus, the successful completion of a programme of methodical/pedagogical education is proposed in that part of the Strategy tied to higher education as one of the additional conditions (criteria) for admission to a first teaching post.” This idea was further elaborated in the section on higher education within objective 3: “In the present-day higher education system, most teachers do not undergo specific training to obtain teaching competences, so even though they have expertise in the field relevant to the courses they conduct, they must depend in their teaching methods solely on the experiences of other colleagues or their own intuition and talent. The continual education of teachers will thus be introduced via specially conceived seminars that will be the condition for assuming teaching duties, as well as a condition for admission to a research/teaching post.” Measure 3.1.3. Development, Acceptance and Implementation of the Continual Teacher Training Programme in the Higher Education System was instituted as a prerequisite which should ensure the achievement of this objective within the Strategy, and it should also be the foundation for the development of the Educa-T Project.

The Analysis of the Situation and Activities, as the foundation for higher quality work within the framework of the Educa-T project, was conducted at higher education institutions in the Republic of Croatia for the purpose of improving the quality of learning and teaching⁹ in which its authors concluded that even though the administrations of Croatian higher education institutions stress that they are aware of the need to improve teaching and learning competences, as well as the need to determine strategic objectives that would improve learning and teaching, the institutional frameworks to implement activities that would support such strategic objectives are absent at their institutions.

The completed analyses and activities within the framework of the Educa-T project confirm the exceptional need for the formulation and

⁹ Dužević, Baković, Delić, “Analiza stanja i aktivnosti koje se provode na visokim učilištima u Republici Hrvatskoj sa svrhom unapređenja kvalitete učenja i poučavanja,” 2017, <http://educa-t.hr/wp-content/uploads/2018/01/recenzija-izvjestaja.pdf>, (accessed 4 April 2018).

implementation of measures that will contribute to the development and enhancement of competences for teaching and learning at higher education institutions, particularly among junior academic staff. The tendency to neglect qualification and training for teaching work due to other duties and pressures is evident, particularly where this is due to the conditions for career advancement which neglects the teaching aspect. A further challenge is the lack of awareness and knowledge of the complexity of the contemporary teaching and learning context, particularly student-centred learning, which emerges as a barrier to one's own learning and further development.

In this sense, it is exceptionally important to take into account the professional development of each academic staff member who will be cognizant of these challenges, and ensure balanced development of all academic interpretations. Therefore, **each higher education teacher should systematically improve his/her teaching competences with adequate institutional support.**

3

HIGHER EDUCATION TEACHERS

COMPETENCE AREAS FOR TEACHING

1. Mastery of academic discipline in service of the teaching process

Teachers at higher educational institutions are invariably expected to have, first and foremost, sound knowledge of key traditional and modern concepts, processes and models, including their respective terminology in the field of the relevant scholarly discipline, as well as the core principles of academic writing. A teacher should always engage in critical analysis of the relevant literature, which guides him/her toward continuous improvement and the strategic planning of his/her professional development. At the outset of his/her scholarly and teaching career, it is particularly important that he/she becomes aware of key correlations and processes within the discipline of his/her interest,

but also that, in later stages, he/she continuously enhances his/her awareness thereof. Accordingly, to work as a teacher, one needs to adopt an interdisciplinary approach. In his/her scholarly and research work, he/she is expected to apply a methodology whereby he/she will highlight the social conditioning of the academic profession. This should induce him/her to apply effective and ethical peer review procedures in his/her own scholarly field, introduce innovations in the work of his/her higher educational institution, bring about inspiring changes within study courses and programmes, and achieve academic success, recognisable in both national and international contexts.

A higher education teacher **knows and understands**:

- key concepts, processes and models and their respective terminology within a specific scholarly discipline
- interdisciplinarity
- research methodology
- criteria to select valuable knowledge and knowledge valuable for teaching

A higher education teacher **is able to**:

- apply the underlying concepts and terminology in the context of specific courses/study programmes
- take an interdisciplinary approach to relevant topics
- apply methodology to research efforts made in his/her scientific discipline

A higher education teacher **should**:

- raise awareness of the importance of knowing and understanding core terms and concepts in the context of specific courses/study programmes
- advocate an interdisciplinary approach to teaching
- advocate a scientific, research-based and critical approach to the teaching process
- motivate students and associates to carry out and enhance research efforts as part of courses/study programmes

2. Professionalism and professional development of higher education teachers

Recent changes in higher education at the global and national levels have created new requirements that are imposed on academic professionals and affect their professional development. In this context, it is particularly important for a university teacher to understand the complexity of his/her profession and its core activities (teaching, research work, contribution to the society and community). Since the democratisation of higher education brings a diversified student body into the system, which, *inter alia*, imposes the requirement for a student-centred approach to teaching, it is extremely important for teachers to understand the significance of their role and, in particular, its complexity in contemporary circumstances, and to demonstrate a commitment to their professional development in teaching. To develop teaching competences from the perspective of professionalism and professional development, it is especially important for teachers to have knowledge of teaching-research theories and methodological approaches in order to engage in teaching-research efforts which should lead directly to the improvement of their own teaching practice. Teachers need to understand the importance and have knowledge of self-evaluation techniques and, in particular, of collaborative evaluation in improving their own teaching practice. Special emphasis should be placed on their need to be aware of ethical and multicultural principles in their teaching work and to make ethical values part of their identity as teachers.

A higher education teacher **knows and understands**:

- different aspects of a teacher's role in the overall professional development
- advancement requirements/conditions guiding professional development in teaching
- teaching-research theories and methodological approaches
- importance and techniques of self-evaluation in professional development
- collaborative evaluation techniques in higher education
- ethical and intercultural principles in teaching

A higher education teacher **is able to**:

- manage his/her teaching career and professional development
- plan his/her professional development in the teaching context
- conduct and become involved in the conduct of research on/in teaching
- apply appropriate self-evaluation techniques to plan professional development
- apply collaborative evaluation techniques in higher education
- behave ethically, respecting differences in the teaching practice

A higher education teacher **should**:

- be committed to his/her role/profession as a teacher in the context of his/her own professional development
- demonstrate a commitment to his/her professional development in teaching
- advocate the application of outcomes of his/her own research to improve teaching
- apply the results of self-evaluation to enhance his/her own teaching practice
- advocate collaborative evaluation to enhance his/her own teaching practice
- make ethical values part of his/her identity as a teacher

3. Curriculum planning and development in higher education

The efforts to plan, develop and implement modern university programmes rely on a curriculum-based approach. It is therefore important for a university teacher to understand theoretical sources used in developing a curriculum and to use his/her theoretical knowledge as a basis to select one or combine several approaches in developing specific study programmes. Furthermore, a university teacher should take an active part in planning development methods and developing study programmes, where with his/her activities need to rely on scientific insights about steps in curriculum planning and his/her knowledge of

university regulations governing this area. As a result of efforts to prepare a curriculum, learning outcomes are defined at the level of programmes, courses and units, including the definition of appropriate student workload, suitable teaching methods (learning experiences for students) and methods to assess learning outcomes. In this context, it is important to understand the concept of constructive alignment within a study programme and be able to analyse horizontal and vertical curriculum alignment by applying adequate analytical techniques. A university teacher should take responsibility for a continuous improvement of the curriculum at all of its levels, which implies understanding the models and applying the techniques for curriculum evaluation.

A higher education teacher **knows and understands**:

- approaches and theoretical sources used in curriculum development at the level of study programmes and courses
- steps in curriculum planning and development
- relations between learning outcomes, student workload, teaching and evaluation methods
- the concept of constructive alignment within a study programme and a particular course
- curriculum evaluation models and techniques

A higher education teacher **is able to**:

- choose the approach suited to a specific curriculum
- plan steps in developing a specific study programme and participate in particular steps
- define learning outcomes at the level of study programmes, courses, modules and units
- define student workload
- define teaching methods (learning experiences for students) and assessment methods
- analyse learning outcomes at the level of programmes and courses by using a structural matrix
- use appropriate curriculum evaluation techniques

A higher education teacher **should**:

- advocate the development of study programmes based on insights from curriculum theory
- base his/her professional activities on scientific insights about curriculum planning and development
- base his/her teaching activities on a student-centred approach
- take responsibility for horizontal and vertical curriculum alignment
- take responsibility for continuous curriculum improvements

4. Learning and students

The main goal of teaching in higher education and lifelong learning programmes is to facilitate quality learning for students. A higher education teacher needs to plan his/her teaching activity on the basis of scientific insights about learning and teaching, building upon clearly defined learning outcomes to be mastered by students. He/she should make content more comprehensible, meaningful and challenging for students and engage them in active learning through research, questioning, inference and interpretation of content and processes. In doing this, he/she should encourage them to apply effective learning strategies, including their own learning management skills, and to identify their own academic and professional goals. He/she should appreciate key characteristics of students and apply his/her knowledge of individual differences to create a learning environment conducive to students' sense of self-confidence, expressing positive expectations and providing positive and informative feedback. By using various forms of collaborative work, a teacher will encourage students to tolerate each other and appreciate their differences.

