



## Course Regime

Course: **Microbiology, Immunology and Oral Microbiology**

Study Programme:

Medicine                      **Dental medicine**

Year of the Course: 1 2 **3** 4 5 6

Semester:

**Winter**                      Summer

Course type:

**COMPULSORY**              ELECTIVE

Number of ECTS credits: **7**

Lecturer(s):

Assist. Prof. Mateja Pirš, MD, Assist. Prof. Tadeja Matos, MD, Prof. Alojz Ihan, MD, Assoc. Prof. Miroslav Petrovec, MD, Prof. Mario Poljak, MD, Prof. Manica Mueller Premru, MD, Prof. Katja Seme, MD, Prof. Eva Ružič Sabljic, MD.

Participating Organisational Units (Departments and Institutes): Chair of Microbiology and Immunology and the Institute of Microbiology and Immunology, University of Ljubljana, Faculty of Medicine.

Parts (Modules) of the Course

- 1:
- 2:
- 3:
- 4:

Date of Issue: 15.9.2018

## **A. General part** (*applies to compulsory and elective courses*)

### **1. Course objectives**

Students cover materials of particular importance for clinical work in dental medicine pertaining to microbiology and immunology. By working independently in small groups and preparing materials the students learn to find connections between practice, interpretation and evaluation of laboratory reports and research results in connection to the clinical presentation in individual cases. The course is conducted in the form of introductory lectures, student seminars and practical lessons.

### **2. Detailed course description**

All Microbiology, Immunology and Oral Microbiology course notifications for students of the Single-Cycle Master Study Programme Dental Medicine are posted in the web classroom.

The interpretation of the provisions of the Regulations for the Assessment of Knowledge and Skills for the Single-Cycle Master Study Programmes Medicine and Dental Medicine falls under the responsibility of the Dean of UL MF and the Vice-Dean for Study Affairs. Therefore in case of alleged inconsistencies between the Rules and the Course Regime for the Microbiology, Immunology and Oral Microbiology for the Single-Cycle Master Study Programme Dental Medicine the Dean of UL MF and the Vice-Dean for Study Affairs are informed.

The Microbiology, Immunology and Oral Microbiology course is conducted in the form of seminars, lectures and practical lessons.

The course subject matter is fully covered in Slovenian textbooks: Medicinska bakteriologija z mikologijo, Parazitologija človeka, Splošna medicinska virologija, Medicinska virologija, Oralna bakteriologija and Praktikumza vaje, which also support the execution of the course.

### **Lectures and seminars**

Thursday 8:00-10:00, the small lecture room at the Faculty of Medicine, Korytkova 2.

The dates and titles of lectures and seminars are published in the timetable on the website <http://www.imi.si/> and in the web classroom of the Faculty of Medicine.

**Lectures** are an elective part of the course but are nevertheless strongly recommended to students because there they have the opportunity to talk with leading Slovenian experts about the latest approaches and cases in individual selected areas which are not included in textbooks and are of great help during studies and later professional work. In case there are 5 or less students present the lectures are cancelled.

**Seminars** are a compulsory part of the course. There are 22 seminars in total and an individual seminar is prepared jointly by 2 or 3 students at most. All have to take part in writing the seminar and presenting it. A student has to attend at least 18 seminars to be allowed to enter the final examination, a strict record of attendance is going to be kept. The seminar grade contributes 10% to the final grade.

Students choose one of the proposed topics which are going to be presented in the first lecture. In addition to study literature, a coherent article can serve as the basis for the preparation of a seminar. They should send it to the mentor for review and if it is deemed suitable they can prepare a seminar and send it at least one week before its presentation to the mentor for review and discussion. The coherent article and the study literature are only the basis for the preparation of the seminar, in addition to these it is compulsory to study the literature referenced in the article and include it in the written paper, at least 4 references (5 articles in total +/- a book). References also have to be

appropriately quoted in the text of the seminar. The written form of the seminar is 5 to 12 pages long, written on a computer. Font size should be 12 pt and line spacing 1.5.

Contents of the seminar paper:

**First page:** title of the seminar paper, name and surname of the authors, mentor of the seminar, the date of first submission to the mentor, the date of return of the corrected seminar, date of the seminar presentation.

**Second and further pages:**

**Abstract:** in Slovenian and English (a very short summary of the work, 150-250 words).

**Key words:** in Slovenian and English (three to five words).

**Introduction:** presentation of the field, broader knowledge on the subject matter.

**Seminar contents:** you can adapt it to your original article or as you deem fit.

**Conclusion:** an obligatory part of the seminar. It should summarise the main points of emphasis in the seminar, it should be half a page long and it should include 7-12 main findings, conclusions of the seminar, best listed in bullet points.

**Literature:** it should include at least 5 references listed in line with the rules of the Slovenian Medical Journal ([https://vestnik.szd.si/01\\_Citiranje\\_in\\_navajanje\\_virov\\_verzija\\_2017.pdf](https://vestnik.szd.si/01_Citiranje_in_navajanje_virov_verzija_2017.pdf)).

Students should also prepare 5 questions for discussion at the end of the seminar. They should send the questions to their mentor for review, together with the seminar, that is, at least one week before to the presentation. The oral presentation is 20 minutes long.

### **Practical lessons**

They are conducted in the practice room at the Institute for Microbiology and Immunology, University of Ljubljana, Faculty of Medicine, Zaloška 4, Friday 9:00-15:00, 2 study hours per group. Practical lessons are a compulsory part of the course and a prerequisite for entering the final assessment. There are 7 practical lessons in total. The schedule for practical work groups is posted at the beginning of each semester in the web classroom. Changes between groups are not possible as a permanent sitting arrangement is necessary due to on-going assessment of knowledge using Turning Point.

