**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 | | | | **Professional Practice** | | **RE1121** |
| 2.2. Teaching staff in charge with lectures | | | |  | | |
| 2.3. Teaching staff in charge with practical activities | | | | **Associate Professor Daniela-Viorelia Matei, MD, PhD**  **Lecturer Cătălin Ioniţe, PhD**  **Lecturer Ilie Onu, PhD** | | |
| 2.4. Year of study | **I** | 2.5. Semester | **2** | 2.6. The type of assessment | **Colloquium, C2** | |
| 2.7. Discipline type | | **Mandatory** | | **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 |  |  | |  | | | |
| Semester 2 |  |  | |  | | | |
| 3.4. Total number of learning hours: | **120** | 3.5. Of which: Courses |  | 3.6. Of which: Seminars / practical classes: | | | **120** |
| 3.7. Distribution of individual study time: | | | | | Hours sem. 1 | Hours sem. 2 | |
| Study time using course book materials, bibliography and hand notes | | | | |  |  | |
| Supplementary documentation in the library, using specialised platforms via internet and by field work | | | | |  |  | |
| Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays | | | | |  |  | |
| Tutorship | | | | |  |  | |
| Examinations | | | | |  |  | |
| Other activities | | | | |  |  | |
| Total hours of individual study (*without examinations*) | | | | |  |  | |
| 3.8. Total hours per semester | | | | |  |  | |
| 3.9. Number of credits | | | | |  | **2** | |

**4. Preconditions (where applicable)**

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| 4.1. of curriculum | Theoretical and methodical foundations of physiotherapy, Medical gymnastics, Movement pedagogy, Biomechanics |
| 4.2. of competences | Development of domain-specific programmes |

5. **Conditions (where applicable)**

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| 5.1. for lectures |  |
| 5.2. for seminars / practical classes | Students will have appropriate equipment |

**6. Specific competences acquired**

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| **Transversal**  **competencies** | **CT1** | Identification of the objectives to be achieved, the resources available, the conditions for their completion, the work stages, the work times, the related deadlines and the related risks |

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

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| 7.1. General objective | - Knowledge of functional anatomy and joint biomechanics  - Knowledge of assessment tests: joint and muscle balance  - Knowledge of massage techniques  - Knowledge of general notions of psychology and effective communication with patients - Knowledge of the main types of exercises and individualised training programmes |
| 7.2. Specific objectives | - Perform pathology-specific functional assessments (initial, intermediate, final) using joint and muscle balance  - have knowledge of graphic representation of physical exercises  - develop the ability to communicate appropriately with the patient and family  - develop the ability to observe, assess and evaluate  - knowledge of and respect for rules and principles of ethical and deontological behaviour  - apply specific physiotherapy exercises for each joint  - acquire knowledge and skills in the field of kinesiology  - develop the ability to posture the patient with different conditions in order to prevent different complications  - to know the main mobilisation techniques and their underlying principles and to develop the ability to mobilise the patient  - knowledge of the various equipment and devices used in assistance and development of the ability to manipulate and use them to increase independence/autonomy  -to know and apply massage techniques  -understand the role and develop their ability to work in a multidisciplinary team: medical doctor - physiotherapist - psychologist - nurse |

