### **COURSE OUTLINE**

### LANGUAGE AND ARTIFICIAL INTELLIGENCE

### 1. GENERAL

| SCHOOL  | CLASSICS AND HUMANITIES                          |                               |  |              |  |
|---|--|-------------------------------|--|--------------|--|
| DEPARTMENT/UPS  | HUMANITIES / PHILOLOGY, HISTORY AND ANTHROPOLOGY |                               |  |              |  |
| LEVEL OF STUDIES  | UNDERGRADUATE – LEVEL 6                          |                               |  |              |  |
| COURSE CODE   | XXXXX SEMESTER 5 <sup>TH</sup>                   |                               |  |              |  |
| COURSE TITLE  | LANGUAGE AND ARTIFICIAL INTELLIGENCE             |                               |  |              |  |
| TEACHING ACTIVITIES  If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits. |  | TEACHING<br>HOURS PER<br>WEEK |  | ECTS CREDITS |  |
| , ,   |  | 3                             |  | 5            |  |
| Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.   |  |                               |  |              |  |
| COURSE TYPE  Background, General Knowledge, Scientific  Area, Skill Development   | SKILL DEVELO                                     | PMENT                         |  |              |  |
| PREREQUISITES:  | NO   |                               |  |              |  |
| TEACHING & EXAMINATION LANGUAGE:  | GREEK  |                               |  |              |  |
| COURSE OFFERED TO ERASMUS STUDENTS:   | YES  |                               |  |              |  |
| COURSE URL:   | https://eclass.duth.gr/courses/XXXXXX/           |                               |  |              |  |

### 2. LEARNING OUTCOMES

### **Learning Outcomes**

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course, students will be able to:

- Identify AI tools used in education.
- Understand how AI algorithms and applications function.
- Recognize and describe the applications, limitations, and ethical issues arising from the use of AI
  in education.
- Design syllabi that incorporate AI.
- Compare different AI tools and assess the advantages of teaching with and without AI.
- Critically evaluate AI products.
- Create lesson plans that integrate AI usage.

### **General Skills**

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, Project design and management

T Use Equity and Inclusion

Adaptation to new situations Respect for the natural environment

Decision making Sustainability

Autonomous work Demonstration of social, professional and moral responsibility and

Teamwork sensitivity to gender issues
Working in an international environment Critical thinking

Working in an interdisciplinary environment Promoting free, creative and inductive reasoning

Production of new research ideas

- Search, analysis and synthesis of data and information, ICT Use
- Adaptation to new situations
- Decision making
- Autonomous work
- Teamwork
- Equity and Inclusion

- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Critical thinking
- Promoting free, creative and inductive reasoning

### 3. COURSE CONTENT

| 1  | Introduction, Learning Contract, and Overview of Key Course Questions           |
|----|---|
| 2  | Key Question 1: What is natural language, and how do machines understand it?    |
| 3  | Key Question 2: What techniques are used for natural language processing (NLP)? |
| 4  | Key Question 3: How do language models learn and comprehend language?           |
| 5  | Key Question 4: What are the applications of AI in language and education?      |
| 6  | Key Question 5: How does AI impact human communication and culture?             |
| 7  | Key Question 6: How do we address bias and fairness in language models?         |
| 8  | Key Question 7: How can AI support teaching and learning?                       |
| 9  | Key Question 8: How can AI language models help personalize learning?           |
| 10 | Key Question 9: How does AI function as a learning strategy?                    |
| 11 | Key Question 10: What ultimately is AI Literacy?                                |
| 12 | Student Mini-Project  |
| 13 | Course Feedback   |

### 4. LEARNING & TEACHING METHODS - EVALUATION

## **TEACHING METHOD**Face to face, Distance learning, etc.

- In-Class Lectures
- Video Viewing
- Active Learning (Hands-On Learning) Experiential Learning: Familiarization with AI tools
- Distance Asynchronous Learning

# USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)

Use of ICT in Teaching, in Laboratory Education, in Communication with students

Use of ICT in Teaching and Communication with Students

- Integrated Learning Management System Moodle (eClass)
- ChatGPT, Claude, Gemini, Copilot, Google Bard
- Quizlet, Kahoot, Mentimeter, Quizizz
- Diffit
- Google Classroom
- Kaizena

| TEACHING ORGANIZATION                              |
|--|
| The ways and methods of teaching are               |
| described in detail.                               |
| Lectures, Seminars, Laboratory Exercise, Field     |
| Exercise, Bibliographic research & analysis,       |
| Tutoring, Internship (Placement), Clinical         |
| Exercise, Art Workshop, Interactive learning,      |
| Study visits, Study / creation, project, creation, |

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.

| Activity                | Workload/semester |  |
|-------------------------|-------------------|--|
| Lectures                | 39                |  |
| Assignments             | 20                |  |
| Study and               | 27                |  |
| Analysis of Literature  |                   |  |
| Simulations             | 4                 |  |
| Discovery Learning      | 30                |  |
| Activities              |                   |  |
| Out-of-Class Activities | 30                |  |
| Total                   | 150               |  |

### STUDENT EVALUATION

Description of the evaluation process

project. Etc.

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed Formative

Language of Assessment: Greek

- Multiple Choice Quiz (10%)
- Case Study (Al Application Analysis) (20%)
- Critical Reflection Essay on the Limitations of AI (20%)
- Creation of a Lesson Plan Using AI (20%)
- Writing a User Guide for AI Tools (20%)

| • | Peer Review (10%) |
|---|-------------------|
|   |                   |

### 5. SUGGESTED BIBLIOGRAPHY

### Foreign:

Baker, T., Smith, L. and Anissa, N. 2019. Educ-Al-tion Rebooted? Exploring the future of artificial intelligence in schools and colleges. London, NESTA. Available at: https://www.nesta.org.uk/report/education-rebooted

### Greek:

Ζωή Γαβριηλίδου, 2024, Διδάσκοντας και μαθαίνοντας γλώσσα με το ChatGPT, Εκδ. Κριτική

### ANNEX OF THE COURSE OUTLINE

### Alternative ways of examining a course in emergency situations

| Teacher (full name):    | Z. GAVRIILIDOY  |  |
|-------------------------|---|--|
| Contact details:        | zgabriil@helit.duth.gr  |  |
| Supervisors: (1)        | YES   |  |
| Evaluation methods: (2) | Multiple Choice Quiz (10%)  |  |
|                         | Case Study (AI Application Analysis) (20%)                                |  |
|                         | Critical Reflection Essay on the Limitations of AI (20%)                  |  |
|                         | Creation of a Lesson Plan Using AI (20%)                                  |  |
|                         | Writing a User Guide for AI Tools (20%)                                   |  |
|                         | Peer Review (10%)   |  |
| Implementation          | All of the above are conducted through the integrated Learning Management |  |
| Instructions: (3)       | System Moodle (eClass).   |  |

- (1) Please write YES or NO
- (2) Note down the evaluation methods used by the teacher, e.g.
  - > written assignment or/and exercises
  - written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.
- (3) In the Implementation Instructions section, the teacher notes down clear instructions to the students:
  - a) in case of written assignment and / or exercises: the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.
  - b) in case of **oral examination with distance learning methods:** the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.
  - c) in case of written examination with distance learning methods: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.