**ACADEMIC DISCIPLINE OVERVIEW**

1. **Program data**

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| 1.1. Higher education institution | Grigore T. Popa University of Medicine and Pharmacy Iasi |
| 1.2. Faculty | Medical Bioengineering |
| 1.3. Department | Biomedical Sciences |
| 1.4. Field of study | Health |
| 1.5. The cycle of studies | Bachelor |
| 1.6. Study program / qualification | Balneo-physiokinetotherapy and rehabilitation – english language / Physiokinetotherapist |

**2. Discipline data**

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| 2.1. Name of the discipline / Code | | | | **b. Podology** | | **RE1321** |
| 2.2. Teaching staff in charge with lectures | | | | **-** | | |
| 2.3. Teaching staff in charge with practical activities | | | | **Lecturer Iustina Condurache, PhD** | | |
| 2.4. Year of study | **III** | 2.5. Semester | **1** | 2.6. The type of assessment | **Colloquium, C1** | |
| 2.7. Discipline type | | **Elective** | | **Specialty discipline** | | |

**3. Estimated total time (hours/semester of didactic activity)**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 3.1. Number of hours / week: | | 3.2. Courses number of hours / week | | 3.3. Seminars / practical classes  number of hours / week | | | |
| Semester 1 | **1** |  | | **1** | | | |
| Semester 2 |  |  | |  | | | |
| 3.4. Total number of learning hours: | **14** | 3.5. Of which: Courses |  | 3.6. Of which: Seminars / practical classes: | | | **14** |
| 3.7. Distribution of individual study time: | | | | | Hours sem. 1 | Hours sem. 2 | |
| Study time using course book materials, bibliography and hand notes | | | | | 16 |  | |
| Supplementary documentation in the library, using specialised platforms via internet and by field work | | | | | 14 |  | |
| Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays | | | | | 3 |  | |
| Tutorship | | | | | 2 |  | |
| Examinations | | | | | 2 |  | |
| Other activities | | | | | 3 |  | |
| Total hours of individual study (*without examinations*) | | | | | **36** |  | |
| 3.8. Total hours per semester | | | | | **50** |  | |
| 3.9. Number of credits | | | | | **2** |  | |

**4. Preconditions (where applicable)**

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| 4.1. of curriculum | Anatomy. Biomechanics. Movement pedagogy. Kinesiology |
| 4.2. of competences | Realization and design of kinetic programs |

5. **Conditions (where applicable)**

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| 5.1. for lectures | - |
| 5.2. for seminars / practical classes | Sala kinetoterapie, dotare cu echipamente de specialist și video proiector  Studenții vor purta echipament de protecție (Halat, Saboți medicali). |

**6. Specific competences acquired**

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| **Professional competencies** | **C 1.4** | The application of physical therapy programs correlated with the functional diagnosis and according to the doctor's indications, also carrying out secondary prophylaxis. |
| **C 4.3** | Use of appropriate parameters in techniques to increase joint mobility, muscle strength, coordination and balance.  Use of graphic description for specific exercises |

7**.** **Objectives of the study discipline (according to the grid of specific competences acquired)**

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| 7.1. General objective | General and specialized knowledge in the field of movement pedagogy to allow the understanding, analysis and conception of new knowledge in this field, as well as familiarization with the professional activities carried out in this field, with the specialized pedagogical language, by defining the fundamental concepts / notions of the theory and training methodology, respectively theory and assessment methodology. |
| 7.2. Specific objectives | Construction of kinetic plans for the rehabilitation of the foot depending on the pathology |

**8. Contents**

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| **8.2. Practical activities - laborator** | | **Teaching methods** | **Observations** |
| 1 | Notions of foot anatomy and biomechanics. Recap. | Verbal methods: Explenation  Intuitive methods: power point, video, observation.  Practical methods: performance of techniques, performance of techniques in a group of students, etc | 2 h |
| 2 | Physiotherapy in the diabetic foot. Physiotherapy in diseases of cartilaginous tissues and skin tissue at the level of the foot. | 2 h |
| 3 | Physiotherapy in rheumatological diseases of the foot. | 2 h |
| 4 | Physiotherapy in vascular diseases of the leg. | 2 h |
| 5 | Physiotherapy in leg trauma. | 2 h |
| 6 | Physiotherapy after foot surgery. | 2 h |
| 7 | Physiotherapy in neurological disorders of the foot. | 2 h |

