COURSE OUTLINE

(1) GENERAL

SCHOOL	APPLIED BIOLOGY AND BIOTECHNOLOGY		
DEPARTMENT	BIOTECHNOLOGY		
STUDY LEVEL	*Undergraduate*		
COURSE CODE	**3480**	**SEMESTER**	8th
COURSE TITLE	CLINICAL NUTRITION		

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**
Lectures	4	1,40
Individual assignment		0,60
Individual study		1,00
TOTAL		**3,00**

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Knowledge
PREREQUISITE COURSES:	Field of Science Physiology Biochemistry Introduction to Human Nutrition Nutrition and Metabolism
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek (English if needed)
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*
- *Guidelines for writing Learning Outcomes*

The course is the basic introductory class to Clinical Nutrition.
The material of the course aims at introducing the students to the basic principles and application of clinical nutrition for the prevention and treatment of chronic diseases.
In addition it covers the basic principles of pathophysiology of heart disease, diabetes mellitus, hypertension, chronic kidney disease, obesity, osteoporosis and cancer.
Finally, the goal of the course is for the students to comprehend the role of nutrition, nutrition supplements, functional foods and the new technologies for their development and application.
Upon successful completion of the course the student will:

- **Have gained knowledge and understanding of the basic issues and new developments** in Clinical Nutrition and the relationship between nutrients and foods and prevention or dietary treatment of chronic diseases.
- Will be able to comprehend complex issues related to Clinical Nutrition.
- Will be able to understand the relationship between food patterns, nutrients and foods and chronic disease development.
- Will be able to comprehend the food patterns and the dietary prescription assigned by type of chronic disease.
- Will be able to comprehend the connection between functional foods and public health.

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

- Acquisition, analysis and synthesis of data and information with the use of relevant technologies
- Knowledge flexibility and adaptation in new scientific environment
- Independent work
- Group work
- Work in interdisciplinary environment
- Development of new research ideas
- Respect of ecosystems
- Social and ethical responsibility and sensitivity on male/female issues
- Critical thinking
- Promotion of free, creative and analytical thinking

(3) COURSE CONTENT

1. Basic principles
2. Nutrition and Heart Disease
3. Nutrition and Hypertension
4. Nutrition and Obesity
5. Nutrition and Diabetes Mellitus
6. Nutrition and Chronic Kidney Disease
7. Nutrition and Cancer
8. Nutrition and Osteoporosis
9. Nutrition and diseases of upper and lower Gastrointestinal system

(4) TEACHING and LEARNING METHODS - EVALUATION

<table>
<tr><td>TEACHING METHOD
Face-to-face, Distance learning, etc.</td><td colspan="2">In class lectures using adequate technological means, distance learning if required; and specific exercises at the end of hands on lectures.</td></tr>
<tr><td>USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES
Use of ICT in teaching, laboratory education, communication with students</td><td colspan="2">Use Powerpoint slides. Communication with students via e-mail. Learning process support through access to e-class, online databases, etc.</td></tr>
<tr><td>TEACHING ORGANISATION
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</td><td>Activity</td><td>Semester workload</td></tr>
<tr><td></td><td>Lectures</td><td>35h</td></tr>
<tr><td></td><td>Individual assignment (brief methodological study protocol)</td><td>15h</td></tr>
<tr><td></td><td>Individual study</td><td>25h</td></tr>
<tr><td></td><td>Course total
(25 hours of student work load per ECTS)</td><td>75h</td></tr>
<tr><td>STUDENT EVALUATION
Description of the evaluation procedure

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.</td><td colspan="2">. I. Written exam (60%) which includes:
- Multiple choice questions and critical evaluation of concepts

II. Presentation of Group Assignment (40%)</td></tr>
</table>

(5) ATTACHED BIBLIOGRAPHY

1. Α. Ζαμπέλας, Κλινική Διαιτολογία και Διατροφή, Εκδόσεις Πασχαλίδης, 2007
2. Online class material (PowerPoints).