A higher education teacher **knows and understands**:

- learning concepts and theories relevant for efficient teaching in higher education and lifelong learning programmes
- contribution of specific cognitive, motivational and emotional learning success factors

- role of individual learning differences related to gender, age, learning approaches, interests, cultural background, prior educational experience and special learning needs

A higher education teacher **is able to**:

- apply the theoretical concepts and models of learning and his/her understanding of the dynamics of internal learning factors in planning his/her teaching activity so as to contribute to achieving the expected learning outcomes
- encourage the application of efficient learning strategies, including the skills to self-regulate cognitive and motivational learning processes
- apply his/her knowledge of individual differences to create a learning environment conducive to students' sense of self-confidence and appreciation, their experience of self-efficacy in learning, academic self-esteem and development of professional identity

A higher education teacher **should**:

- show confidence in student abilities to learn and achieve the planned learning outcomes
- stress his/her belief in the importance and inevitability of lifelong learning for achieving long-term academic, professional and personal goals
- convey his/her enthusiasm for and commitment to academic work as a model for learning and developing professional responsibility among students
- show respect for differences and encourage students to tolerate each other and collaborate

5. Planning, organising and implementing the teaching process

Higher education teaching relies on modern strategies of active learning and teaching. The quality of the teaching process in higher education is achieved, first and foremost, through a thorough curriculum planning and programming of assumed goals and expected learning outcomes and choosing content relevant to developing student competences.

The delivery of higher education teaching through traditional teaching modes (lectures, practical training and seminars) entails continued didactic and methodological efforts to enrich the teaching process and meet the basic and advanced requirements of problem-, research- and project-based teaching, while ensuring a positive teaching climate and environment. The quality of the teaching process also relies on a student-focus paradigm, which directly contributes to building student competence, self-efficacy, self-regulation of learning, intrinsic motivation, better academic achievement and sense of satisfaction. In addition to acquiring competences, emphasis should be placed on collaborative and self-directed learning, responsibility, independence, initiative, reflective and critical thinking and creativity among students. It is also necessary to adopt a multidisciplinary approach to planning, organising and implementing the teaching process and to encourage students to embrace lifelong learning and to link and apply the acquired theoretical knowledge to practical situations.

A higher education teacher **knows and understands**:

- contemporary platforms and guidelines for planning and programming higher education teaching focused on a competence- and curriculum-based approach
- links and relations of curriculum planning and programming at the level of study programmes, modules and university courses/subjects and other units of learning outcomes
- modern trends and approaches in the area of learning and teaching
- specifics and challenges of (co-)construction of knowledge in scientific areas, fields and disciplines
- modern requirements and specifics as well as didactic and methodological prerequisites to ensure quality in planning, organising and implementing higher education teaching (project-, problem- and research-based teaching; multidisciplinary approach; guidelines to achieve quality in the teaching atmosphere and environment)
- differences between traditional direct instruction and active teaching
- relations between phases in structuring the teaching process

- theoretical tenets and principles of student-centred teaching
- different taxonomies of educational objectives
- concept of learning outcomes, including all conditions prerequisite to their effective achievement
- strengths and weaknesses of teaching methods, strategies and forms
- general and specific educational needs of students and adults
- specifics of organising and applying different forms of teaching (lectures, seminars, practical training etc.)

A higher education teacher **is able to**:

- plan, organise and implement the teaching process relying on a curriculum- and competence-based approach
- plan, organise and implement a student-centred teaching process
- efficiently manage and lead his/her group of students
- design and prepare teaching materials
- encourage students to learn and to apply the acquired knowledge/ skills in practice
- apply different teaching strategies, methods and forms of work with regard to students' knowledge, interests and needs and the specifics of subject matter taught
- create a positive teaching climate and environment conducive to learning
- encourage students to engage in further and lifelong learning

A higher education teacher **should**:

- encourage the development of critical and reasoned thinking
- foster academic accountability and integrity
- promote reflective practices
- assess and support students in their pursuance of academic, professional and personal achievements
- encourage and support intellectual curiosity and eagerness to gain knowledge

- take initiative and be innovative and creative
- demonstrate enthusiasm and a high level of empathy
- use his/her teaching skills and professional manners as a model for his/her students in building their professional identity (a model of professional conduct)

6. Assessment and self-assessment of student achievements

The notion of assessment in higher education refers to systematic efforts to collect, track and document evidence of the achieved level of student competences during and after the learning process, in line with the defined learning outcomes, procedures and criteria, and to apply the collected data for different educational purposes. The assessment and teaching processes are closely connected and interdependent. We can distinguish three different approaches to assessment, depending on its purpose. The first approach, the so-called *assessment for learning*, pertains to continued monitoring and record-keeping of a student's progress in order to plan the learning and teaching process. It encourages the progress of each student and enhances his/her learning independence and self-assessment of learning results. Such assessment is formative and, if made properly, crucial for inciting a student's motivation for learning and his/her learning efficiency. At the end of the day, it contributes to the development of learning skills. The second approach is identified as *assessment of learning outcomes*, i.e. evaluation of learning results. It indicates the level of achievement reached by a student. Such assessment is called summative assessment. Its purpose is to provide a student with feedback on his/her status within the reference student group. At the end of a specific course or module, summative assessment – expressed as a score or grade – serves as a reference point for making decisions on further education or entry in the labour market. The third form of assessment – *assessment as learning* – pertains to the teacher's self-evaluation of the extent to which his/her approach to assessment really contributed to achieving the desired learning outcomes. The teacher's self-evaluation helps improve the quality of achieving the two aforementioned purposes of assessment.

A higher education teacher is expected to have a good knowledge and understanding of these fundamental approaches and apply them in teaching on a complementary basis, by using appropriate and diverse methods and techniques to measure out and assess learning outcomes. When making assessments, teachers should be particularly mindful of the need to identify and remedy any sources of subjectivity in evaluating student achievements.

A higher education teacher **knows and understands**:

- fundamental concepts, principles, methods and techniques related to the assessment process in higher education
- student motivation factors and personal characteristics which may bear on the process of assessing their academic achievements
- concept of self-evaluation in higher education
- structural and process-related elements of internal quality assurance systems at higher education institutions

A higher education teacher **is able to**:

- apply efficient and appropriate approaches to and methods of assessing learning outcomes
- efficiently monitor and document student participation in and contribution to different learning activities
- evaluate the achievement of defined learning outcomes by a numerical and/or narrative assessment of student performance
- interpret and analyse the results of different types of assessment
- apply procedures allowing student self-assessment, i.e. enabling students to review their own progress and apply efficient learning strategies
- prepare materials to assess, monitor and evaluate student achievements
- apply student evaluations to improve teaching quality in higher education
- develop evaluation criteria and align them with relevant regulations
- assess and evaluate achievements by students with specific difficulties

A higher education teacher **should**:

- advocate the culture of assessment and self-assessment as part of academic and professional culture
- develop a reflective view of his/her own teaching practice to improve its quality
- become aware of and assess his/her own position in the process of assessing student achievements
- apply and maintain ethical standards in the assessment and self-assessment process
- provide students with timely, impartial, substantial and stimulating feedback on their work, progress and achievements
- detect unethical, inappropriate and partial assessment approaches and procedures
- advocate impartial and appropriate assessment approaches and procedures
- use a quality (self-)assessment procedure to motivate students for further learning

7. Mentoring

The mentoring process in higher education implies the establishment of a close, appreciative and inspiring collaborative relationship between a higher education teacher and his/her student, where the teacher provides the student with support and leadership in the assignment dealt with in the mentoring process. Mentored assignments include different types of student work (seminar papers, final papers, bachelor's, master's and doctoral theses), and the mentor's role entails his/her availability to help the student throughout his/her work on the assignment – from the formulation and conceptualisation of the topic, through the choice of methodology to address the assignment, to the discussion of results, the method of their presentation and their possible publication. The mentor also encourages the student to manage his/her own professional development in order to fulfil his/her potential, develop skills, achieve high academic performance, and evolve as a person and a professional.

In fulfilling his/her mentoring role, the mentor – besides his/her recognised mentoring excellence – has to know and understand the aspects of the mentoring role, the mentoring principles and tasks and the nature of the mentoring process, its stages and potential setbacks. For successful mentoring, the mentor should possess developed communication and social skills, including self-reflection skills, required to establish, nurture and conclude the mentoring relationship. Though a collaborative relationship with his/her mentor, the student – in addition to receiving professional and personal support – develops a sense of self-efficacy, acquires the skills of self-reflection in his/her work, develops the awareness of deferent aspects of academic work (ethical, cultural, social) and builds his/her professional social network and professional identity. The mentoring relationship provides the mentor with an opportunity to take stock of his/her own professional development, deepen and integrate his/her previously acquired professional knowledge and skills, broaden his/her network of professional relations and achieve greater satisfaction through his/her task to monitor a student's individual development and performance.

