

## COURSE OUTLINE

### 1. GENERAL INFORMATION

<b>SCHOOL</b>	School of Education		
<b>DEPARTMENT</b>	Department Of Preschool Education		
<b>STUDY LEVEL</b>	Undergraduate		
<b>COURSE CODE</b>	SEM-406	<b>SEMESTER</b>	C
<b>COURSE TITLE</b>	GEN Artificial Intelligence in Preschool Education		
<b>INSTRUCTIONAL ACTIVITIES</b>	<b>TEACHING HOURS PER WEEK</b>	<b>NUMBER OF ECTS CREDITS</b>	
1. Lectures	3	10	
<b>COURSE TYPE</b>	Free choice General knowledge Skills development		
<b>PREREQUISITIES</b>	Non		
<b>LANGUAGE OF INSTRUCTION AND ASSESSMENT</b>	Greek		
<b>COURSE IS OFFERD TO ERASMUS STUDENTS</b>	YES		
<b>COURSE WEBSITE</b>	<a href="https://eclass.edc.uoc.gr/courses/PTPEU469/">https://eclass.edc.uoc.gr/courses/PTPEU469/</a>		

### 2. LEARNING OUTCOMES

<b>Learning Outcomes</b>
<p>Students should develop knowledge related to artificial intelligence and its potential applications for its introduction into Preschool Education and acquire the ability to utilize and evaluate appropriate teaching interventions (educational scenarios) using artificial intelligence applications in the preschool classroom.</p> <p>The aim of the course is to introduce students to basic concepts of artificial intelligence with the following goals:</p> <ol style="list-style-type: none"> <li>1. Understanding the fundamental principles and applications of artificial intelligence.</li> <li>2. Critical evaluation and analysis of the impact of artificial intelligence on the educational process.</li> <li>3. Development of skills to utilize artificial intelligence applications in the preschool classroom.</li> <li>4. Creation of appropriate educational scenarios for teaching in the preschool classroom using artificial intelligence applications.</li> </ol> <p>Upon successful completion of the course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the basic principles and applications of artificial intelligence, as well as how it affects the educational process.</li> <li>2. Critically assess and analyze the impact of artificial intelligence in the educational field, considering ethical, social, and pedagogical aspects.</li> <li>3. Utilize artificial intelligence applications in the preschool classroom to develop pedagogical activities and improve the teaching process.</li> <li>4. Create and implement appropriate teaching scenarios that integrate artificial intelligence technologies, adapting them to the needs and characteristics of preschool education.</li> </ol>

**General Abilities**

- Independent work, research, analysis, and synthesis of data and information, using the necessary technologies, as well as the generation of new research ideas.
- Adaptation to new situations.
- Decision-making.
- Independent work.
- Teamwork.
- Promotion of creative and inductive thinking.

**3. COURSE CONTENT**

- Introduction to artificial intelligence and its applications in the educational field.
- Basic concepts of artificial intelligence and methodologies for developing applications.
- Artificial intelligence technologies and educational applications in the preschool classroom.
- Analysis of the impact of artificial intelligence on the educational process and society.
- Utilization of educational scenarios and development of teaching activities using artificial intelligence applications in the preschool classroom.
- Design and evaluation of pedagogical activities that integrate artificial intelligence technologies.

**4. METHODS OF INSTRUCTION, LEARNING AND ASSESSMENT**

<b>MODE OF INSTRUCTION</b>	<ul style="list-style-type: none"> <li>• Face to face teaching.</li> <li>• Tech lab.</li> </ul>										
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Artificial intelligence software</li> <li>• e-class electronic platform</li> </ul>										
<b>ORGANISATION OF INSTRUCTION</b>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Semester Workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>30</td> </tr> <tr> <td>Lab activities</td> <td>20</td> </tr> <tr> <td>Study</td> <td>100</td> </tr> <tr> <td><b>Total</b></td> <td>150</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Semester Workload</i>	Lectures	30	Lab activities	20	Study	100	<b>Total</b>	150
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<b>Total</b>	150										
<b>STUDENTS' ASSESSMENT</b>	Presentation of a teaching scenario utilizing artificial intelligence applications for teaching in the preschool classroom.										
<b>RECOMMENDED READING</b>	Tom, T. (2019). Artificial Intelligence Basics: A Non-Technical Introduction. <i>Monrovia, CA, USA: Appres.</i> Domingos, P. (2015). <i>The master algorithm: How the quest for the ultimate learning machine will remake our world.</i> Basic Books.										