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| **8.3. Bibliography:** |
| ***Mandatory:*** |
| 1. Albert I. King. The biomechanics of impact injury. Biomechanical response, mechanisms of injury, human tolerance and simulation. Springer International Publishing AG 2018 ISBN 978-3-319-49792-1 2. Derek Hasen, Steve Kennelly. Plyometric anatomy. Human Kinetics. USA. 2017. ISBN: 978-1-4925-3349-8 James Watkins. Biomecanics. Laboratory and field excercises in sport and exercise. Routledge Taylor & Francis Group. 2018. ISBN 978-1-315-30631-5 3. Ioanna Eleftheriadou et all. Atlas of the diabetic foot. Third edition. John Wiley & sons Ltd. USA, 2019 ISBN: 9781119255307 4. Kaj Klaue. The foot. From evaluation to surgical correction. Springer. 2015. ISBN 978-3-662-47697-0 5. Klaus Buckup, Johannes Backup. Clinical Tests for the Musculoskeletal system. Examination-Signs-Phenomena. Thieme Publisher Stuttgart, Germany, 2016 ISBN 9783131367938 6. Mansfield Neumann. Essentials of kinesiology for the physical therapist assistant. Elsevier INC, St. Louis Missouri, 2014 ISBN: 978-0-323-08944-9 7. Rotariu Mariana, Ionite Andrei-Cătălin. Movements of the spine correlations between landmarks and effectors. Editura Discobolul, București, 2018 ISBN: 978-606-798-060-8 8. Walter Daghino et all. Foot and ankle trauma injuries. Springer. 2018. ISBN 978-3-319-69617-1 |
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| ***Elective:*** |
| 1. James Watkins. Biomecanics. Laboratory and field excercises in sport and exercise. Routledge Taylor & Francis Group. 2018. ISBN 978-1-315-30631-5 2. Kazuyuki Kanosue et all. Physical activity exercise, sedentary behavior and health. Springer. Japan. 2015 ISBN 978-4-431-55333-5 3. Terry J. Housh et all. Introduction to exercise science. Fifth edition. Routledge Taylor & Francis Group. 2018. ISBN 978-1-315-17767-0 |
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**9. *Correlation of the discipline contents with the expectations of the epistemic community, professional associations, and representative employers from the afferent program field***

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| Knowledge and abilities are established as didactic objectives and specified as such in the analytic programs that are revised yearly. After their analysis by the study discipline staff, these are discussed and approved in the Curricular Committee, towards curricular harmonization among the various study disciplines. Along this entire process systematic evaluation is performed, directly if possible, regarding the correspondence of the contents to the expectations of the academic community and of the representatives of the social community, professional associations, and employers. |

**10. Evaluation**

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| Type of activity | Assessment criteria | Evaluation methods | Contribution to the final grade |
| Lectures | Acquiring theoretical notions and presented in the course | Written exam.  MCQ Examination |  |
| Practical activities | Activities carried out in laboratory and conducted quality essays. | Colloquium practical activity | 80 % |
| Individual study | Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays.  Study time using coursebook materials, bibliography and hand notes, documentation in the library, using specialised platforms via internet and by field work. | Tests during the semester | 20 % |
| Minimal performance standard:   * Theoretical and practical knowledge related to specific techniques used in podiatry. | | | |

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| Date | Holder of course / signature, | Holder of practical activities / signature, |
| 11.09.2023 |  | Lecturer Iustina Condurache, PhD |

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| Date of approval in the Department Council/Teaching Council, | | |
| 14.09.2023 |  | Department director / signature, |
|  |  | Associate Professor Daniela-Viorelia Matei, MD, PhD |