

<b>Course Title</b>	<b>Physiotherapy in Special groups</b>				
<b>Course Code</b>	PHYS302				
<b>Course Type</b>	Compulsory				
<b>Level</b>	Bachelor (Level 1)				
<b>Year / Semester</b>	3 <sup>d</sup> / Spring				
<b>Instructor's Name</b>	Dr Vasiliki Sakellari, Michail Pantouveris				
<b>ECTS</b>	6	<b>Lectures / week</b>	2	<b>Laboratories/week</b>	2
<b>Course Purpose</b>	The purpose of the course is to familiarize students in the assessment, collection, the evaluation of special groups of people such as the elderly, the mentally ill and other categories of patients such as mental health issues and gynecological problems. The course prepares students with the necessary knowledge and practical techniques in the appropriate evaluation and assessment of the findings of each special patient category. In addition, it prepares students to conduct a patient centered physiotherapy intervention programme in these special groups of patients based on the characteristic feature of each category.				
	<b>Course Learning Outcomes</b>				<b>Aligned PLOs</b>
<b>Learning Outcomes</b>	Upon completion of the theoretical part of the course, students are expected to be able to:				
	1. Understand the effect of aging on the biological structures, motor and mental skills of the elderly				C1 -C3
	2. Record and consider skeletal, motor, behavioral, mental adaptations using appropriate "tools" of recording and assessment				K1-K2
	3. Adapt specialized physiotherapy skills in the assessment and rehabilitation of special groups of people				S1-S3
	4. Design evidence-based intervention programs, <b>according to the ICF model of function</b> with exercise, skills training such as safe movement and counseling to prevent falls, improve balance, increase self-confidence, reduce fear of falling and promote an active and healthy lifestyle in older people				S1-S3, E1 & E2
	5. Participate with a key role in clinics, such as fall clinics, that provide comprehensive assessment, to identify				AP1 – AP4

	underlying pathological conditions (such as osteoporosis) and by referring to other specific services as well as providing individual advice, motivation and support		
	6. Organize physiotherapeutic interventions aimed at preventing and restoring common pathological conditions and disorders of special groups		S1-S3
	7. Underline the vital role of digital physiotherapy in the assessments and treatment of special groups of patients (geriatric, cancer, amputations, mental patients, maternity patients etc (telephysiotherapy and monitoring of their progress		AP1 – AP4
	8. Implement rehabilitation programs, in cooperation with specialized scientists		S1-S3
	9. Identify the short- and long-term objectives of the physiotherapeutic interventions		K1, K2, C1, E3
	Upon completion of the laboratory part of the course, the learner is expected to be able to:		
	10. Conduct a full subjective and objective evaluation in bi-different population groups of patients (elderly, gynecological, burn, cancer patients, amputees, psychiatrics, etc.)		AP1 -AP4
	11. Choose through clinical reasoning and the of each group evaluation findings, the appropriate research-documented interventions		C1-C4, E1-E3
	12. <b>Record the patients' functioning, disability and overall health condition, according to the ICF model</b>		AP1-AP4
	13. Apply physiotherapeutic interventions appropriately addressing difficulties in cooperation and communication with patients		E1-E4
Prerequisites	None	Co-requisites	None
Course Content	<ul style="list-style-type: none"> <li>Amputations</li> </ul>		

	<ul style="list-style-type: none"> <li>- Categorization of amputations - lower limb amputations - upper limb amputations – abutment</li> <li>- Physiotherapeutic treatment - preoperative and postoperative physiotherapy, Appropriate / inappropriate amputation sites in various positions</li> <li>- Maintenance or recovery of muscle strength in amputees</li> <li>- Care of the amputation - avoidance of edema and inflammation,</li> <li>- Prevention of adhesions and improvement of circulation,</li> <li>- Gait retraining - retraining of others functional activities,</li> <li>Prostheses - types of prostheses - methods of evaluating the application of prosthesis, retraining a patient in prosthesis placement, retraining in performing daily activities,</li> <li>- Emotional, social and professional adaptation of amputees</li> </ul> <ul style="list-style-type: none"> <li>• Obstetrics-Gynecology <ul style="list-style-type: none"> <li>- Anatomical and physiological adaptations of the female organism during pregnancy, stages of childbirth, purposes of special physiotherapy in pregnancy,</li> <li>- Exercises and relaxation positions, goals - before childbirth - during childbirth, exercises to stimulate circulation and metabolism and stress effects on the lower extremities during pregnancy,</li> <li>- Exercises for contraction and strengthening of the abdominal muscles, exercises to improve the contraction of the whole body,</li> <li>- Physiotherapy after childbirth,</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• Physiotherapy in the elderly <ul style="list-style-type: none"> <li>- Characteristics of elderly people, adjustments of various systems with age,</li> <li>- Prevention of falls,</li> <li>- Osteoporosis and exercise,</li> <li>- Obesity and exercise</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• Physiotherapy in burns and skin ulcers <ul style="list-style-type: none"> <li>- Types of burns, impact of burns on the body</li> <li>- Skin ulcers (diabetic, pressure, healing stages)</li> <li>- Role of physiotherapy in prevention and healing</li> <li>- The role of Physiotherapy in burn disease</li> <li>- Mechanical skin behavior</li> <li>- Stages of burn healing</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• Cancer patients <ul style="list-style-type: none"> <li>- Types of cancer, causes and epidemiology</li> <li>- Pathophysiological characteristics</li> <li>- Physical/organic effects/symptoms of cancer</li> <li>- Psychological effects/symptoms of cancer</li> <li>- Social Impact/symptoms of cancer</li> <li>- Types of cancer treatments/interventions and their side effects</li> <li>- Cancer pain, effects and management methods</li> <li>- Palliative care</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>- The role of the multidisciplinary team in the treatment of cancer</li> <li>- The role of physiotherapy in the treatment of cancer (interventions, means, techniques)</li> <li>• Psychiatric and concomitant behavioral problems <ul style="list-style-type: none"> <li>- People with psychiatric and other behavioral problems, obese people, people with motor and other concomitant problems (eg deafness, blindness, etc.)</li> </ul> </li> <li>• Physiotherapy of special population groups in the community <ul style="list-style-type: none"> <li>- Elderly</li> <li>- Chronically bedridden neurological patients</li> <li>- Head and multi-injury patients</li> <li>- Patients under mechanical ventilation and oxygen therapy at home</li> <li>- Patients with Long-Covid syndrome</li> <li>- Telerehabilitation of patients in the community</li> </ul> </li> <li>• Integrating patients' overall status based based on the 'International Classification of Functioning, Disability and Health'</li> <li>• <b>Digital physiotherapy in the assessment and treatment of special groups of patients(geriatric, cancer, amputations, mental patients maternity patients etc (telephysiotherapy and monitoring of their progress.</b></li> </ul>
<b>Teaching Methodology</b>	<p><b>Theory</b></p> <p>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.</p> <p><b>Laboratory</b></p> <p>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.</p>
<b>Bibliography</b>	<p><b><u>Textbooks:</u></b></p> <p>Avers Dale, Wong Rita A. (2022) Guccione's Physiotherapy in Geriatrics. Greek Edition: Vasiliki Sakellari, Broken Hill Publishers Ltd., ISBN: 9789925588114</p> <p>Bottomley J, Lewis C. (2008) Geriatric Rehabilitation: A Clinical Approach. 3rd ed. Upper Saddle River, NJ: Pearson Prentice Hall.</p>

