**ACADEMIC DISCIPLINE OVERVIEW**

1. **Data**

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| **1.1. Institute** | **GRIGORE T. POPA UNIVERSITY OF MEDICINE AND PHARMACY IASI** |
| **1.2. Faculty** | **FACULTY OF MEDICAL BIOENGINEERING**  |
| **1.3. Department** | **PROGRAMME:** Physio-kinetotherapy and rehabilitation |
| **1.4. Study field** | **STUDY FIELD:** Health |
| **1.5. Level of studies** | **STUDY CYCLE**: UNDERGRADUATE |
| **1.6. Study program / Qualification** | **STUDY PROGRAMME:** INENGLISH |

1. **Discipline data**

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| **2.1 Subject:** | **SPECIAL REHABILITATION TECHNIQUES FOR DISABLED INDIVIDUALS / RE1308** |
| **2.2 Module leader** | **M1: Prof. dr. Mihail Dan Cobzeanu****M2: SL Moraru Andreea** |
| **2.3 Seminar leader** | **Assist. Bogdan Mihail Cobzeanu** |
| **2.4 Study year** | **3** | **2.5 Semester** | **1** | **2.6. Evaluation type** | **Exam** |
| **2.7 Discipline status** | **Mandatory** |

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

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| --- | --- | --- | --- | --- |
| **3.1 Number of hours / week** |  | **3.2 Lectures**  |  |  **3.3 seminar/laboratory/project** |
| **Semester I** | **4** |  | **2** |  | **2** |
| **3.4 Total hours** | **56** | **3.5 Lecture** | **28** | **3.6 seminar/laboratory** | **28** |
| **Time distribution:** | **Sem. I hours** | **Sem. II hours** |
| **Study after the guidebook, course material, bibliography, notes** | **22** |  |
| **Individual study in the library, study using the electronic platforms, field study** | **10** |  |
| **Preparing for seminars/labs, homework, portofolios and essays** | **10** |  |
| **Tutoring** |  |  |
| **Examinations** | **2** |  |
| **Other activities** |  |  |
| **3.7 Total hours of individual study** | **44** |  |
| **3.8 Total hours/semester *(3.4 + 3.7)*** | **100** |  |
| **3.9 Credits number** | **4** |  |

1. **Prerequisites (as needed)**

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| **4.1 Curriculum** | **Exploring and evaluation methods for medical rehabilitation, Internal medicine knowledge** |
| **4.2 Skills** | **Knowing the fundamental concepts, theories and notions for the physiological and pathological mechanisms of the human body, recognizing the clinical signs and symptoms** |

1. **Conditions (as needed)**

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| **5.1. Lectures** | **Video logistical support** |
| **5.2. Seminars/Laboratories** |  |

1. **Acquired skills**

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| **Professional skills** | **C1.5****Developing and implementing new kinetotherapy protocols****C3.5****Developing and implementing new HTT protocols** **C4.5****Developing and implementing new electrotherapy protocols** |
| **Related skills** | **Establishing the goals, the resources, the worksheets, the timetables, the deadlines and the risks.****Setting the role and the duties for each member of a multidisciplinary team using efficient liaising and working techniques both with the colleagues and with the patients.** |

1. **Course objectives (as in the cumulated competences chart)**

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| **7.1 General objective of the discipline** | * **Learning methods of recovery/rehabilitation for hearing loss, balance issues, disphonias and evaluation of the results**
* **Applying concepts, theories and methods of investigation to assess the visual aparatus**
* **Differentiating between typical normal development and abnormal development patterns**
 |
| **7.2 Specific objectives** | **- Testing the patients to assess the auditory and balance (vestibular) functions****- Use of the latest developments in knowledge and professional applications in the field of ophthalmologic rehabilitation****- Enabling students to identify the symptoms that determine the differential diagnosis of language disorders** |

1. **Contents**

**8. 1. Course**

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| **M1- Recovery for dysphonia and auditory disabilities** | **Teaching methods** | **Obs** |
| 1. Anatomy and physiology of the nose and pharynx and related inflamatory and tumoral diseases.Anatomy and physiology of the larynx and related inflamatory and tumoral diseases. Disphonia and ways of vocal rehabilitation. ENT emergencies: acute respiratory failure, bleeding.
2. Hearing apparatus and hearing loss. Conventional hearing aids for hearing rehabilitation.
3. Implantable devices for hearing rehabilitation.
4. Speech recovery in patients with hearing aids.
5. Vestibular apparatus and balance pathology.
6. Vestibular evaluation and rehabilitation methods for periferic vertigo.
7. Dysphonia – pathology and rehabilitation.
 | **Powerpoint presentations, interactive courses** | **2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours** |
| **M2 –** Recovery of visual disability |  |  |
| 1. Normal functioning of the visual system. Accommodating remote image formation. Determination of visual acuity.
2. Diseases of the eye. View imperfecta - myopia and hyperopia, astigmatism and presbyopia
3. Diseases of the eye - dry eye syndrome and allergies. Eye ailments - diseases - cataract, macular degenerscenta.
4. Glaucoma
 | **Powerpoint presentations, interactive courses** | **2 hours****2 hours****2 hours****2 hours** |
| **M3 –** Recovery speech disorders |  |  |
| 1. Psychomotor development of the child. Language pathology. Classification of language disorders.
2. Language development disorders.Articulation disorders (Pronunciation).Voice disorders.Arrhythmias and fluency. Fluff. Tahilalie. Bradilalie. Tumultus sermonis
3. Polymorphic disorders. Alali. Aphasia. Methods and techniques for recovery.
 | **Powerpoint presentations, interactive courses** | **2 hours****2 hours****2 hours** |

