

Course Title	Clinical Nutrition		
Course Code	PHYS112		
Course Type	Elective		
Level	Bachelor (Level 1)		
Year / Semester	1 st / Spring		
Instructor's Name	Dr Chrystalla Papoutsou		
ECTS	6	Lectures / week	3
Course Purpose	<p>The aim of the course is to acquire knowledge of the various types of food items and ingredients in relation to good physical, mental and mental health and consequently to health problems, lack of control of body weight (obesity, anorexia, etc.), nutritional problems associated with exercise in various population groups (diabetes mellitus, asthma, cardiovascular problems, muscle and joint problems, hormonal problems, etc.) as well as specially designed exercise programs to control body weight. The aim is also to gain knowledge of the physiological basis of the energy expenditure of metabolism and the methods of assessing the composition of body weight to maintain physical and mental health and well-being.</p>		
Learning Outcomes	<p>At the end of the course will be able to:</p> <ul style="list-style-type: none"> • know the science of nutrition • recognize and determine the energy costs of metabolism as well as understand, select and apply the methods of its evaluation • collect, interpret and synthesize the results of nutritional assessment in relation to health problems and the participation of special populations in exercise • to assess and identify the energy nutritional deficit in the affected patient • to correlate and adjust the clinical reasoning when planning the intervention with the patient's deficit and nutritional needs • to identify through clinical reasoning nutritional short- and long-term goals in relation to exercise, limited mobility and immobilisation 		
Prerequisites	None	Co-requisites	None
Course Content	<ul style="list-style-type: none"> • Introduction to clinical dietetics - Clinical Dietetics and its correlation with nutrition and health. 		

	<ul style="list-style-type: none"> • Nutrition and physiology - The response of diet to the physiological systems of the human body to promote health and in relation to exercise. • Energy expenditure - Energy expenditure (kcal- calories), energy systems and metabolism • Categories of nutritional components. Water and electrolytes. Vitamins and physical performance. • Nutritional items and components I - Diet and carbohydrates. - Nutrition and protein. Nutrition and fat • Categories of dietary components. Water and electrolytes. Vitamins and physical performance. • Nutritional items and components I - Diet and carbohydrates. - Nutrition and protein. Nutrition and fat • Categories of dietary components. Water and electrolytes. Vitamins and physical performance. • Nutritional assessment - Methods and systems of nutrition evaluation. - Body weight composition and evaluation methods (fat measurement methods). • Clinical dietetic approach I - Clinical dietetics and health problems in special population groups: obesity cardiovascular diseases diabetes mellitus hormone disorders muscle and joint problems • Clinical reasoning in nutrition - dietary adjustments during exercise and immobilization. Defining exercise and prevention programs in relation to diet
Teaching Methodology	<p>The delivery of the course includes lectures to offer the theoretical background of clinical nutrition. Detailed notes with PowerPoint are used in teaching. Methods such as case studies, clinical scenarios, discussion, questions / answers about clinical nutrition of clinical cases following a physiotherapy program. Relevant material published in international scientific journals is also used to follow the latest developments related to the subject of the course.</p>
Bibliography	<p><u>Textbooks:</u></p> <p>Plessas S.T. Human Dietetics, Pharmakon Press Publications, 2010.</p> <p>Biesalski H.K., Grimm P. Nutrition Handbook, P.C. Paschalidis Medical Publications, 2008.</p> <p>Kontogianni M., Giannakoulia M., Karatzi K., Fappa E. Handbook of Clinical Nutrition, Greek Academic Electronic Textbooks and Aids, 2015.</p> <p>Plessas S.T. Human Dietetics, Pharmakon Press Publications, 2010.</p> <p>Kontogianni M., Giannakoulia M., Karatzi K., Fappa E. Handbook of Clinical Nutrition, Greek Academic Electronic Textbooks and Aids, 2015.</p> <p>Balch P.A. Prescription for Nutritional Healing, 5th Edition, Penguin Books Australia, 2010.</p>

	<p>McArdle W.D., Katch F.I., Katch V.L. Exercise Physiology: Energy, Nutrition, and Human Performance, 8th Edition, Wolters Kluwer Health, 2015.</p> <p>Williams M.H., Rawson E.S., Branch J.D. Nutrition for Fitness and Sport, 11th Edition, Mc Graw Hill Higher Education, 2016.</p> <p>Kafetzopoulos N. Practical Guide to Sports Nutrition, Parisianos Scientific Publications, 2018</p>
<p>Assessment</p>	<p><u>Continuous Assessment (50%):</u></p> <p>The assessment may include any combination of the following:</p> <ul style="list-style-type: none"> • Written and/or oral, and it consists of multiple – choice, short answer, open ended questions and/or essay questions, that align with the learning outcomes, in order to assess the theoretical knowledge gained. The questions ensure that students will demonstrate a deep understanding of the subject matter and apply their knowledge to solve problems or analyse scenarios. • Assignments and projects provide opportunities for students to apply their theoretical knowledge in practical ways. The assignments are designed in a way that require critical thinking, research, analysis, and synthesis of information. Projects can be individual, self directed learning or group-based and should align with the learning outcomes. Students are evaluated on the quality of their work, the depth of understanding displayed, and their ability to effectively communicate their ideas. Assignments and projects may be individual or group work. • Use of case studies or problem-solving exercises to assess how students can apply theoretical knowledge to real-life situations. Students are presented with scenarios that require analysis, critical thinking, and the application of theoretical concepts and they are assessed based on their ability to perform verbal presentations, viva voce examinations, identify and evaluate relevant information, propose solutions, and provide justifications for their choices. • Online quizzes or interactive assessments: Online quizzes or interactive assessments, reflective writing can be used through the Moodle platform, to create quizzes with various question formats. These assessments can be self-paced or timed, and immediate feedback can be provided to students. • Classroom discussions and debates: Students engage in classroom discussions and debates to assess their theoretical knowledge. Active participation is encouraged to hone their critical thinking skills by posing open-ended questions and facilitating dialogue. • Peer and self-assessment: Students are assigned to review and provide feedback on each other's work, encouraging them to critically evaluate their peers' understanding and provide constructive suggestions. <p>Final Exam (50%): comprehensive final exam, to assess students' overall theoretical knowledge. These assessment covers a broader range of topics and learning outcomes from the entire program of study, to gauge the students' understanding and integration of knowledge across different areas.</p>