**SYLLABUS “INFORMATICS I”**

1. **General**

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| **College** | College of Applied Economic and Social Sciences | | | | |
| **Department** | Regional and Economic Development | | | | |
| **Level of Studies** | Undergraduate | | | | |
| **Couse Code** | **6105** | **Semester** | | 1st | |
| **Course Title** | Informatics I | | | | |
| **Faculty Name** |  | | | | |
| **Office Hours** |  | | | | |
| **email** |  | | | | |
| **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 CONTACT HOURS** | | **ECTS** |
| Lectures | | | 3 | | 3 |
| Laboratory exercises | | | 2 | | 3 |
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| **COURSE TYPE**  **Background, General Knowledge, Scientific Area, Skills Development** | **Skills Development** | | | | |
| **Prerequisites** | - | | | | |
| **Language of instruction and examinations** | Greek | | | | |
| **Course Offered to Erasmus Students** | No | | | | |
| **Course Webpage** | https://oeclass.aua.gr/eclass/ | | | | |

1. **COURSE LEARNING OUTCOMES**

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| **Learning Outcomes** | |
| * *The learning outcomes of the course describe the specific knowledge, skills and competences of an appropriate level that students will acquire after successful completion of the course.* | |
| *Knowledge*  *- Define and articulate the fundamental principles of Computer Science and Information Technology*  *- Understand terms and concepts used in computer science*  *- Describe the basic functions of information systems*  *Skills:*  *- Manage and evaluate the hardware of a computer system*  *- To become familiar with word processing, spreadsheet, presentation and database software*  *- Analyse the risks of AI applications in everyday activities*  *- Analyse ethical and moral issues related to the use of social networks*  *- Decode & present the characteristics of technological developments*  *- Identify threats to network and data security*  *- Explore the factors that influence the life cycle stages of a project development*  *Competences:*  *- Evaluate & contrast arguments regarding the development of technology and its impact on the economy, the environment and society* | |
| ***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, including the use of the necessary technologies*  *Adaptation to new situations*  *Decision-making*  *Autonomous work*  *Group work*  *Working in an international environment*  *Working in an interdisciplinary environment*  *Generating new research ideas* | *Project planning and management*  *Respect for diversity and multiculturalism*  *Respect for the natural environment*  *Demonstrating social, professional and ethical responsibility and gender sensitivity*  *Exercise of criticism and self-criticism*  *Promotion of free, creative and deductive thinking* |
| *Search, analysis and synthesis of data and information, including the use of the necessary technologies*  *Adaptation to new situations*  *Group work*  *Decision-making*  *Exercise of criticism and self-criticism*  *Promotion of free, creative and deductive thinking* | |
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1. **COURSE CONTENT**

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| * Technological evolution * Computer systems * Internet of Things * Artificial Intelligence principles * Software and Hardware * Evaluation of computer systems * Networking * Ethical issues in the digital era * Risk assessment * Databases * Business software |

1. **TEACHING AND LEARNING METHODS - ASSESSMENT**

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| **METHOD OF DELIVERY**  **Face-to-face, Distance learning, etc.** | Lectures and meetings with students |
| **USE OF TECHNOLOGY, INFORMATION AND COMMUNICATION** *Use of ICT in teaching, laboratory training, communication with students* | Computer and interactive whiteboard will be used in the teaching. Communication with students will be on a personal level, also using e-mail and direct telecommunication (e.g. skype) |
| **ORGANISATION OF TEACHING**  *The way and methods of teaching are described in detail.*  *Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Literature, Tutorials, Practical (Placement), Clinical Exercise, Artistic Workshop, Interactive teaching, Educational visits, Study visits, Project work, Writing of work / assignments, Artistic creation, etc.*  *The student's study hours for each learning activity as well as the hours of unguided study are indicated so that the total workload at semester level corresponds to the ECTS standards.* | |  |  | | --- | --- | | ***Activity*** | ***Workload*** | | Lectures | 65 hours | | Study of course material (material taught) | 33 hours | | Exercises and practice of in economic applications | 27 hours | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | | Course Total | 125 hours | |
| **STUDENT ASSESSMENT**  *Description of the evaluation process*  *Language of Assessment, Assessment Methods, Formative or Inferential, 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.* | Written Final Exams and tentative midterm examinations during the course |

1. **BIBLIOGRAPHY**

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| **Main Textbooks (all in Greek):**   * Evans, A., Martin, K., Poatsy, M. (2018). *Εισαγωγή στην πληροφορική: Θεωρία και πράξη*. Εκδόσεις Κριτική, ISBN: 978-960-586-236-7 [Κωδικός: 112692279] * Brookshear, G. (2009). *Η επιστήμη των υπολογιστών: Μια ολοκληρωμένη παρουσίαση.* Εκδόσεις Κλειδάριθμος, ISBN: 978-960-451-270-3 [Κωδικός: 13957] * Forouzan, B. (2015). *Εισαγωγή στην επιστήμη των υπολογιστών*. Εκδόσεις Κλειδάριθμος, ISBN: 978-960-461-660-2 [Κωδικός: 50656335] * Russel, S., Norvig, P. (2021). *Τεχνητή Νοημοσύνη: Μια σύγχρονη προσέγγιση*. Εκδόσεις Κλειδάριθμος [Κωδικός: 102070469] * Βογιατζής, Ι., Αντωνοπούλου, Η. (2021) *Υλικό, Λογισμικό και Επικοινωνίες υπολογιστών*. Εκδόσεις Νέων Τεχνολογιών ΙΚΕ [Κωδικός: 102075306] * Γιαννακόπουλος, Γ. (2021). *Τεχνητή Νοημοσύνη*. Εκδόσεις ΧΑΡΙΤΟΣ [Κωδικός: 102073617] * Δαγδιλέλης, Β., Ευαγγελίδης, Γ., Σατρατζέμη, Μ., Φαχαντίδης, Ν. (2015). Εισαγωγή στη χρήση των Η/Υ. Εκδόσεις ΤΖΙΟΛΑ & ΥΙΟΙ ΑΕ [Κωδικός: 50656000] * Μποζάνης, Π. (2016*). Εισαγωγή στην Πληροφορική και τους Υπολογιστές*. Εκδόσεις ΤΖΙΟΛΑ & ΥΙΟΙ ΑΕ [Κωδικός: 50656335] * Παπάζογλου, Π. (2021). *Εισαγωγή στην Πληροφορική και τις Εφαρμογές της*. Εκδόσεις ΤΖΙΟΛΑ & ΥΙΟΙ ΑΕ [Κωδικός: 102071693] * Ταμαρέση, Α., Μητάκος, Θ. (2017) *Εισαγωγή στους Υπολογιστές Θεωρία – Επεξεργασία κειμένου, λογιστικά φύλλα, Access*. Εκδόσεις ΤΣΟΤΡΑΣ [Κωδικός: 68395773] |