**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: Postsurgical rehabilitation RE1303** |
| **2.2.** | **Module leader: Associate Professor Bradea Costel** **Professor Poeata Ioan** |
| **2.3.** | **Seminar leader: Assistant Popa Lucian** **Lecturer Chiriac Alexandru** |
| **2.4. Year of study** | **III** | **2.5. Semester in which is taught** | **I** | **2.6. Evaluation type** | exam | **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** | 15 |
| **Supplementary documentation in the library, using specialised platforms via internet and by field work** | 10 |
| **Preparation for seminars / practical classes, study themes, reviews, portofolio, and essays** | 15 |
| **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 Curriculum** | **Biology (modules Anatomy and Phisiology)** |
| **4.2 Skills** | **Knowledge in macro and microscopical organs and systems of the organism** |

1. **Conditions (where applicable)**

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| **5.1. Lectures** | **Video logistical support** |
| **5.2. Seminars/Laboratories** | **The students will have protective clothes** |

1. **Specific competences acquired**

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| Professional competences (expressed as knowledge and abilities) | **C1.2 Able to recognize surgical deseasses sindroms****C1.5 Able to develop kineto programs for the surgical patients****C2.2 Able to explain the necessity of these programs****C2.5 Implementation of new masaj protocols** **C3.5 Development of new protocols of HTT****C5.1 Able to describe muscular and joints evaluation,the scores for functional evaluation and quality of life to the disability patients****C5.3 Able to aply muscular and joints evaluation teckniques,the evaluation of quality of life in surgical deseases** |
| Transverse competences (of role, of professional development, personal) | **Identification of the objectives,resources,finalisation conditions,work stages,terms of finishing and risks.****Identification of the roles,resposabilities in a multidisciplinary team and aplication of the teckniques of relationship for eficenty in this team in relationship with the patient** |

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

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| **7.1 General objective of the discipline** | * **Explanation of the sindroms and the geriatric diseases,kineto programs,hidrotermotherapy,electrotherapy,the evaluation of the function of the diseased region**
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| **7.2 Specific objectives** | **- Evaluation and integration of the methods of kinetotherapy, masaj, hidrothermotherapy, electrotherapy, phototherapy, magnetotherapy, ultrasonotherapy; aplication of the scores for initial and final control,for calculation of the functional deficit evaluation; socio-professional independence aquaiered after these therapies.** |

1. **Contents**

**8. 1. Course**

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|  | **Teaching methods** | **Obs** |
| 1. Definitions (rehabilitation, deficent, infirm etc),tisular regeneration,methods to prevent scars problems;patient examination;form of kineto applying.
2. Respiratory and general gymnastics. General parameters of the kineto programs.Local parameters.Secondary aims of the kinetotherapy.General postoperator program.
3. Principles and methods for applying postop kineto.Statical and dinamic exercises.Backthorax program exercises.Programs for entire life.
4. Torticolis-surgical treatment and rehabilitation.
5. Rehabilitation in surgical superior and inferior limb,shoulder and thorax deseases .Superior and inferior limb and thorax basic masaj methods.
6. Pain-definition,causes,perception,importance.Kabat method, Williams program,Armstrong exercises for platfoot.
7. Kabat diagonals,Bobath and Kenny methods.Postop rehabilitation on inf limb;ortheses.
8. General aspects of neurological surgery: clinical and laboratory evaluation of the neurosurgical patient, laboratory investigations (lumbar puncture, myelography, CT, MRI, arteriography), types of interventions.
9. Expansive intracranial syndromes. Recovering patient comatose, confused, aphasic, brain death, state vegetativa- care issues. Posttraumatic syndroms.
10. Treatment and recovery in stroke and spinal pathology: stroke, intracranial aneurysms, arteriovenous malformations, primary intracerebral hematoma;
11. Reabilitation in intervertebral disc herniation.
12. Protocols of care and patient recovery in neurosurgical services (back program, gymnastics respiratory, skin care, hydratation, diet)
13. Physical therapy and rehabilitation of cervical vertebral syndrome;
14. Techniques recovery procedures in tetra, paraparesis, hemiparesis and paresis root. Prostheses and medical devices used in the treatment of neurosurgical patient's recovery
 | **Powerpoint and video methods** | **2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours** |

**8.2. Laboratory**

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| 1. Rehabilitation in obliterant arteritis of the inferior limbs.
2. Rehabilitation of the inferior limb;muscular testing scores;knee rehabilitation.
3. Scoliosis and lordosis.Signs of lombosciatics and abdominal paralisis. Semiology of the pelvic bones.
4. Pre-and post-operative respiratory gymnastics.
5. General pre-and post-operatory special kinetotherapy for abdominal operated patients.
6. Special kinetotherapy for superior and inferior limbs operated patients.
7. Special kinetotherapy for head,neck and thorax operated patients.
8. Presentation of neurosurgery service, introductory notions of neurosurgical patient care
9. Medical history and clinical examination bed, laboratory examinations. Principles and techniques for evaluation of coma patients in ICU
10. Principles and techniques for recovering stroke patients
11. Evaluation and patient recovery with spinal cord disorders, posttraumatic syndrom.
12. Principles recovery of patients with degenerative brain diseases (Parkinson, involuntary movements, etc.). Management of the patient with hydrocephalus recovery
13. Medical devices and prostheses in neurosurgical patient recovery and physical therapy
14. Techniques and methods of using prostheses in neurosurgical patient recovery and physical therapy
 | **Clinical case presentation, clinical discutions** | **2hours****2hours****2hours****2hours****2hours****2hours****2hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours** |
| **Bibliography****mandatory**1. **Power Point Lecture of our Discipline which is found on the e-learning UMF Platform.**
2. I Poeata: Neurochirurgie si elemente de bioinginerie neurochirurgicala, ED. Tehnica Info, Chisinau 2000

selective2. M.Rusu, N Ianovici, I Poeată, Dana Turliuc, M Anghel: Neurochirurgie, Editura Contact Internaţional, Iaşi, 19933. MS Greenberg: Handbook of Neurosurgery, fifth edition, Thieme, 2001Cordun M., "Kinetologie Medicala", Ed. Axa, Bucuresti, 19995. Ionescu N.A., "Masajul" - Editura ALL, Bucuresti, 19946. Kiss  L,  "Recuperare  neuro-motorie  prin  mijloace  kinetice",   Ed.   Medicala, Bucuresti, 19897. Mârza D., "Metode speciale de masaj", Editura Plumb, Bacau, 1998 |

**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. |

1. **Evaluation**

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| **10.1. Activity type** | **10.2. Evaluation criteria** | **10.3. Evaluation method** | **10.3 Percentage of the final grade** |
| **10.4 Lecture** | **Lecture curricula** | **Multiple choice questions** | **50%** |
| **10.5 Seminar/laborator** | **Laboratory curricula****Periodical semester examination** | **Practical questions****Practical questions** | **40%****10%** |
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| **Minimum standard of performance: to aply the rehabilitation programs to a specific patient,** |

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

20.01.2017 Associate Professor Bradea Costel, Ph-D

Professor Poeata Ion, Ph-D

**Department approval date,**

30.01.2017 **Signature of department director**

Lecturer Daniela-Viorelia Matei, Ph-D