NEW METHODS IN PHYSIOTHERAPY

Semester: A'(1^{rst}) ECTS credits: 8 Code:

HOURS: 2 theory / 1Exercise **Type:** Mandatory Module

Module aim: The aim of the module is to provide specialized knowledge in rehabilitation issues in relation to current, complex, changing developments in the field of physiotherapy, rehabilitation and ergonomics. Determining the priorities of Physiotherapy in relation to the demographic, population, cultural and educational changes that are taking place in the country and internationally.

Characteristic of the module will be the application of selected current knowledge from a wide

interdisciplinary range in clinical physiotherapy at an advanced level of study.

Learning objectives: Upon successful completion of the module, the students will be able to:

1) Demonstrate knowledge and understanding that supports but also expands / enhances the knowledge related to the first cycle of studies, and provides the basis for the development and / or application of ideas, in a framework of theoretical, research and applied practice.

- 2) Apply their first- and second-cycle knowledge to solve problems in new or less familiar environments within the broader (or interdisciplinary) working conditions related to their field of study, confirming their understanding, and their ability to use
- 3) Have the ability to incorporate knowledge, manage complex issues and make decisions with incomplete or limited information, while at the same time supporting reflection on the social and ethical responsibilities associated with applying their knowledge and decisions.
- 4) be able to convey their conclusions, as well as the knowledge and logic on which they are based, to a specialized and non-specialized audience with clarity and adequacy.

Module content:

Module Content.

The module will develop Thematic issues on: Ergonomic approach to Physiotherapy. Prevention of falls in the elderly. Physiotherapeutic approach in Geriatrics. Biomechanical methods - dynamometry. Balance disorders and the contribution of Physiotherapy. Technology in Physiotherapy rehabilitation – Advanced technology devices and data recording, evaluation and planning of Physiotherapy intervention. Specialized Physiotherapy Intervention in Neuro-otology, temporomandibular disorders, burn. Therapeutic exercise methods, exercise in water, Scandinavian walking. Theory and research to improve participation and adherence to Physiotherapy programs. Development and implementation of Guidelines in Physiotherapy.

Teaching methods and means: 13 weeks X 2 hours theory & 1 hour practice

Evaluation methods:

 The evaluation of students will be carried out in accordance with the regulation of the Post Graduate Program and the relevant decisions of the Assembly of the Department of Physiotherapy

Indicative Bibliography:

- Νεότεροι Ορίζοντες στην Επιστήμη της Φυσικοθεραπείας. Εξειδικευμένη Φυσικοθεραπευτική Παρέμβαση σε ΩΡΛ Προβλήματα. Ειδικός τόμος. Επιστημονική Ημερίδα Γ.Ν.Α. Ο Ευαγγελισμός. 28 Απριλίου 2012, Αθήνα, Ελλάς. Επιθεώρηση Κλινικής Φαρμακολογίας και Φαρμακοκινητικής (Epitheorese Klinikes Farmakologias Kai Farmakokinetikes) Ελληνική Έκδοση, 31(1) 2013.
- 2. Φυσικοθεραπεία. Σύγχρονες τάσεις και προοπτικές. Ειδικός τόμος. 22ο Ετήσιο Πανελλήνιο Επιστημονικό Συνέδριο Φυσικοθεραπείας του Ν.Π.Δ.Δ Πανελλήνιος Σύλλογος Φυσικοθεραπευτών, 7, 8 και 9 Δεκεμβρίου 2012, Αθήνα, Ελλάς. Επιθεώρηση Κλινικής Φαρμακολογίας και Φαρμακοκινητικής (Epitheorese Klinikes Farmakologias Kai Farmakokinetikes) Ελληνική Έκδοση, (2) 2013.
- 3. Guccione A.: Geriatric Physical Therapy, 2nd edition. St. Louis, Mosby (2000)
- 4. Bronstein A.M., Brandt T., Woollacott M.H., Nutt J.G.: Clinical Disorders of Balance, Posture and Gait. 2nd ed. London: Arnold, (2004)
- 5. Lanham-New S, O'Neill T, Morris R, Skelton D, Sutcliffe A (eds). Managing Osteoporosis. Oxford: Clinical Publishing, 2007.
- 6. Jakobs K. Ergonomics for Therapists. 3nd Edition. Baltimore: Mosby, 2008.

- 7. McGaryex Charles. Physical therapy of the cancer patient –Churchill, Livingstone, New York 1989.
- 8. Key G.L, Industrial therapy –Mosby, St. Louis 19887.
- 9. Wilder Elnine, Obstetrics and gynaecologic physical therapy Churchill, Livingstone, New York 1994
- 10. Guyton, Text book of work physiotherapy Prim Books Bangalore-1991 8th edition
- 11. Masoro Hand book of physiology in Aging-, C.R.C Press, 1981
- 12. Seidman, Z., Mcnamara, R., Wootton, S., Leung, R., Spencer, L., Dale, M., et al. (2017) People attending pulmonary rehabilitation demonstrate a substantial engagement with technology and willingness to use telerehabilitation: A survey. Journal of Physiotherapy, 63(3):175-181, 2017.
- 13. Ross lles, Nicholas F Taylor, Megan Davidson and Paul O'Halloran La Trobe. Telephone coaching can increase activity levels for people with non-chronic low back pain: a randomised trial. Journal of Physiotherapy: (57) 2011.
- 14. Lesinski M, Hortoba T, Muehlbauer Th, Gollhofer A, Granacher U. Effects of Balance Training on Balance Performance in Healthy Older Adults: A Systematic Review and Meta-analysis. Sports Medicine 45:1721–1738, 2015.
- 15. Meriam M. J., Willeke V., Katrien G. L. Development of an evaluation tool for geriatric rehabilitation care. BMC Geriatrics, 19:206, 2019.
- 16. O'Keeffe M., Cullinane P., Hurley J, Leahy I, Bunzli S. What Influences Patient– Therapist Interactions in Musculoskeletal Physical Therapy? Qualitative Systematic Review and Meta– Synthesis. Physical Therapy 96(5):609–622, 2016.