**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 | | | | **Rheumatological Rehabilitation** | | **RE1310** |
| 2.2. Teaching staff in charge with lectures | | | | **Lecturer Cătălin Ionițe, PhD** | | |
| 2.3. Teaching staff in charge with practical activities | | | | **Lecturer Cătălin Ionițe, PhD** | | |
| 2.4. Year of study | **III** | 2.5. Semester | **1** | 2.6. The type of assessment | **Exam, E1** | |
| 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 |  | **1** | | **1** | | | |
| Semester 2 |  |  | |  | | | |
| 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 | | | | | 15 |  | |
| Preparation time for seminars / practical classes, study themes, reviews, portfolio and essays | | | | | 10 |  | |
| Tutorship | | | | | 4 |  | |
| Examinations | | | | | 4 |  | |
| Other activities | | | | | 10 |  | |
| Total hours of individual study (*without examinations*) | | | | | **47** |  | |
| 3.8. Total hours per semester | | | | | **75** |  | |
| 3.9. Number of credits | | | | | **3** |  | |

**4. Preconditions (where applicable)**

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| 4.1. of curriculum | Anatomy, Biomechanics, Electrotherapy, Kinetology, Massage, Balneology. |
| 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.**  Students with adequate equipment. |

**6. Specific competences acquired**

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| **Professional competencies** | **C 5.1** | To apply different kinetic programs based on functional diagnosis of rheumatic pathology according to physician recommendations.  To apply different techniques to increase (articular) range of motion, strength, equilibrium and coordination, and to improve visceral (cardiovascular, respiratory, neuromuscular) impairment.  To correctly identify specific massage techniques based on a complete assessment of muscle tone, strength, pain before and after procedure. |
| **C 5.3** | To correctly assess specific techniques of hydrotheramotherapy based on a complete assessment of functional deficit.  To correctly assess specific techniques of electrical therapy based on a complete assessment of pain and functional deficit.  To correctly apply methods to evaluate functional deficit and subsequent socio-professional independence. |

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| **Transversal**  **competencies** | **CT1** | To identify main objectives, skills, tools, working phases, deadlines and risks.  To identify roles and responsibilities in a multidisciplinary team and to apply working principles inside the specialist physician- physical therapist connection. |

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

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| 7.1. General objective | To describe main inflammatory, mechanical and degenerative rheumatic conditions (clinical picture, disability, management).  To achieve basic skills for clinical assessment and evaluation of rheumatic conditions.  To advance the role of physical therapy in different rheumatic diseases. |
| 7.2. Specific objectives | To promote knowledge about functional disability related to different rheumatic conditions.  To develop the ability to select adequate methods and techniques of physical therapy in order to prevent or decrease the musculoskeletal impairment/ disability.  To develop the ability to plan both short and long-term rehabilitation programs;  To promote a successful relationship between physical therapists and specialist physicians. |

**8. Contents**

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| **8.1. Lectures** | | **Teaching methods** | **Observations** |
| 1 | Rehabilitation in rheumatic conditions: objectives, methods, monitoring and assessment. | Power point presentations, interactive courses | 2 hours |
| 2 | Rheumatoid arthritis: rehabilitation programs.  Ankylosing Spondylitis: rehabilitation programs. | 2 hours |
| 3 | Psoriatic arthritis: rehabilitation programs. Hip osteoarthritis: rehabilitation programs. | 2 hours |
| 4 | Knee osteoarthritis: rehabilitation programs.  Hip and knee replacement: rehabilitation programs. | 2 hours |
| 5 | Lumbar and cervical spine pathology (disk herniation): rehabilitation programs. | 2 hours |
| 6 | Microcrystalline arthropathies (gout): rehabilitation programs.  Soft tissue pathology –rehabilitation programs. | 2 hours |
| 7 | Osteoporosis: rehabilitation programs. | 2 hours |

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| **8.2. Practical activities - practical class** | | **Teaching methods** | **Observations** |
| 1 | Rehabilitation in rheumatic conditions: objectives, methods, monitoring and assessment. | Case presentation, Power Point presentations, interactive discussions | 2 hours |
| 2 | Rheumatoid arthritis: rehabilitation programs. | 2 hours |
| 3 | Ankylosing Spondylitis: rehabilitation programs. Psoriatic arthritis: rehabilitation programs. | 2 hours |
| 4 | Hip osteoarthritis: rehabilitation programs.  Knee osteoarthritis: rehabilitation programs.  Hip and knee replacement: rehabilitation programs. | 2 hours |
| 5 | Lumbar and cervical spine pathology (disk herniation): rehabilitation programs. | 2 hours |
| 6 | Microcrystalline arthropathies (gout): rehabilitation programs.  Soft tissue pathology –rehabilitation programs. | 2 hours |
| 7 | Osteoporosis: rehabilitation programs. | 2 hours |

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| **8.3. Bibliography:** |
| Mandatory: |
| 1. Courses and laboratory support materials available on the University’s platform. 2. Chirieac Rodica & Ancuta Codrina: Notiuni de balneofizioterapie, curs pentru studenti, Iasi 2009, editura “Gr.T.Popa” UMF Iasi ISBN: 978-973-7682-81-9 (suport curs) 3. Ancuta Codrina: Clinica si tratamentul complex al principalelor boli reumatismale, Iasi 2009, editura „Gr.T.Popa” UMF Iasi, ISBN: 978-973-7682-78-9 (suport) 4. Ancuta Codrina: Elemente de diagnostic, evaluare si monitorizare in patologia reumatismala (DVD educational), Iasi 2009, editura „Gr.T.Popa” UMF Iasi, ISBN: 978-973-7682-91-8 (suport LP studenti)   Elective:   1. [Marc C. Hochberg](https://www.books-express.ro/marc-c-hochberg/c/770305), [Ellen M Gravallese](https://www.books-express.ro/ellen-m-gravallese/c/107991214), [Josef S. Smolen](https://www.books-express.ro/josef-s-smolen/c/700300), [Desiree van der Heijde](https://www.books-express.ro/desiree-van-der-heijde/c/657899), [Michael E. Weinblatt](https://www.books-express.ro/michael-e-weinblatt/c/770306), [Michael H. Weisman](https://www.books-express.ro/michael-h-weisman/c/486485). Rheumatology. 2-Volume Set. Hardback. 2022. 2. Handa R. Clinical Rheumatology. [Springer Verlag, Singapore](https://www.libristo.ro/ro/editura/Springer%20Verlag,%20Singapore). 2022. 3. [Gary S. Firestein](https://www.libristo.ro/ro/autor/Gary%20S.%20Firestein), [Ralph C. Budd](https://www.libristo.ro/ro/autor/Ralph%20C.%20Budd),  [Sherine E](https://www.libristo.ro/ro/autor/Sherine%20E), [McInnes](https://www.libristo.ro/ro/autor/McInnes), [Iain B](https://www.libristo.ro/ro/autor/Iain%20B). Firestein. Textbook of Rheumatology, 2-Volume Set. [Elsevier - Health Sciences Division](https://www.libristo.ro/ro/editura/Elsevier%20-%20Health%20Sciences%20Division). 2020. 4. Strone J. Current Diagnosis & Treatment in Rheumatology, Fourth Edition. Paperback. 2021. |
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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 | 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.  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:   * Student should be able to elaborate a therapeutic program based on a specific clinical/ functional diagnosis and to apply various kinetic, electrical and hydrotherapy programs. | | | |

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| Date | Holder of course / signature, | Holder of practical activities / signature, |
| 12.09.2023 | Lecturer Cătălin Ionițe, PhD | Lecturer Cătălin Ionițe, 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 |