**SYLLABUS**

1. **Programme Details**

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| **1.1.** | **GRIGORE T. POPA UNIVERSITY OF MEDICINE AND PHARMACY IASI** |
| **1.2.**  | **FACULTY : MEDICINE / DEPARTMENT: MEDICAL DISCIPLINES III** |
| **1.3.** | **DISCIPLINE: INTERNAL MEDICINE** |
| **1.4.**  | **FIELD of STUDY:HEALTH** |
| **1.5.** | **STUDY CYCLE: BACHELOR**  |
| **1.6.** | **PROGRAMME of STUDY: Medicine - English**  |
| 1. **Discipline Details**
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| **2.1.** | **Name of the Discipline: INTERNAL MEDICINE** |
| **2.2.** | **Teaching staff in charge with lectures:** Sef Lucr. Dr. Șorodoc Victorița, Sef Lucr. Dr. Radu Sascau |
| **2.3.** | **Teaching staff in charge with seminar activities:** Asist. univ. dr. Bologa Cristina, Asist. univ. dr.Stoica Alexandra,Asist. univ.dr. Sirbu Oana, Asist. univ. dr. Constantin Mihai,Lecturer Radu Andy SASCĂU, Lecturer Cristian STĂTESCU, Asist. Rodica RADU, Asist. Carmen PLEȘOIANU, Asist. Delia ȘALARU, Asist. Larisa ANGHEL, Asist. dr. Marcu Marius Traian, |
| **2.4. Year**  | **IV** | **2.5. Semester** | **1/II** | **2.6. Type of evaluation**  | **E1/E2** | **2.7. Discipline regimen**  | **Mandatory** |

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

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| * 1. **Number of hours per week**
 | 19 | **Of which: 3.2. lectures** | 6 | * 1. **seminar/ laboratory**
 | 13 |
| * 1. **Total hours in the curriculum**
 | 248 | **Of which: 3.5. lectures** | 66 | **3.6. seminar/ laboratory** | 182 |
| **Distribution of time**  |  |  |  |  | **Hours** |
| **Study time using course book materials, bibliography and notes**  | **25** |
| **Further study time in the libray, online and in the field** | **5** |
| **Preparation time for seminars / laboratories, homework, reports, portfolios and essays** | **20** |
| **Tutoring** | **2** |
| **Examinations** | **2** |
| **Other activities** | **-** |
| **3.7. Total hours of individual study** |  | **52** |
| **3.8. Total hours / semester** |  | **300** |
| **3.9. Number of credits** |  | **12** |

1. **Prerequisites (where applicable)**

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| **4.1. curriculum** | Anatomy, Physiology, Physiopathology, Pharmacology, Medical semiology |
| **4.2. competences** | - |

1. **Conditions (where applicable)**

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| **5.1. for lecture delivery** | - |
| **5.2. for seminar / laboratorydelivery** | - |

1. **SpecificCompetences Acquired**

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| **Professional Competences (knowledge and skills)** | 1. Theoretical and practical knowledge of the patient’schart: anamnesis, clinical examination, diagnosis hypothesis, and management plan 2. Correct interpretation of the usual paraclinical investigations: hematological and biochemichal tests, biological fluids (pleural, pericardial and peritoneal liquid), echocardiography, vascular Doppler ultrasonography, spirometry, arterial gases, general ultrasound, ECG, chest X ray, funduscopic examination.3. Interpretation of the Holter ECG and ABPM. Performing ABI and results.  |
| **Transversal Competences (roles, personal and professionaldevelopment)** | * Ability to work in team
* Ability to communicate with the patient
* Compliance with professional ethics
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1. **Obiectives of the Discipline (related to the acquired competences)**

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| **7.1. General Obiective** |  |
| **7.2. Specific Obiectives** |  |

