**ACADEMIC DISCIPLINE OVERVIEW**

1. **Program data**

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| **1.1.** | **GRIGORE T. POPA UNIVERSITY OF MEDICINE AND PHARMACY IASI** |
| **1.2.**  | **FACULTY OF MEDICAL BIOENGINEERING**  |
| **1.3.** | **PROGRAMME:** Physio-kinetotherapy and rehabilitation |
| **1.4.**  | **STUDY FIELD:** Health |
| **1.5.** | **STUDY CYCLE**: UNDERGRADUATE |
| **1.6.** | **STUDY PROGRAMME:** INENGLISH |
| 1. **Subject data**
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| **2.1.** | **Subject: Rehabilitation in Rheumatic diseases** |
| **2.2.** | **Module leader: Assoc prof Codrina ANCUTA**  |
| **2.3.** | **Seminar leader: staff of the discipline**  |
| **2.4. Year of study** | **III** | **2.5. Semester in which is taught** | **1** | **2.6. Evaluation type** | C | **2.7. Subject status** | Mandatory  |

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

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| **3.1.Number of hours / week** | 4 | **3.2. Courses number of hours / week** | 2 | **3.3.Seminar / l practical classes** | 2 |
| **3.4. Total number of learning hours** | 56 | **3.5. Courses** | 28 | **3.6. Seminar / practical classes** | 28 |
| **3.7. Distribution of the available time** | Hours |
| **Study based on the manual, lecture support, bibliography and hand notes** | 20 |
| **Supplementary documentation in the library, using specialized platforms via internet and by field work** | 10 |
| **Preparation for seminars / practical classes, study themes, reviews, portofolio, and essays** | 10 |
| **Tutorship** |  |
| **Examinations** | 4 |
| **Other activities** |  |
| **3.8. Total hours of individual study** | 44 |
| **3.9. Total hours pes semester** | 100 |
| **3.10. Number of credits** | 4 |

1. **Preconditions (where applicable)**

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| **4.1.** of curriculum | Joint biomechanics, physical therapy (electrotherapy, kinetotherapy)  |
| **4.2.** of competences |  |

1. **Conditions (where applicable)**

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| **5.1.** for lectures | Logistic support – PC, projector |
| **5.2.** for seminars / practical classes | Students with adequate equipment |

1. **Specific competences acquired**

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| Professional competences (expressed as knowledge and abilities) | 1. **Knowledge**

C1.2 Basic knowledge about rheumatic pathologyC1.2 Basic knowledge about how to explain and evaluate the opportunity of different kinetic programs specifically designed for various rheumatic conditions C1.3 Basic knowledge about hydrothermal procedures and the adequate selection of a management protocolC1.4 Basic knowledge about the adequate selection of electrotherapy for specific rheumatic conditionsC1.5 Basic knowledge about methods and tools to perform a complete functional assessment of different rheumatic conditions1. **Skills/ abilities**

C1.3 To apply different kinetic programs based on functional diagnosis of rheumatic pathology according to physician recommendationsC1.4 To apply different techniques to increase (articular) range of motion, strength, equilibrium and coordination, and to improve visceral (cardiovascular, respiratory, neuromuscular) impairmentC2.3 To apply massage therapy programs specifically designed for different pathologies C2.4 To correctly identify specific massage techniques based on a complete assessment of muscle tone, strength, pain before and after procedureC3.3 To evaluate and integrate hydrotermotherapy according to specific rheumatic conditions C3.4 To correctly assess specific techniques of hydrotheramotherapy based on a complete assessment of functional deficit C4.3 To correctly apply electrotherapy, fototherapy, ultrasound, in various rheumatic conditionsC4.4 To correctly assess specific techniques of electrical therapy based on a complete assessment of pain and functional deficitC6.4 To correctly apply methods to evaluate functional deficit and subsequent socio-professional independence  |
| Transverse competences (of role, of professional development, personal) | CT1. To identify main objectives, skills, tools, working phases, deadlines and risks; CT2. To identify roles and responsibilities in a multidisciplinary team and to apply working principles inside the specialist physician- physical therapist connection |

