

EDUM-ET-108 Technology-based Assessment and Evaluation (MA)

Aim of training

Aim of the study program:

The aim of the course is to summarize and offer a practice-oriented overview of educational assessment and evaluation in the 21st century. The course provides students with an understanding of how to design and administer different types of educational tests using digital technology. Students will learn about the basic concepts of educational assessment, focusing specifically on technology-based assessment and evaluation. Students will develop a deeper understanding of the potentials of diagnostic, formative, and summative forms of assessment, acquire knowledge and skills related to classroom assessment, classic and modern test theory and the goodness of measurement. Students will also learn to use web-based applications to construct student achievement tests and questionnaires. In addition, students will gain experience in student evaluation.

Expected learning outcomes and related competencies

Knowledge:

- Has knowledge of the latest results of research in education science and its neighboring fields and the relevant pedagogical innovations; and is able to analyze and interpret them critically.
- Has knowledge of the terminology of education science in his/her mother tongue and at least in one foreign language.

Skills:

- Is able to prepare professional materials according to independently chosen aspects, to present and analyze research results with objectivity, to write shorter professional texts independently.
- Is able to create age-appropriate educational conditions based on his/her knowledge of characteristics of learning, and to support individual ways of learning.
- Is able to interpret professional scientific discourses and to compare arguments of different viewpoints.
- Is able to evaluate and assess documents defining his/her profession and to compile documents at organizational level.

Attitude:

- Has professionally established critical approach and committed to professional analysis based on values and knowledge.
- Stands for the importance of communication in pedagogical and professional work, considers important to utilize the potentials of information technology tools. Committed to improve continuously his/her foreign language skills.

Autonomy and responsibility:

- Strengthens his/her professional confidence and assesses realistically his/her own professional potentials and deficits.
- Due to intentional self-development is able to work independently and with responsibility and is able to reconcile personal and professional goals in his/her work. Initiates and leads innovative processes with responsibility.

Main topics

Main contents

1. Introduction to educational assessment and evaluation
2. Formative, and summative assessment in education
3. Diagnostic assessment and educational planning
4. Goodness of measurement: reliability, validity, objectivity
5. Modern Test Theory and adaptive testing
6. International student assessments, item banks
7. Modern technology and assessment: Game-based, Simulation-based assessment
8. Applications of web-based assessment (Quizlet, Kahoot, Socrative, etc.)
9. Technology enhanced classroom assessment
10. Test design and administration in the 21st century

Planned teaching and learning activities

Class discussions, individual work, group work and homework.

Evaluation

Requirements, type and aspects of evaluation:

Requirements:

- Construction of a student achievement test (including test description, with a detailed content and requirement register)
- Peer and self-evaluation
- Active participation at least 80% of the classes (based on HKR, up to 3 classes missing). Participation is a part of the final mark.

Type of evaluation: practice-based mark

The evaluation of the achievement during the semester:

1. Test - 60%

2. Peer evaluation - 20%
3. Active participation in the classes, group and individual tasks - 20%

Total obtainable points: 100%

Course grades:

- 5 (100-90%),
- 4 (90-80%),
- 3 (80-70%),
- 2 (70-60%),
- 1 (below 60%)

Reading

Required reading:

- Drasgow, F. (Ed.). (2015). *Technology and testing: improving educational and psychological measurement*. New York, NY: Routledge.
- Reynolds, C. R., Livingston, R. B., Willson, V. L., & Willson, V. (2010). *Measurement and assessment in education*. Harlow, UK.: Pearson.