A higher education teacher **knows and understands**:

- concepts, models and principles of knowledge and achievement within a fundamental area, field and discipline of science and teaching
- teaching approaches, methods and techniques in a higher education environment
- the nature of mentoring relationship, the principles of mentoring work and setbacks in mentoring relationship

A higher education teacher **is able to**:

- effectively convey his/her professional knowledge and experiences to his/her student
- establish and nurture an inspiring, dynamic and collaborative mentoring relationship
- adjust his/her mentoring style and the content of assignments to student individual needs, including their prior knowledge, their interests and socio-cultural background

- support students in planning, implementing and assessing all assignments/projects included in the mentoring process
- apply appropriate communication and social skills, especially those of giving *motivating* feedback

A higher education teacher **should**:

- attach importance to a high level of academic integrity and ethical principles
- express confidence in the capacity of his/her students for continuous growth and development
- show high expectations concerning the abilities of his/her students as a motivation to reach a high level of achievement
- believe in mentoring as a form of professional development both for the mentor and the mentored student
- show empathy and authentic concern for other people's professional development

8. Application of new technologies in teaching

The meaningful application of modern digital technologies in the educational process can largely contribute to the quality and efficiency of learning and teaching in higher education, motivating students for learning and enabling them to acquire higher levels of competences. It is therefore imperative for each higher education teacher to acquire and continuously improve his/her digital competences for planning, delivering and assessing the educational process and communicating and interacting with his/her students and peers. Teachers are expected to be open to teaching in a digital environment and adapt their teaching styles to new technologies. They should know and understand key concepts, strategies, methods and techniques in the field of information and communication technologies, be familiar with appropriate computer tools, services and platforms, and have knowledge and understanding of the possibilities and constraints of using digital technologies in the education process and their scientific and professional work. They should be able to efficiently identify, select, organise and analyse digital

data and content, taking a critical attitude towards their relevance, credibility and reliability. By using appropriate computer tools, services and network platforms, they should also be able to effectively communicate, collaborate and share digital educational and professional content with students and other teachers, respecting the relevant codes of ethics and appreciating generational and cultural differences. With the aid of appropriate digital resources, teacher should also be able to create new and adapt the existing digital educational content, following key aesthetic principles in their design. Teachers should definitely know and understand security risks and threats in a digital environment and the impact of digital technology production and use on health, energy and the environment. On that basis, they should systematically and promptly apply effective procedures, tools and services to protect digital devices, data and content, including information about students and the education process. They should use digital technology effectively, taking into account basic ergonomic principles, energy consumption and environmental impact. Finally, teachers are also expected to consistently respect and advocate high ethical principles, copyrights, licences and other legal provisions governing the use of digital technology.

A higher education teacher **knows and understands:**

- concepts, strategies, techniques and computer tools and services to search, organise and analyse digital data and content for the purposes of teaching, research and professional work
- possibilities and constraints of digital technology for communication and interaction and sharing information and content for the purposes of teaching, research and professional work
- digital resources (devices, tools and platforms), strategies and techniques for the development and customisation of digital educational content and problem-solving in teaching, research and professional work
- security risks and threats in a digital environment and the impact of digital technology production and use on health, energy and the environment

A higher education teacher **is able to**:

- effectively identify, select, organise and analyse relevant digital data and content for the purposes of teaching, research and professional work
- effectively communicate, collaborate and share digital educational and professional content with students and other teachers through appropriate computer tools, services and network platforms
- create new and adapt the existing digital educational content to improve teaching and learning processes
- develop student competences to solve professional problems by selecting and using appropriate digital technologies
- systematically and promptly apply effective procedures, tools and services to protect digital devices, data and content, including information about students and the education process
- effectively use digital technology, taking into account basic ergonomic principles, energy consumption and environmental impact

A higher education teacher **should**:

- have a developed critical attitude towards the relevance, credibility and reliability of digital data, content and computer tools
- demonstrate openness to communication, interaction and sharing educational content in a digital environment, respecting the relevant codes of ethics and appreciating generational and cultural differences
- follow key aesthetic principles in designing digital educational content
- continuously work on improving his/her digital competence and adapt his/her teaching styles to new technologies
- consistently respect ethical principles, copyrights, licences and other legal provisions governing the use of digital technology
- advocate the safe, healthy and sustainable use of digital technologies

9. Communication and social skills

The appropriate development of teacher communication and social skills is reflected in successful oral and written communication and a well-structured and comprehensible presentation of the relevant content so that students can apply the acquired knowledge, skills and attitudes in a constructive dialogue within the academic environment. This implies respect for the principle of tolerance, especially towards others and those who are different, and contributes to developing a sense of empathy among stakeholders in academic discourse. A teacher's relationship with his/her peers and students should be imbued with quality communication, mutual trust and respect, readiness for open critical reflection and self-reflection, and the appreciation of competences at the personal and professional levels. A continuous improvement of communication and social skills requires upgrades to a number of individual values, beliefs, habits and attitudes about how to better behave and act in interpersonal relationships in keeping with the established social norms, make decisions, solve problems and conflict situations, that is, make social interactions effective. Given the specific nature of the population they interact with, teachers should contribute to the development of quality relations among the youth.

A higher education teacher **knows and understands**:

- key principles in the linguistic expression and presentation of the teaching content
- concepts and principles of interpersonal communication in teaching and beyond
- group and team dynamics of social processes
- networking and negotiating techniques within the academic context

A higher education teacher **is able to**:

- clearly and efficiently present the teaching content in keeping with the rules of academic discourse and respecting the standards of written and oral academic expression
- communicate with students and peers in a motivating and constructive manner

- create and maintain different forms of teaching and research collaboration with students and peers
- negotiate with students and peers, especially in situations of potential or actual conflict
- apply well-developed networking and negotiating techniques within the academic context

A higher education teacher **should**:

- become aware of the importance of appropriate linguistic expression in the academic context, i.e. in the context of academic presentation and communication
- maintain a motivating and constructive communication with peers and students
- encourage any form of collaboration with peers and students aimed at joint efforts to improve scientific knowledge and teaching practice
- advocate the ability to negotiate with peers and students, respecting the previously agreed or, as appropriate, subsequently amended rules
- foster the development of empathy and tolerance in relations with all academic discourse stakeholders

4

CURRICULUM FRAMEWORK FOR TEACHING COMPETENCE ENHANCEMENT IN HIGHER EDUCATION

The general curriculum under the title *Teaching Competence Enhancement in Higher Education* was developed on the basis of the Higher Education Teacher Competency Profile, specifically the competence areas defined therein. Furthermore, the curriculum framework has been aligned with the Recommendations for Development and Improvement of Teaching Competences in Higher Education.

The curriculum encompasses three modules, of which each implies a load of 20 ECTS points for participants.

Module 1 encompasses the following courses: Professionalism and Professional Development in Higher Education, Students and Learning, Teaching Process in Higher Education, Assessment of Learning Outcomes and Digital Competences in Higher Education. This module is aimed primarily at participants who are at the beginning of their academic careers in higher education, i.e., in associated occupations such as assistant lecturer and postdoctoral associate, as well as participants with greater experience in academic teaching who did not have the opportunity to complete formal modes of preparatory training for academic teaching. **Mastering the competences that are acquired upon completion of this module are suggested as a necessary prerequisite for involvement in academic teaching and a fundamental requirement for obtaining the research/academic or arts/academic title of assistant professor, as well as the teaching vocation of lecturer.**

Module 2 encompasses the following courses: Curriculum in Higher Education, Professional Communication, Academic Profession, e-Learning Systems in Higher Education, Mentorship and Academic Discipline and Teaching Laboratory. This module is geared toward everyone who has completed the first module and wants to improve his/her teaching competence and competences in the field of curriculum planning and development. By completing this module, participants gain competences that qualify them to plan and develop curricula in higher education institutions, apply complex communication skills in professional contexts, more thoroughly understand their own professional role with particular reference to academic ethics, and mentor students. Furthermore, **this module is intended for participants who wish to enhance their competence for work in teaching and who are interested in passing the next module.**

Module 3 includes the course Research Methods in Higher Education, and also entails individual consultation with mentors, and preparation of a final thesis based on personal empirical research. This module builds on the preceding two. **It is intended for higher education teachers who want to specialize in academic teaching.**

The *Teaching Competence Enhancement in Higher Education* general curriculum offers a foundation for the development of practical curricula at individual universities or departments thereof. In other words, the institutions that assume responsibility for implementing programmes to develop academic teaching competences can adapt it in line with their own standards.

Module 1

Course: Professionalism and Professional Development in Higher Education

Recent changes in higher education at the global and national levels have led to new demands on the academic profession and they are influencing professional development. In that context, it is vital for a university lecturer to comprehend the complexity of his/her profession and its fundamental components (teaching, research, contribution to society and the community). The objective of this course is to highlight the complexity of the academic profession, inform higher education teachers of the legal framework that regulates the academic profession, and help them more successfully manage their own professional development. In this context, participants will be apprised of how to identify various aspects of academic roles in overall professional development and interpret the criteria for promotion which direct their professional development as an exceptionally important academic career path. Herein participants will be taught to apply different self-evaluation and collaborative evaluation techniques that should contribute to the enhancement of a collegial academic culture. The course is expected to contribute to the formation of a stable professional identity tied to a sense of career satisfaction, permanent motivation, dedication to work and a sense of self-sufficiency.

