COURSE OUTLINE

"Research Methods in Education" (EDU520)

(1) GENERAL

SCHOOL	SCHOOL OF SOCIAL & HUMANITIES (LIMASSOL UNIVERSITY) & SCHOOL OF HEALTH AND WELFARE SCIENCES (WEST ATTICA UNIVERSITY)		
SECTION	DEPARTMENT OF EDUCATIONAL SCIENCES & DEPARTMENT OF BIOMEDICAL SCIENCES		
LEVEL OF STUDIES	MA		
COURSE CODE	**EDU 520**	**SEMESTER OF STUDY**	**A΄**
COURSE TITLE	**Research Methods in Education**		

INDEPENDENT TEACHING ACTIVITIES *where credit is awarded for discrete parts of the course e.g. lectures, laboratory exercises, etc. If credit is awarded for the whole course, indicate the weekly teaching hours and the total number of credits*	**WEEKLY TEACHING HOURS**	**CREDIT UNITS**
LECTURES AND LABORATORY EXERCISES	3	10
Add rows if necessary. The teaching organisation and the teaching methods used are described in detail in (d).		

TYPE OF *general background, special background, specialization general knowledge, skills development*	*General*
PREREQUISITE COURSES:	-
LANGUAGE OF TEACHING AND EXAMINATION:	GREEK
THE COURSE IS OFFERED TO STUDENTS	NO
ELECTRONIC COURSE PAGE (URL)	https://moodle.uol.ac.cy/login/index.php

(2) LEARNING OUTCOMES

Learning Outcomes

The learning outcomes of the course are described as the specific knowledge, skills and competences of an appropriate level that students will acquire after successful completion of the course.

Consult Annex A

- *Description of the Level of Learning Outcomes for each cycle of study according to the Qualifications Framework of the European Higher Education Area*
- *Descriptive Indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Annex B*
- *Learning Outcomes Writing Guide*

The aim of the course is to help students to understand and apply the basic methodological approaches in the design and conduct of research in the field of education, especially in Special Education and New Technologies. In addition, the course focuses on the research process of collecting quantitative and qualitative data and the statistical analysis and interpretation of research design results.
Specifically, students after successful completion of the course will have acquired basic and sufficient knowledge about

- the importance and applications of educational research.
- the main types of surveys and the stages of their conduct.
- the use of various techniques for collecting quantitative and qualitative data.
- the basic strategies for analysing quantitative and qualitative data.
- the effective design of research studies, learning how to formulate research questions, select appropriate methodologies (experiments, surveys, interviews, etc.) and develop robust research designs that ensure the validity and reliability of educational research.
- a thorough review of the scientific literature in various databases to allow in-depth knowledge on a specific topic.
- the monitoring of international developments in Special Education and New Technologies.
- the critical study of research articles presenting analyses of quantitative and qualitative data in the field of Special Education and New Technologies

General skills

Taking into account the general competences that the graduate should have acquired (as listed in the Diploma Supplement and listed below), which one(s) does the course aim at?

Search, analysis and synthesis of data and information, using the necessary technologies	*Project planning and management*
Adapting to new situations	*Respect for diversity and*
Decision-making	*Respect for the natural environment*
Autonomous work	*Demonstrate social, professional and ethical responsibility and sensitivity to gender issues*
Teamwork	*Exercise of criticism and self-criticism*
Working in an international environment	*Promoting free, creative and inductive thinking*
Working in an interdisciplinary environment	*.....*
Generating new research ideas	*Other...*
	.....

The course aims to:

- Search, analysis and synthesis of data and information, using the necessary technologies
- Adapting to new situations
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment

(3) COURSE CONTENT

LECTURES - UNITS:

1. Introduction to research methodology & Types of surveys and examples

This is an introductory session. This week focuses on the key pillars of quantitative and qualitative research methods. Students will gain a deep understanding of these vital aspects, equipping them with the skills to understand under what circumstances it is best to use qualitative or quantitative research methods to approach a research question

2. Ethical Issues and Open Science.

This week focuses on the key pillars of Ethics and Open Science practices. Students will gain a deep understanding of these vital aspects, equipping them with the skills to design research studies that respect participants and create results accessible to all.

3. Research design - research stages.

This week focuses on the different stages of designing a study. Students will gain a deep understanding of these vital aspects, equipping them with the skills to define a research question, review existing literature, select an appropriate methodology, and appreciate the importance of evaluating results in the context of existing literature

4. Literature Review.

This week focuses on the importance of conducting a thorough and honest literature review to generate high quality research findings

5. Variables and Types of Variables.
This week focuses on defining variables and understanding measurement scales in research. Students will gain a deep understanding of these vital aspects, equipping them with the skills to define appropriate variables to pursue a research question.