1. **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 (electro-, hydro-, kinetotherapy) 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 |

1. **Contents**

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| **8.1. Lecture** | **Teaching methods** | **Observations** |
| **L1. Functional deficit: types, assessment**;  | Power point presentations and projections | 2 hours |
| **L2. Rehabilitation in rheumatic conditions: objectives, methods, monitoring and assessment**  | Power point presentations and projections | 2 hours |
| **L3. Rheumatoid arthritis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis;** | Power point presentations and projections | 2 hours |
| **L4. Rheumatoid arthritis: rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L5. Ankylosing Spondylitis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
|  L**6. Psoriatic arthritis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L7. Hip osteoarthritis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L8. Knee osteoarthritis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L9. Hip and knee replacement: rehabilitation programs**;  | Power point presentations and projections | 2 hours |
| **L10. Lumbar spine pathology (disk herniation): brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs**  | Power point presentations and projections | 2 hours |
| **L11. Cervical spine pathology (disk herniation): brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L12. Microcrystalline arthropathies (gout): brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs**  | Power point presentations and projections | 2 hours |
| **L13. Soft tissue pathology – focus on shoulder: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **L14: Osteoporosis: brief description of clinical, lab and drug management; mechanisms of functional impairment; functional diagnosis; rehabilitation programs** | Power point presentations and projections | 2 hours |
| **References** 1.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)2.**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)3.**sub redactia** **C. Ancuta:** **Esentialul in Medicina Fizica si Recuperare Medicala**, Iasi 2010, editura „Gr.T.Popa” UMF Iasi, ISBN: 978-606-544-031-94.**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) |
| **8.2. Seminar / practical classes** | **Teaching methods** | **Observations** |
| **L1. Functional deficit: types, assessment**;  | Clinical cases | 2 hours |
| **L2. Rehabilitation in rheumatic conditions: objectives, methods, monitoring and assessment**  | Clinical cases | 2 hours |
| **L3. Physical examination in rheumatology; joint biomechanics** | Clinical cases | 2 hours |
| **L4. Rheumatoid arthritis: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L5. Ankylosing Spondylitis: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
|  L**6. Psoriatic arthritis: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L7. Hip osteoarthritis: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L8. Knee osteoarthritis: brief description of clinical, lab and drug management; functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L9. Hip and knee replacement: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L10. Lumbar spine pathology (disk herniation functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L11. Cervical spine pathology (disk herniation): functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L12. Microcrystalline arthropathies (gout): functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L13. Soft tissue pathology – focus on shoulder and hip: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **L14: Osteoporosis: functional diagnosis; rehabilitation programs** | Clinical cases | 2 hours |
| **Bibliography**1.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)2.**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)3.**sub redactia** **C. Ancuta:** **Esentialul in Medicina Fizica si Recuperare Medicala**, Iasi 2010, editura „Gr.T.Popa” UMF Iasi, ISBN: 978-606-544-031-94.**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) |

1. **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. |

1. **Evaluation**

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| **Type of activity** | **Type of activity** | **Evaluation methods** | **Contribution to the final grade** |
| **Lecture** | Topics presented at lectures | Written exam (MCQ) | 50% |
| **Seminar/practical classes** | Topics presented at practical  | Practical exam | 40% |
| Activity during semester |  | 10% |
| **Minimal performance standard:** C5**. 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** C1. Kinetotherapy - techniques and programs for specific rheumatic conditions C2. Massage - techniques and programs for specific rheumatic conditions C3. Kynethotherapy – techniques and programs for specific rheumatic conditions Proceduri de hidrotermoterapie adecvate. C4. Electrotherapy - techniques and programs for specific rheumatic conditions  |

**Date of completion: Signature of head of discipline**

20.01.2017 **Assoc prof Codrina ANCUTA**

**Department approval date**

30.01.2017 **Signature of department director**

Lecturer Daniela-Viorelia Matei, Ph-D