Course title

Professionalism and Professional Development in Higher Education

Credit value (ECTS)

2

Expected outcome of learning at the course level

Once they meet all course requirements, participants will be expected to able to:

1. identify different aspects of the academic profession

2. interpret various aspects of academic roles in the overall professional development of a higher education teacher
3. interpret promotion requirements/criteria which direct the professional development of a higher education teacher
4. evaluate their personal professional development plans
5. apply different self-evaluation and collaborative evaluation techniques

Instructional implementation

- interactive lectures
- e-learning
- consultative teaching
- independent work
- collaborative learning

Examples of learning outcomes assessment

- compiling and self-evaluation of professional development plan (outcomes 1 - 4)
- collaborative evaluation of professional development plan (outcome 5)

Suggested reading

1. The current legislative framework for the academic profession in the Republic of Croatia (Research Work and Higher Education Act, Science and Higher Education Quality Act, Decision on Mandatory Criteria for the Assessment of Teaching and Vocational Activities in Appointment or Re-appointment Procedures in Research and Teaching Professions, Decision on Mandatory Criteria for the Assessment of Teaching and Vocational Activities in Appointment Procedures in Art-instruction and Teaching Professions in the Arts, Rules on the Criteria for Appointment to Research Professions, various institutional documents (university and/or normative documents) which regulate the professional development of staff (for example: rules that govern additional promotion criteria))
2. Ledić, J., Brajdić Vuković, M. (eds.) (2017). *Narativi o profesionalnoj socijalizaciji mladih znanstvenika*, Rijeka: Filozofski fakultet u Rijeci.
3. Ledić, J., Turk, M. (eds.) (2017). *Teaching and Research in the professional Socialization of Junior Researchers / Nastava i istraživanje u profesionalnoj socijalizaciji mladih znanstvenika*, Rijeka: Filozofski fakultet u Rijeci.
4. Ledić, J., Turk, M. (eds.) (2017). *Preporuke o kompetencijama akademske profesije i profesionalnoj socijalizaciji mladih istraživača*. Rijeka: Filozofski fakultet u Rijeci
5. Turk, M., Ledić, J. (2016). *Kompetencije akademske profesije. Fata volentem ducunt, nolentem trahunt*. Rijeka: Filozofski fakultet u Rijeci
6. Teichler, U., Arimoto, A., Cummings, W. K. (eds.) (2013). *The Changing Academic Profession*. Amsterdam: Springer.

Course: Students and Learning

The course *Students and Learning* will enable participants to acquire the competences described in the competence area entitled *Learning and Students*. The purpose of this course is to qualify higher education teachers to apply knowledge on the individual traits of students and on the learning process to the planning and implementation of student-oriented teaching.

Familiarity with the individual traits of students (previous knowledge, interests, motivations, learning strategies, learning difficulties, self-sufficiency and emotional stability) which contribute to academic achievement, but also to the risks of failure in schooling, is important in order to plan adequate support to learning and the creation of an environment that will enable students to live up to their potential with a sense of security and appreciation.

Participants in this course will be trained in the purposeful application of theoretical knowledge on learning in instructional planning. Cognitive-constructivist concepts and principles are particularly suited to the planning of theoretical teaching, social learning models to acquire cognitive and practical skills, situated learning approaches to the organization of practical teaching, and the teaching self-regulation model is the basis in independent learning. The application of this knowledge in the instruction of students will be an intellectual challenge, qualify them to apply effective learning strategies and motivate them to learn and to achieve the expected outcomes of learning.

Course title

Students and Learning

Credit value (ECTS)

4

Expected outcome of learning at the course level

Once they meet all course requirements, participants will be able to:

1. Apply theoretical concepts and learning models to instructional planning that will contribute to the achievement of expected learning outcomes
2. Explain patterns of student cognitive functioning in order to adapt instruction to their specific patterns of learning and thought
3. Recognize sources of motivation for learning and study for the purpose of applying the appropriate motivation methods

4. Elucidate learning self-regulation concepts and models and encourage the application of effective strategies for independent learning and self-motivation in learning
5. Recognize the nature of individual difficulties and obstacles in studying among individual students
6. Suggest an adequate type of support to a student in order to overcome personal difficulties
7. Critically compare one's own ideas on student learning and teaching experience with ideas from the vocational literature on contemporary approaches to teaching in higher education

Instructional implementation

- interactive lectures,
- group discussion,
- collaborative learning,
- practical assignments,
- independent work,
- consultative teaching

Examples of learning outcomes assessment

- Written commentary on one's own teaching unit plan with references to theoretical concepts tied to preparation of plans (outcome 1)
- Presentation of student cognitive functioning patterns with examples of adaptation of teaching to individual patterns (outcome 2)
- Essay (written assignment) on the self-regulation concept and sources of motivation for learning with examples of motivational strategies in one's own instruction and encouragement of students to apply effective learning strategies (outcomes 3, 4 and 5)
- Presentation of cases of rendering support to students to overcome learning difficulties with theoretical consideration of the specific difficulty (outcomes 6 and 7)
- Theoretically based written review of own practices and ideas on learning in the light of contemporary approaches to learning and instruction (self-reflection) (outcome 8)

Suggested reading

1. Biggs, J. (2003). *Teaching for quality learning at university*. Buckingham: Open University Press.
2. Fry, H., Ketteridge, S., Marshall, S. (2010). *A handbook for teaching and learning in higher education*. London: Kogan Page.
3. Hopen, Deborah (ed.) (2010). *Quality Approaches in HE. Enhancing Student Learning. A Supplement to the Journal of Quality and Participation*. Vol. 1, No. 1. www.asq.org/edu/index.html.

4. Kolić-Vehovec, S. (1999). *Edukacijska psihologija*. Rijeka: Filozofski fakultet.
5. Meyer, J.H.F. & Land, R. (Eds.)(2006). *Overcoming barriers to student understanding*. London: Routledge.
6. Vizek Vidović, V. et al. (2014) *Psihologija obrazovanja*, Chapter 6: “Učenje i poučavanje,” IEP. Zagreb

Course: Teaching Process in Higher Education

The *Teaching Process* course will help participants gain the competences described in the *Planning, Organising and Implementing the Teaching Process* segment. The purpose of this course is to qualify higher education teachers to define the objectives and outcomes for the subject they are teaching, select instructional strategies and methods, organize the teaching process and implement teaching in line with the principles of the competence approach and teaching geared to students in contemporary academic environments.

The teaching process in higher education is based on advancements in educational psychology, academic didactics, curriculum theory and adult education theory. In this regard, the primary aim of academic teaching is to foster the development of student competences. This implies the high involvement of students in the teaching process, which is accomplished by employing a strategy of active learning and tutoring which facilitates the achievement of planning teaching outcomes and encourages students to take responsibility for their own learning. Therefore, the implementation of teaching with the use of traditional methods requires continued enhancement with the use of problem-, research- and project-oriented teaching and collaborative learning methods. Furthermore, in student-centred teaching, the teacher is qualified to effectively lead educational groups and development of an environment conducive to learning.

Course title

Teaching Process in Higher Education

Credit value (ECTS)

8

Expected outcome of learning at the course level

Once they meet all course requirements, participants will be able to:

1. create objectives and define learning outcomes for teaching which they carry out with application of the constructive alignment concept
2. apply the competence approach to the planning and implementation of academic courses
3. select instructional methods suited to planned learning outcomes
4. apply diverse instructional methods and social forms of work with regard to the knowledge, interests and needs of students and the specificities of certain academic disciplines
5. develop an observation protocol (peer assessment) and analyze the teaching situation
6. explain the advantages and shortcomings of individual teaching methods, strategies and forms with regard to learning outcomes
7. analyze his/her own lecture time and/or teaching situation
8. ensure a positive teaching atmosphere and an environment conducive to learning, and effectively lead the educational group

Instructional implementation

- lectures
- workshops
- simulated teaching situations
- (group) discussion
- presentations
- role playing

Examples of learning outcomes assessment

- Write down the objectives and outcomes of academic teaching (outcome 1)
- Develop a teaching unit plan (outcome 2)
- Demonstrate instructional methods oriented toward student competences (outcomes 3 and 4)
- Prepare teaching materials for planned lectures (outcome 5)
- Observe teaching by colleagues and analyze teaching according to the established observation protocol (outcome 5)
- Simulate teaching situations or teaching activities with students and hold three ideal lecture hours according to plan (outcome 5)
- Write a (self-)analysis of the hour with consideration for methods employed and achieved learning outcomes (outcomes 6 and 7)
- Based on case analysis, describe the elements of the teaching atmosphere and the conduct of educational groups which encourage learning (outcomes 7 i 8)

Suggested reading

- Biggs, J. & Tang C. (2011). *Teaching for Quality Learning at University*. Berkshire: Open University Press McGraw-Hill Education.
- Borić, E. (2013). *Metodika visokoškolske nastave*. Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Učiteljski fakultet u Osijeku.
- Clement, M. C. (2010). *First Time in the College Classroom. A Guide for Teaching Assistants, Instructors, and New Professors at All College and Universities*. Plymouth, UK: Rowman & Littlefield Education.
- Divjak, B. (ed.) (2008). *Ishodi učenja u visokom školstvu*. Varaždin: FOI-TIVA.
- Divjak, B. (2009). "Ishodi učenja: pretpostavke, iskustva i izazovi." In: M. Mesić, Lj. Pinter (eds.) *Ishodi učenja na Sveučilištu u Zagrebu*. Zagreb: Sveučilište u Zagrebu, 21-32.
- Fry, H., Ketteridge, S and Marshall, S. (2009). *A Handbook for Teaching and Learning in Higher Education*. New York: Routledge.
- Harland, T. (2012), *University Teaching: An Introductory Guide*. London: Routledge.
- Hunt, L. & Chalmers, D. (2012) (Eds.), *University Teaching in Focus: A Learning-Centred Approach*. London: Routledge.

