COURSE OUTLINE

1. GENERAL

SCHOOL	AGRICULTURAL SCIENCES
ACADEMIC UNIT	ANIMAL PRODUCTION, FISHERIES & AQUACULTURE
LEVEL OF STUDIES	UNDERGRADUATE

COURSE CODE	AS_204	**SEMESTER**	2nd

COURSE TITLE	INFORMATICS

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
(the credits are awarded for the whole course)	2 (Lectures) + 2 (Lab. work)	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Background
PREREQUISITE COURSES:	There are no prerequisite courses.
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek. Teaching may be performed in English in case of foreign students
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes
COURSE WEBSITE (URL)	

2. LEARNING OUTCOMES

Learning outcomes
The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. *Consult Appendix A*   • *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*   • *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*

By the end of this course the student will be able to:

- Understand the operation and use of computing systems
- Understand the basic structure of a personal computer
- Understand the networking functionallity
- Use the basic elements of the Windows operating systems
- Use the MS Office software (Word, Excel, PowerPoint)
- Use the internet, browse web pages, use e-mail and asynchronous e-class education platforms

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
	Respect for difference and multiculturalism
Adapting to new situations	
	Respect for the natural environment
Decision-making	
	Showing social, professional and ethical responsibility and sensitivity to gender issues
Working independently	
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*......*
Production of new research ideas	*Others...*
	....

Generally by the end of this course the student will have developed the following general abilities (from the above list)

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Adapting to new situations
- Decision making
- Working independently
- Team Work
- Respect for the natural environment
- Criticism and self-criticism

3. SYLLABUS

- Introduction. Historical Overview
- Personal Computer Architecture. Data and information
- Central Processing Unit (CPU). Arithmetic and Logical Unit. Control Unit. Registers.
- Main memory. Auxiliary memory.Cache memory. Virtual memory. Memory capacity. Memory units
- Input output devices.
- Hard disks. SSD. Optical discs. Computer networking devices. Hub. Switching Hub. Router.
- Methods of computer networking.
- Numeral systems.Binary, octal, hexadecimal numeral systems.
- Computer representation of numbers and computer arithmetic.Addition, subtraction,

1's complement, 2's complement. Multiplication and division
• Operating Systems. The Windows operating system
• Internet. Internet based services
• Electronic mail. Browsers. Internet Explorer. Google Chrome. Mozila Firefox.
• Word processing. MS Word. Spreadsheets. Excel. Representations. PowerPoint. Data
  analysis system.

Laboratory Exercises
• Introduction to Windows
•Windows explorer
• File management. File names
• Windows tools
•Department's Website
•Internet use, web-browsers
•Bibliographic data bases. Webmail
•Introduction to MS – Office (3 lessons)
•Introduction to SPSS (3 lessons)

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face to face. Laboratory exercises
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	• Use of ICT (powerpoint) in teaching • Use of ICT (powerpoint) in laboratory exercises • Use of ICT in Student Communication (Learning Support through the e-class platform)

TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*		
	Activity	*Semester workload*
	Lectures	26
	Laboratory practice	26
	Final examination	3
	Private study time of the students for the lab preparation and final examination	70
	Course total **(25 work load for each ECTS credit)**	**125**

STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure*	1. Laboratory work (A) 2. Written final examination (B) *Each case is graded on a scale of 0-10* Final grade (FG): FG = 0.3A + 0.7B

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	*Minimum passing grade: 5 (Grade: 0-10)* Greek language is used. For foreign students (e.g. Erasmus students) it can be done in English

5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

1. A. Garbis, D. Fotiadis, *Introduction to Computers and Informatics* ARAKYNTHOS Editions, 2015
2. Peter Norton, Introduction to Computers. Thessaloniki, Tziola Editions 2004.
3. Snell, Temple, Clark, *Internet and Web Basics All in one* Athens, M. Giourdas Editions, 2004.
4. P. Bozanis, *Introduction to Informatics and Computers*. Thessaloniki, Tziola Editions, 2017.