1. **Contents**

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| **8.1. Lecture** | **Teaching methods**  | **Comments** |
| Bronchial asthma. Chronic obstructive pulmonary disease (COPD). Cor pulmonale. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Viral and bacterial pneumonia. Bronchiectasis. Pulmonary abscess. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Primitive pulmonary fibrosis. Non-tuberculosis pleural effusions. Bronchopulmonary cancer. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Rheumatic fever. Mitral and aortic valve disease. Infectious endocarditis. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Acute and constrictive pericarditis. Myocarditis. Cardiomyopathies (dilatative, hypertrofic and restrictive). | Oral presentations, active-participative interactive methods, power point presentations |  |
| Congenital cardiopathy in adults: atrial septal defect, ventricular septal defect, patent arterial ductus, pulmonary artery stenosis, Fallot tetralogy. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Essential and secondary hypertension. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Preventive cardiology, cardiogenesis, cardio-vascular risk factors, dyslipidemia, primary and secondary prevention. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Arrhythmias and conduction disturbances. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Stable and unstable angina pectoris. Myocardial infarction. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Acute heart failure. Chronic heart failure. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Arteries diseases – dissection of the aorta, acute and chronic peripheral ischemia. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Venous diseases – superficial and deep venous thrombosis. Pulmonary thromboembolism. | Oral presentations, active-participative interactive methods, power point presentations |  |
| Iron-deficiency anemia. Megaloblastic anemia. General diagnosis and management principles in hemolytic anemias. | Oral presentations, active-participative interactive methods, power point presentations |  |
| **Bibliography**1.Harrison’s Principles Of Internal Medicine**,** 18th Edition. McGraw-Hill, 2011.2. Sorodoc L., Frasin M. Principles of Diagnosis in Internal Medicine vol I, Respiratory System, Cardiovascular System. Publisher AcademprintTargu-Mures, 2002. |
| **8.2. Seminar / Laboratory** | **Teaching methods**  | **Comments** |
| 1. The analysis of the observation chart and representation of the main clinical parameters (temperature, pulse, blood pressure, diuresis etc.). Drawing blood for biochemichal and hematological tests (technique, normal values, interpretation): erythrocite sedimentation rate, bleeding time, coagulation time, PTT (activated partial thromboplastin time), prothrombine index / INR. | Active-participative interactive methods, presentations of clinical cases |  |
| 2. Knowledge of normal values of the main biological tests (blood and urine) and interpretation of these tests in dyslipidemias, inflammatory sybdromes, metabolic diseases, liver diseases, and renal diseases, anemias, leukemias, hemorrhagic syndromes, urine, pleural, pericardial and peritoneal fluids. Interpretation of microbiological tests. Blood culture: indications, technique, and results. | Active-participative interactive methods, presentations of clinical cases |  |
| 3. Pleural puncture: indications, counter indications, methods, technique, results, patient’s follow–up. Pericardial puncture: indications, counter indications, methods, technique, results, patient’s follow–up. | Active-participative interactive methods |  |
| 4. Gasometry interpretation. Spirometry: indications, technique, diagnosis of main changes in respiratory diseases. Venous pressure: indications, technique, results. Ankle brachial index - technique, results. | Active-participative interactive methods |  |
| 5. Chest X ray interpretation: heart, lung. Normal and pathological ECG (heart rate, electrical axis, hypertrophy, arrhythmias, blocks, WPW syndrome, myocardial infarction). | Active-participative interactive methods, ECG presentations and discussions |  |
| 6. Analysis and interpretation of ECG stress test. Holter ECG. Ambulatory BP monitoring. | Active-participative interactive methods |  |
| 7. CPR: cardiac massage, mouth-to-mouth breathing, external electrical shock, intracardiac injection, Kwoledge of drugs used in resuscitation, post-resuscitation conduct, rescuer riscks. | Active-participative interactive methods |  |
| 8. Electric cardioversion: indication, preparation, technique, complications, counterindications. Oxigenotherapy. | Active-participative interactive methods |  |
| 9. Carotid sinus massage: indications, counterindications, methods, technique, results. Performing and indications of therapeutical bleeding. Blood transfusion. | Active-participative interactive methods |  |
| 10. Medical prescription for diseases studied. Recongition and emergency management of bronchial asthma attack | Active-participative interactive methods |  |
| 11. Cardiovascular patient evaluation. Emergency conduct and patient’s evaluation in acute pulmonary edema. | Active-participative interactive methods |  |
| 12. Initial evaluation of hypertensive patient | Active-participative interactive methods, presentations of clinical cases |  |
| 13. Interpretation of an echocardiography (M mode, 2D) in mitral stenosis, aortic valve diseases, mitral valve prolapse, pericarditis, obstructive hypertrophic cardiomyopathy, dilation cardiomyopathy, infectious endcraditis, atrial septal defect, ventricular septal defect, Fallot’s tetralogy.  | Active-participative interactive methods, analysis of echocardiographic results |  |
| 14. Practical approach in the case of anemic syndrome | Active-participative interactive methods, presentations of clinical cases |  |
| **Bibliography**1.Harrison’s Principles Of Internal Medicine**,** 18th Edition. McGraw-Hill, 2011.2. Sorodoc L., Frasin M. Principles of Diagnosis in Internal Medicine vol I, Respiratory System, Cardiovascular System. Publisher AcademprintTargu-Mures, 2002. |

1. **Correlations between the contents of the discipline and the expectations of the epistemic community, of profesional associations and of employers in the field**

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| Knowledge and skills are set as objectives mentioned in teaching and in the curricula, annually reviewed. After the analysis within the discipline, they are discussed and approved at the Bureau of Curriculum, to harmonize with the other disciplines. Throughout the period are evaluated as systematically as possible the direct correlation between the content and the expectations of the academic community, representatives of the community, professional associations and employers. As a primary goal, discipline aims to give to the students an optimal prerequisite for the next years of study in the MD program, in anticipation of a successful employment as soon after the graduation in residency programs held in Romania and other EU countries. |

1. **Evaluation**

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| **Type of activity**  | **10.1. Evaluation criteria:** Ability to use appropiate informationCapacity to support the diagnosis | **10.2. Methods of evaluation**Oral/written exam | **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 ongoing examinations | ongoing evaluation | 10% |
| Grade for practical examination | practical exam | 40% |
| **Minimum standard of performance: at least grade 5 to pass the discipline** |

**Date:**

**01.10.2019 Signiture of Didactic Co-ordinator**

**Prof. Univ. Dr. Antoniu Petriș**

**Prof.univ.dr.Laurentiu Sorodoc**

 **Signiture of Department Director Prof. Univ. Dr. Anca Trifan**

**Prof.univ.dr.Laura Gheuca Solovastru**