**8.2. Laboratory**

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| **M1- Recovery for auditory and vocal disabilities** |  |  |
| 1. Clinical diagnosis in ENT, clinical cases presentation.
2. Paraclinical exploring methods in ENT.
3. Epistaxis-therapeutical methods; Acute repiratory failure; Tracheotmy; clinical cases presentation.
4. Pure tone audiometry, vocal audiometry and tympanometry.

Objective methods for evaluating the auditory function.1. Conventional hearing aids – practical aplications and post-prostethic evaluation.Bone-anchhoursd hearing aids(BAHA) – overview and types of prosthesis.
2. Cochlear and retrocochlear auditory implants – overview and types of implants.
3. Clinical and paraclinical evaluation of the vestibular pathology – practical aspects.Vestibular rehabilitation
 | **Powerpoint presentations, interactive courses** | **2 hours****2 hours****2 hours****2 hours****2 hours****2 hours****2 hours** |
| **M2 – Recuperearea dizabilităților vizuale** |  |  |
| 1. Measure static and dynamic acuity; The field of view. Campimetria
2. Electrooculograma and electrhourstinograma
3. Rehabilitation of patients with refractive errors. Rehabilitation of patients with addictions reflection;
4. Rehabilitation of patients suffering from cataracts. Rehabilitation of patients with glaucoma
 | **Powerpoint presentations, interactive courses** | **2 hours****2 hours****2 hours****2 hours** |
| **M3 – Recuperarea tulburărilor de limbaj** |  |  |
| 12.The organs involved in speech and language nerve centers. Language pathology. Classification of speech disorders. Analysis of case studies, practical demonstrations of working methods (movies) in language development disorders.13. Specific speech therapy phonation disorders. Steps therapeutic for various disorders voice. The composition of therapeutic protocols, design of therapeutic approaches for different rhythm and fluency disorders.14 The role and importance of each decision maker involved in resolving polymorphic disorders. | **Powerpoint presentations, interactive courses** | **2 hours****2hours****2 hours** |

**Bibliography**

**mandatory**

1. Mihail Dan Cobzeanu, Compediu de patologie oto-rino-laringologică și chirurgie cervico-facială, Editura Junimea 2009
2. Sergiu Buiuc, Leonida Jolobceastai, Oftalmologie practica, Editura Junimea, 1981
3. Burlea Georgeta, “ Normal şi patologic în evoluţia limbajului. Esenţialul în logopedie”, Ed. Spiru Haret, Iaşi şi Ed. Tehnica-Info, Chişinău, 2001

**selective**

1. Dan Martu, Luminita Radulescu - Ghid practic O.R.L.
2. Alexandru Gheorghiu, Marinela Olaroiu, Investigatii functionale in practica mediciei de familie, Editura All, 1998
3. Ghid terapeutic in oftalmologie, Editura Facla, 1977
4. Burlea Georgeta, “ Caruselul cuvintelor” – curriculum de support pentru activităţile metodologice, Ed. Spiru Haret, Iaşi, 2002
5. Burlea Georgeta, Enache Angela, Zanfirache Antoaneta, “ Bâlbâiala. Manual de diagnostic şi terapie”, Ed. Tehnica-Info, Chişinău, 2003
6. Burlea Georgeta, Burlea Marin şi alţii, “ Dicţionar explicativ de logopedie”, Ed. Polirom, Iaşi, 2011
7. **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 anasis 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** | Acquisition of the theoretical concepts and ideas presented during the lectures | Written exam | 50% |
| **Seminar/practical classes** | Knowledge of practical activity material | Colloquium practical activity | 40% |
| Lab activity and quality of term papers | Tests throughout the semester | 10% |
| **Minimal performance standard**: **Knowledge on the conventional hearing aids, the main methods of auditory, visual and speaking rehabilitation.** |

**Completition date, Course holder signature,**

16. 01.2017 Prof. Dan Mihail Cobzeanu, Ph-D

Lecturer Moraru Andreea, Ph-D

**Department approval date,**

 **Head of the Departament Signature**

30.01.2017 Lecturer Matei Daniela Viorelia, Ph-D