**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 | **Psychomotricity, Psychomotor education and re-education** | **RE1118** |
| 2.2. Teaching staff in charge with lectures |  **Professor Mariana Rotariu, PhD** |
| 2.3. Teaching staff in charge with practical activities | **Lecturer Dan Trofin, MD, PhD**  |
| 2.4. Year of study | **I** | 2.5. Semester | **2** | 2.6. The type of assessment | **Exam, E2** |
| 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 | **2** | **1** | **1** |
| 3.4. Total number of learning hours: | **28** | 3.5. Of which: Courses | **14** | 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 |  | 12 |
| Supplementary documentation in the library, using specialised platforms via internet and by field work |  | 6 |
| Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays |  | 4 |
| Tutorship |  | 2 |
| Examinations |  | 2 |
| Other activities |  |  |
| Total hours of individual study (*without examinations*) |  | **22** |
| 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, Physiology. |
| 4.2. of competences | The key competences include skills such as to identify the appropriate parameters of joint mobility growth techniques, of muscular forces growth, of coordination, of balance and the improvement of some modified parameters.  |

5. **Conditions (where applicable)**

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| 5.1. for lectures | Video logistical support. |
| 5.2. for seminars / practical classes | Video logistical support. |

**6. Specific competences acquired**

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| **Professional competencies** | **C 1.2** | Description of concepts, theories and fundamental notions of physiological and pathological mechanisms of the human body and in relation to the mechanics of motion. Symptoms and clinical signs, identification methods and techniques of physiotherapy.  |
| **C2.2** | Formulation of hypotheses and operationalization of key concepts to explain syndromes and / or diseasee. |

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| **Transversal****competencies** | **CT1** | Identifying the objectives to be achieved, the available resources, the conditions for completing the tasks, the stages and working times, as well as the deadlines and related risks. Identifying roles and responsibilities in a multidisciplinary team and application techniques and effective work relationships within the team and the relationship with the patient. |

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

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| 7.1. General objective | Knowledge and description of human types of motion, knowledge of human motion evaluation and assessment. |
| 7.2. Specific objectives | Knowledge of human motion reference planes, key components and determinants of motion in normal and in pathological cases.Knowledge of gait analysis, normal and pathological gait parameters.Knowledge of motion assistive technology used in rehabilitation. |

**8. Contents**

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| **8.1. Lectures** | **Teaching methods** | **Observations** |
| 1 | Introduction to human motion. Fundamental concepts in human motion. General Basis of psychomotricity. | Power point presentations, interactive courses | 2 hours |
| 2 | The main stages of evolution of psychomotricity. Basic behavior of motricity: static and dynamic balance. | Power point presentations, interactive courses | 2 hours |
| 3 | Neuromotric behavior - muscle tone. Perceptive behaviors of motricity: body scheme, laterality. | Power point presentations, interactive courses | 2 hours |
| 4 | Motric forms of expression of bodily activities: expression, communication and achievement of motricity. Motion assessment and analysis. Parameters of motion. | Powe rpoint presentations, interactive courses | 2 hours |
| 5 | Gait assesment and analysis. Parameters of gait. Basic notions of podology.  | Power point presentations, interactive courses | 2 hours |
| 6 | Assistive technology in human motion.  | Power point presentations, interactive courses | 2 hours |
| 7 | Performance in human motion | Power point presentations, interactive courses | 2 hours |

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| **8.2. Practical activities - practical class**  | **Teaching methods** | **Observations** |
| 1 | The Basic components of psychomotricity. Introduction in the anatomy and physiology of the nervous system. Neuroplasticity. | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 2 | Oculo-manual coordination. Introduction in pyramidal tract semiology. Ataxia. Visual agnosia. | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 3 | Stance and gait. Semiology data about the cerebellum’s pathology. Extrapyramidal syndrome | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 4 | Motility related abilities. Exercises. Integration of psychomotor concepts in the physical education of the child. Psychomotor reeducation of movement impairment in children and adults.  | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 5 | Education and reeducation of body representation. Basic facts of upper and lower motor neuron. Introduction in sensitive disorders. Impairment of stereognosis in different pathologies.  | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 6 | Reeducation of laterality. | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 7 | Spatial and temporal structures. Exercises. | Case presentation, Power Point presentations, interactive discussions | 2 hours |

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| **8.3. Bibliography:** |
| ***Mandatory:*** |
| 1. Laboratory support materials available on the University’s platform.
2. Berdila, A., Talaghir, L. G., Iconomescu, T. M., & Rus, C. M. (2019). Values and Interferences of Psychomotricity in Education – a Study of the DomainSpecific Literature. Revista Romaneasca Pentru Educatie Multidimensionala, 11(4Sup1), 22-42. https://doi.org/10.18662/rrem/175.
3. Abălaşei, B., Popescu L. (2016). Body scheme- fundamental component of growth and development, Gymnasium- Scientific journal of education, sports and health, 17(2).

***Elective***Popescu CD, Constantinescu A, Ignat EB, Matei D, Alexa D, Bolboceanu O, Grosu C, Popescu D. Neurology for medical students. Second edition. Eds CD Popecu. editura « Gr. T. Popa », ISBN: 978-606-544-288-7, 2015 |

**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 | 80 % |
| Practical activities | Activities carried out in laboratory and conducted quality essays. | Colloquium practical activity | Admitted/ Rejected |
| Individual study | Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays.Individual study 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: Acquiring appropriate methods and means for re-educating psychomotor skills• Elaboration of strategies for the re-education of psychomotor skillsKnowledge of the basic concepts in psychomotricity |

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| Date | Holder of course / signature, | Holder of practical activities / signature, |
| 11.09.2024 | Professor Mariana Rotariu, PhD | Lecturer Dan Trofin, MD, PhD candidate |

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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 |