Course: Assessment of Learning Outcomes

Assessment of Learning Outcomes is a course designed to provide participants with the competences to be acquired under the competence area *Assessment and Self-assessment in Higher Education*. As part of this course, participants will learn to distinguish between two key functions of assessing learning outcomes: a) assessment as a way to measure the level of achievement for the expected learning outcomes; and b) assessment of learning outcomes as a learning process.

Participants will be trained to apply theoretical approaches to the assessment of learning outcomes while planning their own assessment and will learn to develop and use methods and techniques to measure, in a continued and structured manner, the level of achieved learning outcomes against the objectives of specific units or courses. Learning outcomes can be measured by using a variety of techniques, such as written or oral exams, product or service design or presentation, work on practical assignments or student portfolios with sample works. When it comes to students with specific difficulties, participants will learn how to adjust learning outcomes measurement techniques to students' individual abilities.

Participants will be trained to provide feedback on achievement in order to boost student motivation to learn and develop the skills needed to plan and monitor their own learning process.

Course title

Assessment of learning outcomes

Credit value (ECTS)

4

Expected learning outcomes:

Once they meet all course requirements, participants will be able to:

1. Explain fundamental concepts, methods and techniques related to the learning outcomes assessment process in higher education
2. Apply appropriate approaches to and methods for assessing learning outcomes, in line with learning outcomes at the course level and ECTS credits
3. Interpret the results of different types of learning outcomes assessment
4. Apply different strategies to monitor and assess students in different learning activities
5. Evaluate the achievement of learning outcomes by a numerical and/or narrative assessment of student performance in keeping with the relevant legislation
6. Apply procedures, including the provision of stimulating feedback, allowing student self-assessment, i.e. enabling students to review their own progress and use efficient learning strategies
7. Prepare materials to assess, monitor and evaluate student achievement
8. Assess and evaluate achievements by students with specific difficulties

Instructional implementation

- interactive lectures
- group discussions
- collaborative learning
- practical assignments
- independent work
- consultative teaching
- e-learning

Examples of learning outcomes assessment methods:

- Essay on fundamental concepts, methods and techniques of learning outcomes assessment (Outcome 1)
- Critical review with the argumentation of selected approaches and methods

- and the level of the course syllabus and the teaching unit plan (Outcome 2)
- Essay on the strengths and weaknesses of specific assessment methods (Outcome 3)
- Overview of templates for the structured monitoring of student participation in and contribution to different learning activities (Outcome 4)
- Analysis of the achievement of learning outcomes based on several student work samples, including the explanation of evaluation criteria (Outcome 5)
- Presentation on teaching students about self-assessment at the course level (Outcome 6)
- Demonstration of own materials for assessing, monitoring and evaluating achievements at the course level (Outcome 7)
- Case study on the adjustment of assessment methods to a student with specific difficulties (Outcome 8)

Suggested reading

1. Banta, T. W., & Palomba, C. A. (2015). *Assessment Essentials: Planning, Implementing and Improving Assessment in Higher Education* (2nd ed.). San Francisco, CA: Jossey-Bass, A Wiley Brand.
 2. Guskey T. R., & Jung L. A. (2013). *Answers to Essential Questions About Standards, Assessments, Grading, & Reporting*. Corwin, A SAGE Company
 3. Kuh, G. D. et al. (2015). *Using Evidence of Student Learning to Improve Higher Education*. San Francisco, CA: Jossey-Bass, A Wiley Brand.
 4. Vizek Vidović, V. et al. (2014). *Psihologija obrazovanja*, chapter 7. "Planiranje i evaluacija obrazovnog procesa." Zagreb: IEP.
 5. *ECTS Users' Guide 2015*. European Commission, RoC Ministry of Science, Education and Sports.
- https://www.azvo.hr/images/stories/publikacije/Vodич_za_korisnike_ECTS-a.pdf

Course: Digital Competences in Higher Education

Digital Competences in Higher Education is a course aimed at providing higher education teachers with key competences under the competence area *Application of New Technologies in Teaching*. Since the meaningful application of advanced digital technologies in the education process (so-called e-learning) contributes to the quality and efficiency of academic learning, teaching and assessment, motivating students to learn and enabling them to acquire higher-level competences, each higher education teacher should acquire and continuously improve his/her digital competences for planning, organising, delivering and assessing the education process and

communicating and interacting with his/her students, taking due account of digital environment security.

The course has the objective of enabling the participants to identify and assess the possibilities of applying e-learning in their own teaching efforts and to independently prepare, organise and deliver a technically simple e-course by using the selected (available) e-learning system, as well as to effectively identify and ensure protection from security risks and threats in a digital environment. The participants are, however, expected to have already mastered basic digital skills, with focus on proficiency in the use of key text processing, graphic, audio and video tools and platforms for scientific communication in their profession, as well as basic Internet browsing and communication skills.

Course title

Digital Competences in Higher Education

Credit value (ECTS)

2

Expected learning outcomes:

Once they meet all course requirements, participants will be able to:

1. explain key concepts, principles, methods and techniques related to learning and the assessment of learning outcomes in a digital environment (e-learning)
2. design educational activities and the mode in which an e-course participant will interact with the content, teacher and other participants in the selected e-learning system
3. prepare simple teaching materials for e-learning
4. prepare the technical setup for and deliver a simple e-course by using the selected e-learning system
5. ensure effective protection from security risks and threats in a digital environment

Instructional implementation

- computer workshops/course
- e-learning
- consultative teaching
- individual work

Example of learning outcomes assessment methods:

- Critical review of the possibilities of applying e-learning methods in one's own teaching work (outcome 1).

- Overview of the organisation and application of key presentation, communication and assessment tools in the selected e-learning system by using the example of a teaching topic/unit from one's own e-course (outcomes 2-4).
- Demonstration of concrete procedures and up-to-date and efficient tools for one's own protection from security risks and threats in a digital environment (outcome 5).

Suggested reading

1. Andress, J. (2014). *The Basics of Information Security: Understanding the Fundamentals of InfoSec in Theory and Practice* (2nd ed.). Rockland, MA: Syngress
2. Meeuwisse, R. (2017). *Cybersecurity for Beginners* (2nd ed.). London: Cyber Simplicity
3. Birkić, T. et al. (2017). *Sustav za e-učenje Merlin: priručnik za nastavnike*. Zagreb: Sveučilište u Zagrebu Sveučilišni računski centar
<http://www.srce.unizg.hr/files/srce/docs/CEU/sustavi-na-daljinu/Merlin/merlin-prirucnik-nastavnik-2017.pdf> (accessed 2 October 2017)
4. Clark, R. C., & Mayer, R. E. (2016). *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning* (4th ed.). Hoboken, NJ: Wiley
5. Ćukušić, M., & Jadrić, M. (2015). *IT-sigurnost: priručnik za polaznike*. Zagreb: Sveučilište u Zagrebu Sveučilišni računski centar
http://www.srce.unizg.hr/files/srce/docs/edu/osnovni-tecajevi/f400_polaznik.pdf (accessed 2 October 2017)
6. Elkins, D., & Pindler, D. (2015). *E-Learning Fundamentals: A Practical Guide*. Alexandria, VA: ATD Press
7. Horton, W. (2012). *E-Learning by Design* (2nd ed.). San Francisco, CA: Pfeiffer
8. Rice, W. (2015). *Moodle E-Learning Course Development* (3rd ed.). Birmingham, UK: Packt Publishing
9. *The Moodle Project*. <https://moodle.org/> (accessed 2 October 2017)

Module 2

Course: Curriculum in Higher Education

Curriculum in Higher Education is a course designed to provide participants with the competences described under the competence area *Curriculum Planning and Development in Higher Education*. The purpose of this course is to train higher education teachers to actively participate in efforts to plan, develop, implement and evaluate university programmes that rely on a curriculum-based approach.

Participants will acquire basic knowledge about the theoretical sources and approaches used in developing a curriculum, which will enable them to understand and critically reflect on the selection of a single approach or a combination of multiple approaches in developing specific study programmes. Setting forth from scientific insights about steps in curriculum design, participants will be trained to take an active part in efforts to plan and develop study programmes, define competences at the programme level and identify the contribution of course-level learning outcomes to the development of programme-level competences. From the perspective of curriculum planning, the mastery of competences at the programme level depends on horizontal and vertical programme congruence as well as appropriate student workload. Therefore, higher education teachers need to understand the concept of constructive alignment within a study programme and be able to use analytical tools developed based on of that concept. They also need to be aware of models and techniques for curriculum evaluation and enhancement.

