**SYLLABUS**

**2019 - 2020**

1. **Programme Details**

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| **1.1.** | **GRIGORE T. POPA UNIVERSITY OF MEDICINE AND PHARMACY IASI** |
| **1.2.**  | **FACULTY : DENTAL MEDICINE / DEPARTMENT** |
| **1.3.** | **DISCIPLINE: NEUROLOGY** |
| **1.4.**  | **FIELD of STUDY:HEALTH** |
| **1.5.** | **STUDY CYCLE: BACHELOR**  |
| **1.6.** | **PROGRAMME of STUDY: Dental Medicine - English**  |
| 1. **Discipline Details**
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| **2.1.** | **Name of the Discipline: NEUROLOGY** |
| **2.2.** | **Teaching staff in charge with lectures: s.l. dr. CARMEN NICOLETA FILIP** |
| **2.3.** | **Teaching staff in charge with seminar activities: –** |
| **2.4. Year**  | **III** | **2.5. Semester** | **I** | **2.6. Type of evaluation**  | **C1/C2** | **2.7. Discipline regimen**  | **OBLIGATORIU** |

1. **Overall Time Estimates (hours/semester of didacticactivity)**

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| * 1. **Number of hours per week**
 | **4** | **Of which: 3.2. lectures** | **2** | * 1. **seminar/ L.P.**
 | **2** |
| * 1. **Total hours in the curriculum**
 | **28** | **Of which: 3.5. lectures** | **14** | **3.6. seminar/ laboratory** | **14** |
| **Distribution of time**  |  |  |  |  | Hours |
| **Study time usingcoursebookmaterials, bibliography and notes**  | **20** |
| **Furtherstudy time in the libray, online and in the field** | **2** |
| **Preparation time for seminars / laboratories, homework, reports, portfolios and essays** | **6** |
| **Tutoring** | **4** |
| **Examinations** | **5** |
| **Otheractivities** |  |
| **3.7. Total hours of individual study** |  | **33** |
| **3.8. Total hours / semester** |  | **75** |
| **3.9. Number of credits** |  | **3** |

1. **Prerequisites (where applicable)**

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| **4.1. curriculum** | No necessary |
| **4.2. competences** | No necessary |

1. **Conditions (where applicable)**

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| **5.1. for lecture delivery** | No necessary |
| **5.2. for seminar / laboratorydelivery** | No necessary |

1. **SpecificCompetencesAcquired**

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| **Professional Competences (knowledge and skills)** | * To establish the correct diagnosis of the most important neurological pathology
* Ability to interpret the imagistical results and their use in the neurological pathology
* Ability to read and understand the electophysiological invastigation techniques (EEG, EMG, EP, neurography) and their use in neurological pathology
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| **Transversal Competences (roles, personal and professionaldevelopment)** | * Ability to integrate and work within a professional team and to have an interdisciplinary perspective and approach of the neurological pathology
* Communication skills
* Improvement of the case analysis abilities, of the decision making capacity.
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1. **Obiectives of the Discipline (related to the acquired competences)**

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| **7.1. General Obiective** | To understand and to integrate in the general medical education the basic physiology and pathology of the nervous system. To acquire the necessary knowledge required to correclty recognise and treat neurological pathology. |  |
| **7.2. Specific Obiectives** | Semiology of the neurological diseases.Diagnostic methods and approaches in neurology, and how to use them directly for each particular patient.Correct treatment algorithms of the nervous system pathology. |  |

