University of Nicosia, Cyprus

Course Code	Course Title	ECTS Credits
NUTR-250	Principles of Nutr. Biochemistry and Metabolism I	6
Department	**Semester**	**Pre-requisites**
Life and Health Sciences	Fall	BIOL 206
Type of Course	**Field**	**Language of Instruction**
Core Requirement	Nutrition/Dietetics	English/Greek
Level of Course	**Year of Study**	**Lecturer**
1st cycle	Second	Demetres Iacovides
Mode of Delivery	**Work of Placement**	**Co-Requisites**
Face-to-face	N/A	None

Objectives of the Course:

The main Objectives of the Course are to:

- To provide detailed information on the structure, function, digestion, transport, storage, and metabolism of the nutrients.
- To delineate key metabolic pathways in the utilization of macronutrients as well as the interrelationships among nutrients in metabolism.
- To demonstrate comprehension and interpretation of nutrition-related research as reported in scientific publications.
- Identify nutritional risk factors that may lead to chronic disease: cancer, cardiovascular disease, etc.
- Develop lifelong learning skills on nutrient related subjects
- Demonstration of techniques ob body composition measurements
- Interpretation of assessment of data of body composition
- Analysis of macronutrient
- The format of the course will be 3h/w of lectures

Learning Outcomes:

After completion of the course students are expected to be able to:

- To provide detailed information on the structure, function, digestion, transport, storage, and metabolism of the nutrients.
- To delineate key metabolic pathways in the utilization of macronutrients as well as the interrelationships among nutrients in metabolism.
- To demonstrate comprehension and interpretation of nutrition-related research as reported in scientific publications.
- Identify nutritional risk factors that may lead to chronic disease: cancer, cardiovascular disease, etc.

Course Contents:

1. Cell-Biological Energy
2. Digestive system
3. Body Composition and Energy balance
4. Carbohydrate properties-digestion-metabolism
5. Fiber and alcohol
6. Protein properties-digestion-metabolism
7. Lipid properties-digestion-metabolism
8. Integration of nutrients and exercise
9. Nutrition and chronic diseases
10. Body composition techniques
11. Analysis of macronutrients in a computer program
12. Analysis of energy expenditure

Teaching Methods:

Lectures, Practical Exercises and Assignments.

Required Textbooks:

Authors	**Title**	**Publisher**	**Year**	**ISBN**
Gropper S.,Smith J, Groff J.	Advanced Nutriiton & Human Metabolism	Wadsworth, 5th ed	2009	978-0-495-11657-8

Recommended Textbooks/Reading:

Authors	**Title**	**Publisher**	**Year**	**ISBN**
1. McGuire and Beerman	Nutritional Sciences		2007	0-534-53717-0