Course title

Curriculum in Higher Education

Credit value (ECTS)

6

Expected learning outcomes:

Once they meet all course requirements, participants will be able to:

1. Explain approaches and steps in developing a study programme
2. Participate in the definition of programme-level and course-level competences
3. Define student workload for a specific course based on the expected learning outcomes
4. Analyse programme-level and course-level learning outcomes by using a structural matrix

5. Interpret the results of internal and external programme evaluation
6. Suggest procedures to enhance the quality of study programmes

Instructional implementation

- lectures
- workshops
- presentations
- discussions

Examples of learning outcomes assessment methods:

- Essay on the strengths and weaknesses of applying different approaches in developing a curriculum (outcome 1)
- Critical review of the contribution of course-specific learning outcomes to the development of programme-level competences (outcome 2)
- Description of the methods to define total ECTS value for a course, including an explanation of credit allocation to specific course activities (outcome 3)
- Development of a structural matrix for a specific programme (outcome 4)
- Research project on the internal evaluation of a study programme (outcomes 5 and 6)

Suggested reading

1. Bamber, V., Trowler, P., Saunders, M., & Knight, P. (2009). *Enhancing Learning, Teaching, Assessment and Curriculum in Higher Education*. Berkshire: Society for Research into Higher Education & Open University Press.
2. Banta, W. T., Jones, E. A. & Black, K. E. (2010). *Designing Effective Assessment: Principles and Profiles of Good Practice*. San Francisco: John Wiley & Sons.
3. Barnett, R. & Coate, K. (2005). *Engaging the Curriculum in Higher Education*. Berkshire: Society for Research into Higher Education & Open University Press.
4. Biggs, J. (2003). *Teaching for Quality Learning at University*. The Society for Research into Higher Education and Open University Press.
5. Biggs, J. and Kevin F. Collis, K. F.(1982). *Evaluating the Quality of Learning: The SOLO Taxonomy*. New York: Academic Press.
6. Darwin, S. (2016). *Student Evaluation in Higher Education: Reconceptualising the Student Voice*. Springer.
7. Domović, V. (2009). "Kurikulum - osnovni pojmovi." In: Vizek Vidović, V. (ed.). *Planiranje kurikuluma usmjerenoga na kompetencije u obrazovanju učitelja i nastavnika*. Zagreb: Filozofski fakultet Sveučilišta u Zagrebu. 19-32.
8. Hoidn, S. (2016). *Student-Centered Learning Environments in Higher Education Classrooms*. Springer.

9. Kovač, V. & Kolić – Vehovec, S. (2008). *Izrada nastavnih programa prema pristupu temeljenom na ishodima učenja*. Rijeka: Sveučilište u Rijeci.
10. Ornstein, A. C. & Hunkins, F. P. (2014). *Curriculum – foundations, principles and issues*. USA: Pearson and Allyn and Bacon.

Course: Professional Communication

Professional Communication is a course aimed at achieving the learning outcomes planned under the competence area entitled *Communication and Social Skills*.

This course will provide the participants with insights about professional communication, which relies on our efforts to adjust the way we communicate to different communication situations, i.e. on our respect for the principles of active listening and tolerance, which is also conducive to developing a sense of empathy among stakeholders in academic discourse. Quality communication and the teacher's readiness to engage in open critical (self-) reflection are important elements when it comes to encouraging research work as well as developing a number of values that will be nurtured through communication in a broader context.

In higher education, professional communication is focused on two aspects. The first is associated with intercultural communication. The second aspect refers to international communication used by teachers and students in their contacts with foreign students and peers. The foreign language they will use will serve as a means of communication targeted at mutual understanding and encouraging intercultural communication.

The objective of this course is to develop professional communication skills among higher education teachers, which will improve clarity and quality in the structuring of all forms of communication and increase efficiency in communication with students and peers.

Course title

Professional communication

Credit value (ECTS)

3

Expected learning outcomes:

Once they meet all course requirements, participants will be able to:

1. communicate effectively with students and peers, respecting the key rules of quality interpersonal relationships and social interaction
2. engage in successful oral and written communication with regard to situational requirements and respecting communication rules, especially intercultural communication rules
3. present topic-specific content in compliance with relevant linguistic rules, using ICT tools and respecting the standards of academic discourse
4. ask questions conducive to topic-specific content elaboration in order to encourage self-reflection and open dialogue
5. provide efficient meeting moderation and group leadership
6. manage problem situations and conflicts in communication

Instructional implementation

- interactive lectures
- group discussions
- role playing
- collaborative learning
- practical assignments
- independent work
- consultative teaching
- e-learning

Examples of learning outcomes assessment

- Objective-type assignments (Outcome 1)
- Feedback to students and a letter to the dean (head of university) (outcomes 1 & 2)
- Oral recap of conclusions according to specific criteria (outcomes 1, 2, 5)
- Content presentation by using ICT tools (outcome 3)
- Critical evaluation according to agreed criteria (outcomes 4 & 6)
- Self-reflection (outcome 4)
- Discussion (pros/cons) (outcomes 2 & 4)

Suggested reading

1. Green, J. O., Burlison, B. R. (2003). *Handbook of Communication and Social Interaction Skills*, Mahwah. New Jersey: Lawrence Erlbaum Associates.
2. Hargie, O., Dickson, D. (2004). *Skilled Interpersonal Communication: Research, theory and practice*. New York: Routledge.
3. Johnson, W. B. (2015). *On being a mentor: A guide for higher education faculty*. Oxford (UK): Routledge.
4. Knapp, M. L., Daly, J. A. (2002). *Handbook of Interpersonal Communication*. Thousand Oaks, California: Sage.
5. Smith, J. A. (Ed.). (2015). *Qualitative psychology: A practical guide to research methods*. Newcastle upon Tyne (UK): Sage.

6. Tatković, N., Diković, M., Tatković, S. (2016). *Pedagoško-psihološki aspekti komunikacije*. Pula: Sveučilište Jurja Dobrile u Puli.
7. Žižak, A., Vizek Vidović, V., Ajduković, M. (2012). *Interpersonalna komunikacija u profesionalnom kontekstu*. Zagreb: Edukacijsko-rehabilitacijski fakultet.

Course: Academic Profession

By its content, this course builds on the course *Professionalism and Professional Development in Higher Education*, focusing on teaching activity as an aspect of the teaching profession. The objective of this course is to highlight the importance and complexity of the teaching aspect of the academic profession. It is extremely important for teachers to understand the significance of their role and, in particular, its complexity in contemporary circumstances, and to demonstrate a commitment to their life-long professional development in teaching. In this context, it should be especially noted that the democratisation of higher education brings a diversified student body into the system, which, inter alia, imposes the requirement for a student-centred approach to teaching. This course is aimed at raising awareness of ethical and intercultural principles in teaching work, with special emphasis on the need to make ethical values part of higher education teachers' (professional) identity. The course is expected to contribute to the participants' commitment to their role as teachers as part of their own professional development. The course will encourage them to use the results of their own research efforts and apply the results of self-assessment to enhance their own teaching work.

Course title

Academic Profession

Credit value (ECTS)

2

Expected learning outcomes

Once they meet all course requirements, participants will be able to:

1. appropriately interpret different aspects of a teacher's role in the overall professional development
2. analyse different models of the teaching-research nexus in higher education
3. prepare their own teaching portfolio frameworks in line with the specifics of their scientific areas and/or fields

4. apply the ethical and intercultural principles of teaching within their own teaching portfolios
5. evaluate their own teaching portfolio frameworks
6. apply different self-evaluation and peer evaluation techniques

Instructional implementation

- interactive lectures
- workshops
- e-learning
- consultative teaching
- independent work
- collaborative learning

Examples of learning outcomes assessment methods

- writing a self-reflective essay on one's own teaching work, applying different models of the teaching-research nexus in higher education (outcome 2)
- preparation and self-evaluation of teaching portfolios (outcomes 1 - 6)
- peer evaluation of teaching portfolios (outcome 7)

Suggested reading

1. Effective legislative framework for the academic profession in Croatia (*Scientific Activity and Higher Education Act, Science and Higher Education Quality Act, Decision on Mandatory Requirements for Teaching and Professional Evaluation in Admission or Re-admission to Academic Teaching Posts in the Sciences, Decision on Mandatory Requirements for Teaching and Professional Evaluation in Admission to Academic Teaching Posts in the Arts, Ordinance on Conditions for Admission to Scientific Posts, university- or department-level documents governing professional development of academic staff (e.g., ordinances regulating additional advancement requirements)*)
2. Ledić, J., Brajdić Vuković, M. (eds.) (2017). *Narativi o profesionalnoj socijalizaciji mladih znanstvenika*, Rijeka: Filozofski fakultet u Rijeci.
3. Ledić, J., Turk, M. (eds.) (2017). *Teaching and Research in the professional Socialization of Junior Researchers / Nastava i istraživanje u profesionalnoj socijalizaciji mladih znanstvenika*, Rijeka: Filozofski fakultet u Rijeci.
4. Ledić, J., Turk, M. (eds.) (2017). *Preporuke o kompetencijama akademske profesije i profesionalnoj socijalizaciji mladih istraživača*. Rijeka: Filozofski fakultet u Rijeci
5. Turk, M., Ledić, J. (2016). *Kompetencije akademske profesije. Fata volentem ducunt, nolentem trahunt*. Rijeka: Filozofski fakultet u Rijeci
6. Teichler, U., Arimoto, A., Cummings, W. K. (eds.) (2013). *The Changing Academic Profession*. Amsterdam: Springer

Course: E-Learning Systems in Higher Education

E-Learning System in Higher Education is a course that builds up on the course on *Digital Competences in Higher Education* and, in combination with it, provides higher education teachers with an opportunity to master the competences falling within the competence area *Application of New Technologies in Teaching*, creating a basis for their continued enhancement.

Relying on theoretical insights about learning processes and styles used in a digital multimedia environment, the course is aimed at enabling the participants for the critical assessment of e-learning systems in view of the employed digital technologies and the available e-learning methods, for the evaluation of e-courses in view of the applied instructional design, and for the independent development and administration of an integral, methodologically and technologically advanced e-course in the selected (available) e-learning system.

