Course Title	**Orthopaedics - Traumatology - General Surgery**				
Course Code	PHYS106				
Course Type	Compulsory				
Level	Bachelor (Level 1)				
Year / Semester	1st/ Spring				
Instructor's Name	Dr George Charalambous				
ECTS	3	**Lectures / week**	2	**Laboratories/week**	
Course Purpose	The purpose of this course is to provide students with the theoretical knowledge that will allow them to understand the pathology and pathophysiology of orthopedic diseases and injuries. In addition, the aim is to offer the basic knowledge on the medical and surgical treatment of orthopedic diseases in order to enable the student to use this knowledge for the design of preoperative and postoperative rehabilitation programs.				
Learning Outcomes	Upon completion of the course, the student is expected to be able to: • know the mechanisms of orthopedic injuries (fractures, soft tissue injuries, etc.) of the trunk and limbs and their healing stages • recognize and understand the influence of predisposing and aggravating factors on orthopedic diseases, • recalls the pathology of orthopedic problems and correlates it with the clinical picture of the patient, • understands the medical and surgical intervention in the orthopedic diseases and adjust its rehabilitation program accordingly • designs a comprehensive program of preoperative and postoperative intervention for the treatment of symptoms and functional rehabilitation of the patient • cooperates and communicates effectively with orthopedic surgeons for the most effective rehabilitation of the patient • Prompt recognition of the risk factors for chronicity and adjusts his intervention accordingly • develops his ability to evaluate research data regarding orthopedics and musculoskeletal rehabilitation in order to deepen and renew his knowledge in this field.				
Prerequisites	None	Co-requisites	None		

Course Content	• Introduction to orthopedics, basic principles, categories of diseases, methods of diagnosis and treatment • Fractures, classification, complications, treatment of fractures in the trunk and extremities • Dislocations, subluxations, sprains • Arthritis, inflammatory and degenerative and their treatment (surgical & conservative) • Soft tissue injuries (tendinopathies, ligament injuries, muscle injuries, etc.) conservative and surgical rehabilitation • Problems of nervous tissue in orthopedics (meningomyelocele, obstetric palsy, trigeminal neuralgia, poliomyelitis, etc.) • Inflammatory diseases (osteomyelitis, infectious arthritis, tuberculosis, etc.) • Neoplasia in orthopedics • Congenital abnormalities and diseases of the trunk and limbs • Diseases of cartilage, follicles, serous pockets and their orthopedic treatment • Types of surgical techniques and their effect on physiotherapy and rehabilitation approach • Surgical management of sports injuries of knee, shoulder, foot, hand
Teaching Methodology	The course is delivered to the students through lectures, using computer-based presentations programmes. Case Studies, Discussion, Questions / Answers are also used depending on the content of the lecture. Lecture notes and presentations are available online for use by students in combination with textbooks. Relevant material published in international scientific journals is also used to follow the latest developments related to the subject of the course
Bibliography	**Textbooks:** Apley's. Modern orthopedics and traumatology (2010), P. C. Paschalidis Medical Publications (In Greek) Miller M. Review of Orthopedics (2010), Publisher: Konstantaras (In Greek) Pournaras Ioannis D. Orthopaedic Surgery (2010), Ekd Paschalidis (In Greek) Rockwood and Green's Fractures in Adults (7th ed, 2 volumes) Philadelphia: Lippincott, Williams & Wilkins, 2010 Comerford, M., & Mottram, S. (2012). Kinetic control-e-book: The management of uncontrolled movement. Elsevier Health Sciences
Assessment	**<u>Continuous Assessment (50%):</u>** The assessment may include any combination of the following: • **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. **Final Exam (50%):** comprehensive final exam, to assess students' overall theoretical knowledge. These assessments cover 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.
Language	Greek / English