1. **Contents**

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| **8.1. Lecture** | **Teaching methods**  | **Comments** |
| GENERAL PROBLEMS IN NEUROLOGY – THE CENTRAL AND PERIPHERAL NERVOUS SYSTEM – ETIOLOGY OF NEUROLOGICAL DISEASESCENTRAL AND PERIPHERAL NERVOUS SYSTEM PATHOLOGY. PYRAMIDAL SYNDROM. HEMIPLEGY, CLINIC AND TOPOGRAPHIC DIAGNOSIS | Oral presentation with power point slides and/or case presentation |  |
| CEREBROVASCULAR DISEASES: ETIOPATHOGENY OF ISCHAEMIC AND HAEMORRHAGIC STROKE; TYPES OF STROKE; CLINICAL PICTURE OF STROKE WITH DIFFERENT TOPOGRAPHIES AND ETHIOLOGIES | Oral presentation with power point slides and/or case presentation |  |
| BRAINSTEM SYNDROMES | Oral presentation with power point slides and/or case presentation |  |
| CRANIAL NERVES (I, II, III, IV, V, VI) | Oral presentation with power point slides and/or case presentation |  |
| CRANIAL NERVES (VII, VIII) | Oral presentation with power point slides and/or case presentation |  |
| CRANIAL NERVES (IX, X, XI, XII) | Oral presentation with power point slides and/or case presentation |  |
| TROUBLES OF DEGLUTION, MASTICATION AND FACIAL MIMIC | Oral presentation with power point slides and/or case presentation |  |
| **Bibliography****NEUROLOGICAL GUIDE FOR STUDENTS, CARMEN NICOLETA FILIP, LIVIU PENDEFUNDA, GULLIVER PUBLISHING, IAȘI, 2018****NEUROLOGY FOR MEDICAL STUDENTS (SECOND EDITION), EDITOR: CRISTIAN DINU POPESCU, GR. T. POPA PUBLISHER, 2015** |
| **8.2. Seminar / Laboratory** | **Teaching methods**  | **Comments** |
| **⚫ Special elements** of neurological clinical examination; general clinical examination; particular attitudes**⚫ Voluntary movement.** Anatomy of the motor systems. Signs and symptoms associated with motor deficits; ethiology, topography of lesions in different types of palsy. Upper and lower motor neuron syndrome | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| **⚫ Reflexes.** Functional anatomy; deep tendon reflexes, cutaneous, mucous reflexes; medulary reflexes; postural reflexes. Quantitative and qualitative alterations of reflex responses. Idiomuscular contraction**⚫ Muscle tone:** functional anatomy; semeiology; muscle tone abnormalities: hypotonicity, hypertonicity (spastic and plastic); reticular and hypotalamic syndromes | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| **⚫ Coordination**; signs and symptoms of ataxic syndroms; ethiological and pathological diagnosis of ataxic syndromes; cerebellar syndromes; tabetic syndrome. Balance**⚫ Sensitivity**; functional anatomy; semeiology; subjective and objective changes. Sensory syndromes. Talamic syndromes. **⚫ Muscle trophicity**: neurogenic and non neurogenic muscle pathology. Differential diagnosis of miogenic versus neurogenic atrophies. EMG recording and interpretation. Trophic changes of skin and subcutaneous tissue | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| Cranial nerves: clinical examination, anatomy and pathology. Oculomotricity. Trigeminal palsy and trigeminal neuralgy. Facial palsy. Midbrain syndromes. | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| Cranial nerves: clinical examination, anatomy and pathology (cranial nerves VIII, IX, X, XI, XII) | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| **⚫ Cognitive functions** – evaluation of cognition, language. Aphasia; disarthria; disphonia. Apraxia . Cortical areas. Topographical syndroms of the cortical lesions**⚫ Involuntary movements** – tremor, myoclonia, chorea, athetosys, dystonia, tics. Clinical features, diagnosis and treatment of involuntary movements | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| **⚫ Paraclinical** tests in neurological pathology. CSF examination – prelevation, interpretation of values; other electrophysiological tests (conduction velocities, evoked potentials, basis of EEG recording and interpretation); imagistic investigations (CT, MRI); cerebral angiography; doppler examination of brain arteries**⚫ General approach** of the neurologic patient – from diagnosis to medical responsability (particular aspects of the neurological pathology) | Free speech/use of explanatory materials (posters, drawings, ppt projections);Patient examinations – demonstration followed by exercise/patient examination by the students | 2-3 students examine a patient and then present the case; each case is then discussed by the whole group |
| **Bibliography****NEUROLOGICAL GUIDE FOR STUDENTS, CARMEN NICOLETA FILIP, LIVIU PENDEFUNDA, GULLIVER PUBLISHING, IAȘI, 2018****NEUROLOGICAL EXAMINATION, PRACTICAL GUIDE FOR STUDENTS AND RESIDENTS, A. CONSTANTINESCU, EDITURA CANTES, IASI 2003** |

1. **Correlationsbetweenthecontents of the discipline and theexpectations of theepistemiccommunity, of profesional associations and of employers in thefield**

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1. **Evaluation**

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| **Type of activity**  | **10.1. Evaluation criteria:**  | **10.2. Methods of evaluation** | **10.3. Percentage of final grade** |
| **10.4. Lecture** | Grade for multiple choice test | standardized multiple choice test | 50% |
| **10.5. Seminar / Laboratory** | Average grade of ongoingexaminations | ongoing evaluation | 10% |
| Grade forpracticalexamination | practical exam | 40% |
| **Minimum standard of performance: at least grade 5 to pass the discipline** |

**Date: Signiture of Didactic Co-ordinator**

**Name and surname**

 **Signiture of Department Director Name and surname**