The participants are, however, expected to have already mastered basic digital skills, with a focus on proficiency in the use of key text processing, graphic, audio and video tools and platforms for scientific communication in their profession, as well as basic Internet browsing and communication skills and the ability to apply key functionalities of the selected (available) e-learning system. Likewise, the participants are supposed to be already trained to identify and assess the possibilities of applying e-learning in their own teaching work.

Course title

E-Learning Systems in Higher Education

Credit value (ECTS)

2

Expected learning outcomes

Once they meet all course requirements, participants will be able to:

1. critically assess an e-course in line with e-learning theories and relevant criteria
2. develop educational activities, interaction and communication within an e-course by using the selected instructional design model and advanced e-learning methods
3. administer users within the selected e-learning system by using its advanced functionalities

- engage in formative and summative assessment of learning outcomes within the selected e-learning system by using its advanced functionalities and different methods

Instructional implementation

- computer workshop/course
- e-learning
- consultative teaching
- individual work

Examples of learning outcomes assessment methods

- Critical review of several e-courses already set up and available (outcome 1)
- Overview of one's own integral e-course in the selected e-learning system, including the explanation of the applied instructional design model and the demonstration of the advanced e-learning methods used in learning activities, formative and summative assessment of learning outcomes, and interaction and communication with participants (outcomes 2 – 4).

Suggested reading

1. Birkić, T. et al. (2017). *Sustav za e-učenje Merlin: priručnik za nastavnike*. Zagreb: Sveučilište u Zagrebu Sveučilišni računski centar <http://www.srce.unizg.hr/files/srce/docs/CEU/sustavi-na-daljину/Merlin/merlin-prirucnik-nastavnik-2017.pdf> (accessed 2 October 2017)
2. Clark, R. C., & Mayer, R. E. (2016). *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning* (4th ed.). Hoboken, NJ: Wiley
3. Horton, W. (2012). *E-Learning by Design* (2nd ed.). San Francisco, CA: Pfeiffer
4. *Mentimeter tool*. <https://www.mentimeter.com/> (accessed 24 October 2017)
5. *Open Badges Community*. <https://openbadges.org/> (accessed 24 October 2017)
6. *Time to Assess Learning Outcomes in E-learning (TALOE) Webtool*. <https://taloetool.up.pt/> (accessed 24 October 2017)
7. *The Moodle Project*. <https://moodle.org/> (accessed 2 October 2017)
8. Rice, W. (2015). *Moodle E-Learning Course Development* (3rd ed.). Birmingham, UK: Packt Publishing

Course: Mentorship

Mentorship is a course designed to provide the participants with the competences described under the *Mentoring* competence area. The objective of this course is to train the participants for different forms of mentoring work with students, including individual and group project mentoring, student practice mentoring and individual mentoring on final thesis preparation. The participants will gain key knowledge and skills enabling them to establish quality collaborative relationships with mentorees. They will learn about mentoring role aspects, mentoring principles and tasks, and the mentoring process flow. The participants will be trained to apply specific social and communication skills needed to provide students with appropriate support in their individual work on selected assignments. The participants will master the following skills: active listening, providing constructive feedback, asking motivating questions, aligning and negotiating work targets, problems and methods, motivating students to engage in self-reflection, and offering support in case of blocks or obstacles in work. In addition to receiving professional and personal support in carrying out their tasks, mentored students will come to understand different aspects of academic work (ethical, cultural, social), develop self-efficacy for independent their work and build their professional identity.

Course title

Mentorship

Credit value (ECTS)

3

Expected learning outcomes

Once they meet all course requirements, participants will be able to:

1. Analyse the nature of the mentoring role and mentoring relationship and stages in the mentoring process as well as setbacks in the mentoring relationship
2. Apply appropriate social and communication skills in establishing and maintaining a motivating collaborative mentoring relationship with students
3. Support students in planning, implementing and assessing all assignments/projects included in the mentoring process
4. Adjust their mentoring style and assignment planning to individual student needs, including their prior knowledge, interests and socio-cultural background
5. Express confidence in students' capacity for continuous growth and development by providing them with constructive feedback

6. Demonstrate belief in mentoring as an aspect of professional development for the mentored student

Instructional implementation

- interactive lectures
- group discussions
- collaborative learning
- practical assignments
- independent work
- consultative teaching

Examples of learning outcomes assessment methods

- Written assignment analysing the application of theoretical concepts in the field of mentoring, including examples from one's own experience, either from the mentor's or the mentoree's perspective (outcome 1)
- Practical assignments to demonstrate social and communication skills in the field of mentoring (outcome 2)
- Oral assignment providing arguments for the selected approach to offering personal and professional support (outcome 3)
- Written assignment with examples of how to adjust the mentoring style to individual student needs (outcome 4)
- Oral argumentation of the importance of emotional support for students, including examples of constructive feedback (outcome 5)
- Oral explanation of the importance of belief in mentoring work as an aspect of professional development both for the mentor student and the mentor himself/herself (outcome 6)

Suggested reading

1. AZVO (2017) Standardi za vrednovanje kvalitete sveučilišta i sastavnica sveučilišta u postupku reakreditacije visokih učilišta <https://www.azvo.hr/hr/vrednovanja/postupci-vrednovanja-u-visokom-obrazovanju/novi-ciklus-reakreditacije-visokih-ucilista>
2. Clutterbuck, D. and Lane, G. (2004) *The situational mentor - an international review of competences and capabilities of mentoring*, London: Gower publishers.
3. ENQA (2015) Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) – translation by AZVO http://www.enqa.eu/indirme/esg/ESG%20in%20Croatian_by%20ASHE.pdf
4. Laverick, D. M. (2016) *Mentoring Processes in Higher Education*. Springer.
5. Vizek Vidović, V., Brajdić Vuković, M., Matić, J. (2014) *IDIZ-ov Priručnik za mentoriranje mladih istraživača*. IDIZ – Zagreb, http://www.idi.hr/wp-content/uploads/2014/07/IDIZ-ov_prirucnik_za_mentoriranje.pdf.

6. Vizek Vidović (ed.) (2011) *Učitelji i njihovi mentori* (chapter 3. “Uloga mentora u profesionalnom razvoju učitelja” and chapter 5. “Podrška mentorima u radu i profesionalnom razvoju”). Zagreb: IDIZ

Course: Academic Discipline and Teaching Laboratory

Academic Discipline and Teaching Laboratory is a course aimed at achieving the learning outcomes defined under the competence area entitled *Mastery of Academic Discipline*.

The purpose of this course is to train the participants for instructional planning and implementation and the assessment of learning outcomes in keeping students' prior knowledge, so that they can develop an in-depth mastery of key concepts, topics, research issues and scientific methods in the relevant field.

The goal is to adapt and apply theoretical knowledge about learning and teaching to the academic discipline, with due regard for students' needs and characteristics. As part of this course, participants will master the key the principles and methods of action research associated with the academic discipline, which is essential for a successful implementation of the teaching process in the institutional contexts in which participants are active.

Course title

Academic Discipline and Teaching Laboratory

Credit value (ECTS)

4

Expected learning outcomes

Once they meet all course requirements, participants will be able to:

1. Explain how to transpose scientific content to teaching content and methods, while having regard to students prior knowledge
2. Use the plan for a specific teaching topic to show how to apply a student-centred approach.
3. Use examples from one's own teaching practice to explain how to motivate students for research-oriented thinking and the use of scientific methodology
4. Use examples from one's own teaching practice to show how to apply an interdisciplinary approach

5. Explain the purpose and principles of planning and implementing action research based on the relevant theory
6. Apply action research methodology to self-reflect on achieving the planned teaching objective
7. Write a report on the conducted research, setting out the key results, interpreting them competently and drawing key conclusions on the basis thereof, i.e. setting further action guidelines

Instructional implementation

- presentation of examples from one's own practice
- group discussions
- seminars
- action research planning

Examples of learning outcomes assessment methods

- Oral presentation of one's own teaching practice (outcomes 1-4)
- Portfolio with examples from one's one teaching practice (outcomes 1-4)
- Action research plan (outcomes 5 and 6).
- Report on the results of the conducted research (outcome 7)

Suggested reading

1. Bradbury, Hilary (ed.) (2015) *The SAGE Handbook of Action Research*. 3rd ed. <https://books.google.com>.
2. Fry, H., Ketteridge, S., Marshall, S. (2010). *A handbook for teaching and learning in higher education*. London: Kogan Page. (213-466)
3. Neumann, Ruth (2001) "Disciplinary Differences and University Teaching," *Studies in Higher Education*, 26:2, 135 - 146

Reading is suggested by those delivering/implementing the course, depending on the academic discipline.

Module 3

Course: Research Methods in Higher Education – Course Curriculum

The aim of this course is to qualify participants to plan and implement educational research in the field of higher education. The results of such applied research should be the foundation for the improvement of curricula and teaching in various higher education programmes and educational environments. The course will be offered in an online format as support to the planning and development of specialist work. Participants will progress through the course with continual support from their leader/mentor. The course will be rooted in previous knowledge and the research experience of participants in their core areas of expertise.

Within the framework of the course, participants will learn the theoretical grounds upon which the approaches in educational research rest. Participants will be capable of defining a research problem and drafting a research outline suited to the research objective and know how to verify the fulfilment of ethical norms in research. They will be capable of planning and implementing the research process, including the determination of samples, analysis of the relevant literature, selection of an appropriate data-gathering strategy and methods, analysis of data by applying social science data-processing programmes, interpretation of the results and presentation thereof.