Riebe D. (2018). ACSM's Guidelines for Exercise Testing and Prescription. 10th ed. Philadelphia: Wolters-Kluwer.

Asimakopoulos D. (2016) Modern ENTL Geriatrics ROTUNDA Publications

Haniotis F., Haniotis D., (2012) Geriatrics. Publications: K. & N. Litsas O.E.

**References:**

Gillespie, LD, Robertson, MC, Gillespie, WH, Sherrington C, Gates S, Clemson LM, Lamb SE. (2012) Interventions for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews Issue 9. Art. No.: CD007146.DOI: 10.1002/14651858.CD007146.pub3.

De Fina LF, Willis BL, Radford NB, et al. (2013) The association between midlife cardiorespiratory fitness levels and later life dementia. Ann Intern Med. 2013; 158:162–168.

Imamura M, Williams K, Wells M, Mcgrother C (2015). Lifestyle interventions for the treatment of urinary incontinence in adults. Cochrane Database Syst Rev. (12):CD003505. <https://doi.org/10.1002/14651858.CD003505.pub5>.

Lusardi, M.M., Fritz, S., Middleton, A., Allison, L., Wingood, M., Phillips, E., Criss, M., Verma, S., Osborne, J., Chui, K.K. (2017) Determining Risk of Falls in Community Dwelling Older Adults: A Systematic Review and Meta-Analysis Using Post test Probability. J. Geriatr. Phys. Ther. 40, 1–36

Naci H, Ioannidis J. (2013) Comparative effectiveness of exercise and drug interventions on mortality outcomes: metaepidemiological study. BMJ. 347: f5577.

Park, S.H. (2017) Tools for Assessing Fall Risk in the Elderly: A Systematic Review and Meta-Analysis. Aging Clin. Exp. Res. 30, 1–16.

	<p>Raue PJ, McGovern AR, Kiosses DN, Sirey JA. (2017) Advances in psychotherapy for depressed older adults. Curr Psychiatry Rep.19(9):57.  <a href="https://doi.org/10.1007/s11920-017-0812-8">https://doi.org/10.1007/s11920-017-0812-8</a>.</p> <p>Scheike TH, Holst KK, Hjelmborg JB. (2015) Measuring early or late dependence for bivariate lifetimes of twins. Lifetime Data Anal. 21(2):280–299.</p> <p>Sherrington, C. Michaleff, Z.A., Fairhall, N., Paul, S.S., Tiedemann, A., Whitney, J., Cumming, R.G., Herbert, R.D., Close, J.C.T., Lord, S.R. (2017) Exercise to Prevent Falls in Older Adults: An Updated Systematic Review and Meta-Analysis. Br. J. Sports Med. 51, 1749–1757.</p> <p>World Health Organisation (2007) WHO Global Report on Falls Prevention in Older Age. Geneva: World Health Organisation.</p> <p><a href="http://www.csp.org.uk/professional-union/practice/evidence-base/physiotherapy-works/falls-and-frailty">http://www.csp.org.uk/professional-union/practice/evidence-base/physiotherapy-works/falls-and-frailty</a> Physiotherapy works: Falls and frailty   The Chartered Society of Physiotherapy. Physiotherapy reduces falls, addresses frailty and restores independence. AGILE Charter Society of Physiotherapy.</p>		
	Assessment Method and Description	Weight	Aligned CLOs
Assessment	<b>Written</b> 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.	15%	1-9
	<b>Group Projects</b> 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 will <b>be group-based</b> and should align with the learning outcomes. Students are evaluated on the quality of their work, the depth of	15%	10-14

	understanding displayed, and their ability to effectively communicate their ideas. .		
	<p><b>Laboratory</b> 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.</p>	20%	10-14
	<p><b>Final Exam</b> 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>	50%	1-15
Language	Greek / English		