6. Quantitative Research.
This week focuses on the concepts underlying quantitative research methods. We will discuss dependent and independent variables, different types of research designs (e.g., instruments, data analysis), and other factors that affect the robustness of research studies. Students will gain an in-depth understanding of these vital aspects while becoming familiar with quantitative research studies as they are able to design their own at the end.

7. Data Collection in Quantitative Research.
This week focuses on basic methods in quantitative research. Students will gain a deep understanding of the fundamental issues, equipping them with the skills to choose the most appropriate methodology to answer research questions

8. Qualitative Research.
This week focuses on the main pillars of qualitative research methods. Students will gain a deep understanding of these vital aspects, equipping them with the skills to design robust studies using qualitative research methods

9. Data collection in qualitative research.
The aim of the course is for students to study the different types of interviews, the advantages and disadvantages of each type and the ways of analysing the data collected through interviews.

10. Quantitative data analysis and statistics.
This week focuses on the analysis of quantitative and qualitative data through various strategies to understand if and how research data can contribute to the field of Education and specifically to Special Education and New Technologies

11. Validity and Reliability of Research.
This week focuses on the key pillars of validity and credibility. Students will gain a deep understanding of these key scientific criteria, cultivating the skills to ensure the quality of their research efforts.

12. Development of a Research Protocol.
This week focuses on developing a high-quality research protocol that includes all the information needed for a specific research study. Students will gain a deep understanding, cultivating skills to develop their own research protocol. Developing a research protocol is a fundamental element in any research endeavor, providing essential guidance throughout the study.

(4) TEACHING and LEARNING METHODS - EVALUATION

METHOD OF DELIVERY *Face-to-face, Distance learning, etc.*	Distance
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES *Use of ICT in Teaching, Laboratory Training, Communication with students*	ICT and their use in education are the subject of the course and are therefore used extensively in Teaching, Laboratory Training, Communication with students.
ORGANISATION OF TEACHING *The way and methods of teaching are described in detail.* *Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Literature, Tutoring, Practical (Placement), Clinical Exercise, Artistic Workshop, Interactive teaching, Educational visits, Study visits, Project work, Writing work / assignments, Artistic creation, etc.* *The student's hours of study for each learning activity and the hours of unguided study according to ECTS principles are indicated.*	
STUDENT ASSESSMENT *Description of the evaluation process* *Language of Evaluation, Evaluation Methods, Formative or Inferential, Multiple Choice Test, Multiple Choice Test, Short Answer Questions, Test Development Questions, Problem Solving, Written Work, Report, Oral Examination, Oral Examination, Public Presentation, Laboratory Work, Clinical Examination of a Patient, Artistic Interpretation, Other* *Explicitly identified assessment criteria are stated and if and where they are accessible to students.*	*Weekly interactive activities (20% in total):On a weekly basis, students will have the opportunity to interact with the teacher, other students and/or other relevant stakeholders to complete certain activities. These activities are an integral part of the course and help the student understand and assimilate each week's material. The instructor will select 10 interactive activities prior to the start of the course that will count towards the final course grade, each worth 2% of the grade. The remaining interactive activities will be available for students to complete (but will not contribute to their final grade) to facilitate self-assessment and to aid in-depth learning.* *Individual and/or collaborative work (30%): the instructor will assign the students an individual and/or collaborative project and will be evaluated according to the rubric of the project.* *Final examination (50%): the final examination will assess the students' understanding of the learning objectives set for the course and their ability to apply their knowledge to real-life scenarios in the field of Special Education and New Technologies.*

Activity	***Semester workload***
Lectures	*39*
Laboratory exercises	*13*
Interactive Teaching	*13*
Study & Literature Analysis	*26*
Study preparation	*26*
Job Writing	*36*
Independent Study	*47*
Total	**200**

(5) RECOMMENDED-BIBLIOGRAPHY

- Suggested Bibliography:

Bluman, A. (2022). elementary statistics: a step by step approach 11e. mcgraw .

Creswell, J. W. (2011) Research in education: design, conduct and evaluation of quantitative and qualitative research (Edited by Charalambos Tzorbatzoudis) Athens: Ion.

Field, A. (2015) Discovering statistics using SPSS (4th ed.).

Hott, B., Brigham, F., & Peltier, C. (2021). research methods in special education (1st ed.). Routledge. https://doi.org/10.4324/9781003526315

Papanastasiou, K., & Papanastasiou, E. (2016). Methodology of Educational Research (3rd Ed.). Nicosia.

- Related scientific journals:

British Journal *of Educational Technology* (BJET) - British Educational Research Association.

Education and Information Technologies - Springer.

Educational Technology Research and Development - Springer.

International Journal of Artificial Intelligence in Education (IJAIED) - Springer.

IEEE Transactions on Learning Technologies - IEEE.

Journal of Educational Research.

International Journal of Social Research Methodology.