## **3. Description of on-going assessment of knowledge and skills**

### **Seminars**

The seminar grade is comprised of the grades for the written paper (50%) and the presentation (50%). Each student is graded separately.

### **Lectures**

The assessment of knowledge during lectures is conducted by voting on the questions the lecturer poses during the lecture using mobile phones, laptops/tablets or paper forms (papers in the lecture room). During the lecture the lecturer posts questions in the web classroom, enables responses and sets the voting time. The voting during the lecture is technically accessible only to those present in the lecture room and is going to count as a bonus.

### **Practical lessons**

The on-going assessment of knowledge is performed as an exit exam using the interactive system Turning Point after each practical lesson. At the conclusion of practical work students take a practical exam which is a prerequisite for entering the final examination.

## **4. Required conditions for the final examination (Course Exam)**

Attendance at 18 seminars, positive seminar grade, completed practical lessons, practical lessons preliminary exams and the practical exam.

Conditions for taking the exam from the 1<sup>st</sup> and 2<sup>nd</sup> year: a student who wants to take the Microbiology, Immunology and Oral Microbiology exam has had to pass the following exams in the 1<sup>st</sup> and 2<sup>nd</sup> year:

Biochemistry 1 and 2,  
Anatomy 1 and 2,  
Histology and Embryology,  
Physiology,  
Biophysics,  
Cell Biology and  
Emergency Medical Aid.

### **5. Final assessment and examination of knowledge and skills (Course Exam)**

The exam consists of a written (it consists of 50 exam questions and is 60 minutes long) and an oral part. It covers topics published in the web classroom. In case of multiple trials a student is granted access to the oral exam in the third trial regardless of the written exam grade.

In the written exam, which covers the exam topics, questions are organised into three thematic segments. A student who passes the written exam with a score of above 60% (Article 10\*) and attains such a score in all three thematic segments is exempt from the oral exam. The written exam is comprised of 50 questions and is 60 minutes long.

Number of questions according to segments:

Bacteriology with Mycology	40% i.e. 20 questions
Virology	30% i.e. 15 questions
Immunology and Parasitology	30% i.e. 15 questions

Grading scale:

unsatisfactory (1 to 5):	0.00% to 59.99%
satisfactory (6):	60.00% to 67.99%
good (7):	68.00% to 75.99%
very good (8):	76.00% to 83.99%
very good (9):	84.00% to 91.99%
excellent (10):	92.00% to 100%

- A student achieving a positive grade in the written exam (60%) is regardless of the number of points attained signed up for a compulsory oral exam if the score attained in one of the aforementioned segments is lower than 60%.
- A student attaining an overall grade under 60% in the written exam has to retake the written exam.
- The same applies to students who object to the written exam grade.
- A student attaining a positive written exam grade can always take an oral exam at one's own request and notify the department secretariat within 24 hours after the announcement of written exam results. For the calculation of the oral exam grade see the document Final Course Grade Calculation in the web classroom.
- The oral exam is comprised of 5 questions from the exam topics.

Exam applications and cancellations: submitted via the VIS information system, the exam application no later than 3 working days and its cancellation 2 working days before the exam date.

A committee exam is held in line with the Regulations for the Assessment of Knowledge and

Skills for the Single-Cycle Master Study Programmes Medicine and Dental Medicine. The committee exam consists of a written and an oral part.

A student has the right to personally access his written part of the exam in line with Article 39 of the Regulations.

The **course grade** contains:

- 1) the **practical lessons** knowledge assessment grade using the interactive system Turning Point – the theoretical preliminary exam (5%) and the practical preliminary exam grade (5%). Both parts of the preliminary exam have to be independently graded as positive.
- 2) the **examination** grade (80%)
- 3) the **seminar** grade (10%)
- 4) the **bonus** is attained with the grade in the web classroom the average grade of half or more preliminary exams after lectures is 84.00% or above. The bonus is taken into account only at the 1<sup>st</sup> trial of the current academic year.

## **6. Other provisions**

Article 34 of the Regulations for the Assessment of Knowledge and Skills for the Single-Cycle Master Study Programmes Medicine and Dental Medicine applies.

People with special needs can have up to 50% more time for all forms of on-going and final assessment of knowledge.

## **7. Fundamental study material and Supplement reading**

Gubina M, Ihan A (ed.). Medicinska bakteriologija z imunologijo in mikologijo. Ljubljana: Medicinski razgledi, 2002.

Koren S, Avšič-Županc T, Drinovec B, Marin J, Poljak M. Splošna medicinska virologija. Ljubljana: Medicinski razgledi, 1998.

Poljak M, Petrovec M (ed.). Medicinska virologija, Ljubljana: Medicinski razgledi, 2011.

Logar J. Parazitologija človeka. Radovljica: Didakta, 2010.

Seme K (ed.). Navodila za vaje in mikrobiologije in imunologije za študente stomatologije. Ljubljana: IMI MF UL, 2002; and practical lessons materials in the web classroom.

Dragaš AZ. Oralna bakteriologija, Ljubljana: DZS, 1996

Ihan A. Osnove medicinske imunologije, Ljubljana: Medicinski razgledi, in the press (in the web classroom).

## **8. Exam topics, clinical presentations and skills**

### **Exam topics list:**

Published in the web classroom of the Faculty of Medicine.