**8. Contents**

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| **8.1. Lectures** | | **Teaching methods** | **Observations** |
|  | | **120 hours** |  |
| 1 | Knowledge of the relationship between patient and medical staff, ethical behaviour towards the patient. | Students will be asked to observe, perform and apply specific physiotherapy exercises  The practice coordinator explains the specifics and principles of the methods used and practically demonstrates the various manoeuvres and techniques used and then guides and supervises students in the safe and correct performance of these methods and techniques.  Practical activities in the physiotherapy room | Students will attend the practice offices of UMF Iasi partner units, and will perform supervised practice of 120 hours for 3 consecutive weeks.  UMF "Grigore T. Popa" din Iasi, Facultatea de Bioinginerie Medicala  Spitalul Clinic de Recuperare Iași  Spitalul Clinic de Urgență pt. Copii „Sf. Maria” Iași  Institutul Regional de Oncologie  Spitalul Clinic de Urgență „Prof. Dr. N. Oblu” Iași  Spitalul Clinic Județean de Urgențe "Sf. Spiridon" Iași  Spitalul Clinic CF Iasi  Spitalul Clinic de Obstetrică-Ginecologie „Elena Doamna” Iași  Institutul de Psihiatrie Socola Iași  Spitalul Providenta Iasi  UPU SMURD Iasi  Policlinica Balneara Nicolina, Iaşi, cabinete individuale  Centrul de Fiziokinetoterapie si recuperare Iasi, Fundatia Gr. T. Popa  Prolife Clinics S.R.L. Iasi  Armbruster Clinic Iaşi  Cabinet Medical Sanfiz Iași  Centrul de Recuperare Medicală „Fizio-Med” Iași  Centrul de Recuperare Medicală și Reumatologie „Medfiz” Iași  Centrul de zi Echilibru, Iași  Centrul Medical Hygeea S.R.L. Iași  Centrul Medical Preventis, Iași  Roche România S.R.L.  S.C. Analda S.R.L., Iași, Punct de lucru Centrum Gym  S.C. Beta Tech S.R.L., Iași  S.C. Cardiomed S.R.L., Iași  S.C. Kinetic Fit S.R.L, Iași  S.C. Euromedica S.R.L., Iasi  S.C. Osteopharm S.R.L., Iași  S.C. Red Hospital S.R.L. Iasi  S.C. Salina Iași  S.C. Sanomed Consulting S.R.L., Iași  S.C. Terapeutica S.R.L., Iași  Other medical centers, after the conclusion of practice agreements. |
| 2 | Preparing the patient for the medical examination  Patient identity, handling of medical records |
| 3 | Knowledge of medical and social issues raised by the sick person in the family and prophylactic assistance in the field |
| 4 | Postural, gait assessment |
| 5 | knowledge of the main techniques of transfer, mobilization and posturing of the patient with different diseases and their integration into the recovery plan |
| 6 | joint and muscle assessment |
| 7 | Evaluation of active and passive movements |
| 8 | Assessment of movement coordination |
| 9 | Practical applications of massage |
| 10 | Physiotherapy exercise programmes to correct chest and abdominal deficiencies |
| 11 | Physiotherapy exercise programs for correction of kyphosis, lordoosis, scoliosis, round, flat back |
| 12 | Physiotherapy exercise programmes to correct upper limb deficiencies |
| 13 | Physiotherapy exercise programmes to correct lower limb deficiencies |
| 14 | Exercises and physiotherapy programs specifically for the development of motor skills: strength, speed, endurance, coordination, mobility |
| 15 | Making a personalised physical training plan |

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| **8.3. Bibliography:** |
| ***Mandatory:*** |
| 1. Christopher Hayre, Dave Muller, Paul Hackett. Rehabilitation in Practice. Springer Verlag, Singapore, 2022, EAN 9789811683169  2. David X. Cifu. Braddom's Physical Medicine and Rehabilitation. Elsevier - Health Sciences Division, 2020, EAN 9780323625395  3. Neumann DA. Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation. 2nd ed. St. Louis, MO: Mosby Elsevier; 2010  4. Clarkson HM. Muscoloskeletal Assessment. Joint Motion and Muscle Testing, 3rd rd., Lippincott Williams & Wilkins, Philadelphia, 2013  5. Sardaru Dragoș-Petrică, Onu Ilie, Matei Daniela-Viorelia ”Evaluarea amplitudinilor articulare” Iași: Editura ”Gr.T. Popa”, 2021, ISBN 978-606-544-745-5  6. Charles E Giangarra, Robert C. Manske. Clinical Orthopaedic Rehabilitation: A Team Approach. Elsevier, 2018, ISBN9780323393706 |

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| ***Elective:*** |
| 1. Sheryl L. Fairchild and Roberta O'Shea. Pierson and Fairchild's Principles & Techniques of Patient Care, 7th Edition. Evolve, 2023, ISBN: 9780323720885  2. Henk J. Stam, H. Muza>er Buyruk, John L. Melvin, Gerold Stucki, Irene Buyruk Burggraaf. Recuperarea medicala de faza acuta. Universitatea Carol Davila, 2018, ISBN 9789737088796 |

**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:   * making exercise plans for upper limbs, lower limbs, spine * performing joint and muscle assessments * applying massage techniques | | | |

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| --- | --- | --- |
| Date | Holder of course / signature, | Holder of practical activities / signature, |
| 11.09.2024 |  |  |

Associate Professor Daniela-Viorelia Matei, MD, PhD

Lecturer Cătălin Ioniţe, PhD

Lecturer Ilie Onu, PhD

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| --- | --- | --- |
| Date of approval in the Department Council/Teaching Council, | | |
| 19.09.2024 |  | Department director / signature, |
|  |  | Associate Professor Daniela-Viorelia Matei, MD, PhD |