Course title

Research Methods in Higher Education

Credit value (ECTS)

7

Expected outcome of learning at the course level

Once they meet all course requirements, participants will be able to:

1. Explain the approaches to research in education, sources of research ideas in the study of higher education, and the ethical aspects of educational research
2. Write a research outline, research objective, research queries and hypotheses, and
3. Explain the selection of samples and research methodology (quantitative, qualitative approach) suited to the set problem
4. Apply procedures to verify the validity and reliability of measurements

5. Apply different methods for gathering data depending on the problem as formulated and the selected research approach
6. Apply the basic methods of univariate and multivariate data processing with use of a data-processing programme in the social sciences
7. Interpret results in the light of findings from the recent literature
8. Describe the limitations and guidelines for further research and the possibility for practical application of the results
9. Present the results to the public and wider academic community

Instructional implementation

- e-learning
- independent work
- practical tasks
- presentation
- consultation with leader/mentor

Examples of learning outcomes assessment

- Essay on theoretical approaches in education, sources of research ideas in the study of higher education, with ethical aspects of educational research (outcome 1)
- Assignment involving the formulation of a research outline, research queries and hypotheses using the selected research objective (outcome 2)
- Assignment using the selected example (from the preceding assignment) to explain the selection of samples and research methodology suited to the set problem (outcome 3)
- Assignment using the preceding example to explain the procedures to verify the validity and reliability of measurements (outcome 4)
- Assignment in which data-gathering methods are explained depending on the formulated problem and chosen research approach (outcome 5)
- Assignment using a specific example to apply the basic methods of univariate and multivariate data processing with use of the social science data processing programme (outcome 6)
- Assignment involving interpretation of results from the preceding example in the light of recent literature (outcome 7)
- Assignment using the preceding example to describe the limitations and guidelines for further research and the possibility of practical application of results (outcome 8)
- Presentation of research results intended for the professional public and/or wider academic community (outcome 9)

Suggested reading

1. Cohen, L., Manion, L., Morrison, K. (2007) *Metode istraživanja u obrazovanju*, Jastrebarsko: Naklada Slap.
2. Milas, G. (2009) *Istraživačke metode u psihologiji i drugim društvenim znanostima*, Jastrebarsko: Naklada Slap.
3. Petz, B. Kolesarić, V., Ivanec, D. (2012) *V. Petzova statistika*, Jastrebarsko: Naklada Slap.
4. Pearson. Gibbs, P.T. et al. (2016). "Literature review on the use of action research in higher education." *Educational Action Research*, 3-22.
5. National Research Council. 2002. *Scientific Research in Education*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/10236>.
6. *Research in Higher Education* (academic journal), Sage. Selected articles.
7. *Research in Higher Education* (academic journal), Springer. Selected articles.
8. SPSS tutorial, <https://www.spss-tutorials.com/basics/>.

Individual consultations with mentor

Course title

Individual consultations with mentor

Credit value (ECTS)

3

Expected learning outcomes

Participants will be able to:

1. self-regulate their own professional work
2. observe the work of another teacher and provide adequate feedback
3. prepare a progress report
4. analyze difficulties in work and propose guidelines for further work

Learning activities

- consultations
- independent work

Examples of learning outcomes assessment:

- Draft a review of one's own work (outcome 1)
- Develop an observation protocol and write feedback (outcome 2)
- Write a progress report (outcome 3)
- Write guidelines for further work (outcome 4)

Suggested reading

The reading list will be determined in consultation with the mentor

Drafting and defence of a specialist thesis based on an analysis of results of personal empirical research

Course title

Drafting and defence of a specialist thesis based on an analysis of results of personal empirical research

Credit value (ECTS)

10

Expected learning outcomes

Participants will be able to:

1. plan and implement their own research
2. draft a specialist thesis based on an analysis of research results
3. defend the thesis on results of personal research
4. propose new research which ensues from personally conducted research

Learning activities

- practical work
- specialist work
- oral interpretation and analysis

Examples of learning outcomes assessment

- Specialist work (outcomes 1-4)
- Oral defence of specialist thesis (outcomes 1-4)

Suggested reading

The reading list will be determined in consultation with the mentor

RECOMMENDATIONS FOR THE DEVELOPMENT AND IMPROVEMENT OF TEACHING COMPETENCES AT CROATIAN HIGHER EDUCATION INSTITUTIONS

The Recommendations for developing and improving teaching competences at higher education institutions are rooted in the activities conducted during work on the Project (completed analyses of the relevant international and national documents, seminars, workshops and focus groups, experiences with fact-finding tours of the relevant international institutions), as well as the expertise of the of Working Group's members.

Keeping in mind the current state and specific aspects of the national higher education system, the purpose of these Recommendations is to propose a framework for improving the quality of teaching and learning in higher education, which is aimed at prompting the formulation of national and institutional policies that will foster activities to contribute to the reinforcement of the role of university teachers and raise awareness of the importance of improving the quality of learning in higher education.

1. Establish a transparent legal framework for lifelong professional development of teachers in higher education.

The national legal framework for the lifelong professional development of teachers in higher education must be guided by recent European-wide higher education policies that unambiguously point to the need for increasing the quality and importance of academic teaching and learning. Lifelong professional training must be a condition for the work of teachers in higher education, and it must be stipulated by provisions that govern the admission and promotion of higher education teachers.

The importance of teaching must be also be recognized in the regulations that govern higher education: the Science and Higher Education Quality Assurance Act (as published in the official journal of the Republic of Croatia, *Narodne novine*, no. 45/09) and the Scientific Activity and Higher Education Act (*Narodne novine*, no. 123/03, 198/03, 105/04, 174/04, 02/07, 46/07, 45/09, 63/11, 94/13, 139/13, 101/14, 60/15, 131/17).

The Science and Higher Education Quality Assurance Act should define the quality of teaching and learning at higher education institutions, as well as the entire system for improving quality in higher education. This should be particularly apparent in provisions that define the procedures for the re-accreditation of higher education institutions and the initial accreditation of study programmes such that they clearly validate the activities and mechanisms whereby such institutions improve the acquisition of teaching competences and the further training of research/teaching and teaching staff.

When defining the criteria for admission to teaching vocations, as well as the hiring conditions in associated vocations, the obligation of mastering the fundamental competences for higher education teaching must be underscored.

2. Recognize the importance of lifelong professional development by higher education teachers as a the strategic objective of any higher education institution and establish mechanisms for their implementation through the construction of an institutional infrastructure.

Despite the differences in higher education systems, the context of the European Higher Education Area points to the **key role of higher education institutions in recognizing the importance of the professional development of higher education teachers**. In this sense, it is important for higher education institutions to acknowledge the importance of lifelong professional development of higher education teachers in their strategic objectives, and to build mechanisms to implement them (for example, establish centres for research and refinement of academic teaching, support projects tied to the improvement of academic teaching, reward teaching achievements, etc.).

In this context, it is both necessary and possible to develop and implement institutional strategies aimed at increasing the quality of academic teaching, with particular emphasis on the development of teaching competences, to develop institutional policies that promote a

quality of teaching above and beyond national standards in procedures to hire and promote academic staff, and to encourage the acquisition of competences for teaching and learning within the framework of doctoral study programmes. To be sure, it is especially important to develop and certify programmes for the continued training of higher education teachers, and it is vital to support the motivation for further training in teaching by (younger) academic staff with special emphasis on the development of a culture of learning and collegial cooperation, such as the development of the culture of collegial cooperation in scientific research. Institutions are expected to structure the professional socialization of (junior) academic staff, taking into account the balanced development of all academic competences, and, in particular, the link between scientific research and teaching.

3. Ensure the acquisition of fundamental teaching competences for all higher education teachers upon their entry into an academic profession.

The mastering of fundamental teaching competences (encompassed in Module 1 of the Curriculum Framework for Teaching Competence Enhancement in Higher Education) must be facilitated for all teachers upon entry into academic professions. In this context, support must be given at the national and institutional levels to the development and implementation of programmes (by allocation of financial support, and especially development of human resources for the quality implementation of programmes).

4. Base the curriculum for higher education teacher professional development on competence areas.

The competence area allows for the clearer definition of hiring and promotion criteria based on the knowledge, skill and ability necessary for entry or advancement in an academic profession. In this context, it serves as the foundation for the professional higher education teaching development curriculum which should ensure the relevant knowledge, skill and ability.

5. Develop a flexible system to improve teaching competences during an academic career

Given the tempo of change in the academic profession and the differing demands confronted by higher education teachers, it will be necessary to develop a flexible system to improve teaching competences that will fulfil various requirements of higher education teachers (for example, depending on the scholarly discipline, structure of the student body, different stages of a career, etc.).

It is also necessary to foster scientific work and research that will study and improve academic teaching, and especially nurture the specific aspects of teaching and learning on scientific disciplines.

6. Establish a system of continual monitoring and evaluation of the implementation and impact of the teaching competence development program

Higher education institutions that accredit programmes for the development of teaching competences must accord special care to the continued monitoring and evaluation of the impact of such programmes, and periodically revise programmes in compliance with the results of evaluations, thus responding to the needs of their users.

Secure mechanisms at the national level that will monitor the quality of teaching and learning in higher education and its impact on other aspects of higher education (for example, greater enrolment in higher education by all population categories, academic success, employability of persons with degrees, links between higher education and the economy and community...).