

Course Title	Manual Therapy				
Course Code	PHYS202				
Course Type	Compulsory				
Level	Bachelor (Level 1)				
Year / Semester	2 ^d /Spring				
Instructor's Name	Dr Christos Savva, Dimitris Sokratous				
ECTS	6	Lectures / week	2	Laboratories/week	2
Course Purpose	The aim of the course is the critical review as well as the application of special techniques for mobilizing the joints and soft tissues. Students evaluate the various neuro-musculoskeletal dysfunctions with the use of various mobilization techniques, determine the sense of its physiological limiting factor and proceed with the application of therapeutic techniques in order to relieve symptoms and restore dysfunction. The course introduces students to the differential evaluation of intra-articular and extra-articular dysfunction and to neural tissue mobilization techniques.				
Learning Outcomes	Upon completion of the theoretical part of the course, the student is expected to be able to: • identify and select the appropriate manipulations each time depending on the clinical picture and the Physiotherapeutic evaluation • evaluate the mechanical sensitivity and mobility of peripheral neural tissue through the use of neuromobilization techniques • treat the increased mechanical sensitivity and hypoactivity of the peripheral neural tissue involved, through the use of slider and tensioner techniques • evaluate each muscle imbalance that concerns either the spine or the limbs • treat each muscle imbalance through the use of Muscle Energy Techniques • document the use of intra-articular mobilization techniques either in relation to the evaluation or in relation to the treatment of musculoskeletal disorders recognizes adaptations that occur in the biological tissues of the body with the application joint mobilization techniques • identifies the mechanisms that cause the expected results • recalls basic principles on soft tissue mobilisation • identifies the type of existing malfunction				

	Upon completion of the laboratory part of the course, the learner is expected to be able to: • select and apply the appropriate technique, according to the specific dysfunction • apply differential evaluation between intra-articular and extra-articular dysfunction • apply techniques of mobilization of peripheral nervous tissue either during the evaluation of a peripheral type neuropathy or for its restoration • apply Muscle Energy Technique for the treatment of a muscle imbalance • evaluate and treat any intra-articular damage that may concern any joint of the body		
Prerequisites	None	Co-requisites	None
Course Content	Description: • The use of peripheral neural tissue mobilization techniques in the treatment of peripheral neuropathies of musculoskeletal etiology. • The use of Muscle Energy Techniques in the treatment of muscle imbalances. • The use of intra-articular mobilization techniques in the treatment of each intra-articular injury, for each joint. • Introduction to mobilization and manipulation techniques, presentation of the relevant indications and contraindications and their clinical application. • Critical review of the different faculties of Orthopaedic Manual Therapy Laboratory: The student must understand the way the joints behave, the results from the physiotherapist's operation and how each area has absolutely its own peculiarities With the help of audiovisual material and models, students are trained in special mobilization techniques and present tasks in relation to the content of the course in order to fully understand it, applying observation and interpretation. In addition, students, based on the above, become familiar with the approach and access to knowledge sources (libraries, e-libraries, internet). At the same time, students develop, through the application, technical skills for the provision of this physiotherapeutic care.		

Teaching Methodology	Theory 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. Laboratory During the laboratory courses, students develop their clinical skills in skill trainers and patient simulators so that they can successfully and safely apply them in a real clinical environment.
Bibliography	<u>Textbooks:</u> Gibbons., P and Tehan., P (2016). Manipulation of the Spine, Thorax and Pelvis, 4th Edition, Elsevier. Jull., G, Moore., A, Falla., D, Lewis., J, McCarthy., C, Sterling., M. (2015). Grieve's Modern Musculoskeletal Physiotherapy, 4th Edition, Elsevier. Fernandez de las Penas., C, Cleland., J, Dommerholt., J (2015). Manual Therapy for Musculoskeletal Pain Syndromes, 1st Edition, Elsevier. Hing., W, Hall., J, Mulligan., B (2015). The Mulligan Concept of Manual Therapy, 1st Edition, Elsevier. Magee., D. (2015). Orthopedic Physical Assessment, 6th Edition, Elsevier. <u>References:</u> Sun, Y., Zhang, Y., Ma, H., Tan, M., & Zhang, Z. (2023). Spinal Manual Therapy for Adolescent Idiopathic Scoliosis: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. <i>BioMed Research International</i> Eapen, C., Rosita, R., Sohani, M. S., & Patel, V. D. (2023). A systematic review of the effectiveness of wrist manipulative therapy in patients with lateral epicondylitis. <i>Journal of Hand Therapy</i>. da Silva Santos, T., de Oliveira, K. K. B., Martins, L. V., & de Castro Vidal, A. P. (2022). Effects of manual therapy on body posture: Systematic review and meta-analysis. <i>Gait & Posture</i>.
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. Laboratory evaluation consists of assessment of the expected skills and competences, critical thinking, problem-solving and teamwork skills. During the laboratory sessions, students are closely observed as they engage in the assigned tasks and note is taken regarding the actions, approach and any relevant observations that demonstrate their understanding of the subject matter and application of skills. After assessing the laboratory work, constructive feedback is provided to students. Their strengths and areas for improvement are highlighted, linking them back to the learning outcomes to help students understand their progress and guide them towards further development. Depending on the nature of the laboratory work, peer assessment can be incorporated, where students evaluate each other's work based on the established criteria to promote self-reflection, collaboration, and a deeper understanding of the subject matter.
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	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