**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** | | | | | | | | |
| **2.1.** | **Subject: BACTERIOLOGY, VIRUSOLOGY, PARAZITOLOGY** | | | | | | | |
| **2.2.** | **Module leader: Lecturer Roxana Covali** | | | | | | | |
| **2.3.** | **Seminar leader: Lecturer Roxana Covali** | | | | | | | |
| **2.4. Year of study** | | **1st** | **2.5. Semester in which is taught** | **2nd** | **2.6. Evaluation type** | colloquium | **2.7. Subject status** | Elective |

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

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| **3.1.Number of hours / week** | 2 | **3.2. Courses number of hours / week** | 1 | **3.3.Seminar / l practical classes** | 1 |
| **3.4. Total number of learning hours** | 28 | **3.5. Courses** | 14 | **3.6. Seminar / practical classes** | 14 |
| **3.7. Distribution of the available time** | | | | | Hours |
| **Study based on the manual, lecture support, bibliography and hand notes** | | | | | 10 |
| **Supplementary documentation in the library, using specialised platforms via internet and by field work** | | | | | 12 |
| **Preparation for seminars / practical classes, study themes, reviews, portofolio, and essays** | | | | |  |
| **Tutorship** | | | | | 2 |
| **Examinations** | | | | | 3 |
| **Other activities** | | | | |  |
| **3.8. Total hours of individual study** | | | | | 22 |
| **3.9. Total hours pes semester** | | | | | 50 |
| **3.10. Number of credits** | | | | | 2 |

1. **Preconditions (where applicable)**

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| **4.1.** of curriculum | Anatomy, Histology |
| **4.2.** of competences | Knowledge of the communication means between basic units of living matter and the extracellular environment, and of the physical phenomena at the basis of living world |

1. **Conditions (where applicable)**

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| **5.1.** for lectures | Video projecting equipment |
| **5.2.** for seminars / practical classes | Microscopes |

1. **Specific competences acquired**

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| Professional competences (expressed as knowledge and abilities) | C1.2  Formulation of hypothesis and key concepts in order to explain syndromes /diseases |
| Transverse competences (of role, of professional development, personal) | Identifying roles and responsabilities in a multidisciplinary team.  Application of relationship techniques.  Efficiency in teamwork and in patient relationship |

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

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| **7.1.** General objective | To make students accustomed to different body structures, normal and abnormal |
| **7.2.** Specific objectives | To make students accustomed to tiny or major alterations of the different structures of the human body, and their meaning |

1. **Contents**

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| **8.1. Lecture** | **Teaching methods** | **Observations** |
| 1.Bacterial components: structures and functions, nutrition and cultivation | Drawings. Interactive courses | 2h |
| 2. Bacterial genetics. Useful and dangerous bacteria to the human body | Drawings. Interactive courses | 2h |
| 3.Viral shapes, structures and functions. Useful and dangerous viruses to the human body | Drawings. Interactive courses | 2h |
| 1. Body protection against microorganisms. Sterilisation. Preservation. | Drawings. Interactive courses | 2h |
| 1. Microorganisms which enter the human body through the respiratory, digestive systems and skin. | Drawings. Interactive courses | 2h |
| 1. Parasites: classification, structure and function | Drawings. Interactive courses | 2h |
| 7. Useful and dangerous parasites to the human body | Drawings. Interactive courses | 2h |
| **Bibliography**  1.Garcia LS (2016): Diagnostic Medical Parasitology, ASM Press, 6th Edition, 1388 pages  2.Levinson W (2016): Review of Medical Microbiology and Immunology. McGraw Hill, 14th Edition  3.Murray PR, Rosenthal KS, Pfaller M (2016): Medical Microbiology. Elsevier, 8th Edition, 848 pages  4.Pommervil J (2016):Fundamentals of Microbiology: Body Systems, 3rd Edition, 984 pages | | |
| **8.2. Seminar / practical classes** | **Teaching methods** | **Observations** |
| 1. Clinical diagnosis of the bacterial infection | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 2. Laboratory diagnosis of the bacterial infection | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 3.Clinical diagnosis of the viral infections | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 4.Laboratory diagnosis of the viral infections | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 5.Microbial cultures | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 6.Viral cultures | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| 7. Alterations induced by parasites to human body | Study of the microscopic specimens. Drawings. Interactive classes | 2h |
| **Bibliography**  1.Garcia LS (2016): Diagnostic Medical Parasitology, ASM Press, 6th Edition, 1388 pages  2.Levinson W (2016): Review of Medical Microbiology and Immunology. McGraw Hill, 14th Edition  3.Murray PR, Rosenthal KS, Pfaller M (2016): Medical Microbiology. Elsevier, 8th Edition, 848 pages  4.Pommervil J (2016):Fundamentals of Microbiology:Body Systems, 3rd Edition, 984 pages | | |

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** | Knowing the major types of lesions induced by bacteria, viruses and parasites to the human body | Exam | 50% |
| **Seminar/practical classes** | Recognising the microscopic specimen | Examination of the miscoscopic specimen | 40% |
| Recognising the role of these microorganism in the specific organ | Mark during semester | 10% |
| **Minimal performance standard:**  -Identification of the microscopic specimen: organ, tissue, cells  -Identification of lesion | | | |

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

20.09.2019 Lecturer Roxana Covali PhD

**Department approval date**

30.09.2019

**Signature of department director**

Lecturer Daniela-Viorelia Matei, PhD