

| | | | | | |
|---|----|----|---------------------------------------|----|----|
| Higher education institution: Slovak Medical University in Bratislava | | | | | |
| Faculty: Faculty of Medicine | | | | | |
| Course code: GM 013A | | | Course title: Microbiology (1) | | |
| Type, extent and method of educational activity: | | | | | |
| Number of hours per semester: 56 | | | | | |
| Lectures: 28/2 hours per week | | | | | |
| Practicals: 28/2 hours per week | | | | | |
| (Total work load of the student is 150 h) | | | | | |
| Method of the education activity: full-time study (distance study) ¹ | | | | | |
| Form of the study: full-time | | | | | |
| Number of credits: 8 credits | | | | | |
| Recommended semester/trimester study: 4 th | | | | | |
| Level of higher education study: 1. + 2. level | | | | | |
| Prerequisite courses: Medical biology (2) | | | | | |
| Requirements for completion of the course: | | | | | |
| 1. Participation on lectures is obligatory | | | | | |
| 2. Participation on practical exercises is obligatory | | | | | |
| - Student must be theoretically prepared for the actual exercise | | | | | |
| - Student may be excluded from the exercise if not prepared theoretically | | | | | |
| - Two absences are allowed with a excuse (etter/slip stamped and signed the physician, the excuse slip must be delivered at the next practical exercise), in case of a 2 nd absence, it is necessary to examine or prepare a written work on the topic of the missed exercise, length of which is about 2 A4 pages. | | | | | |
| 3. During the semester, there will be at least 2 multiple choice tests. Each test must be written to minimum 65 % to pass | | | | | |
| Student workload is 119 hours | | | | | |
| Learning outcomes: | | | | | |
| Knowledge of general microbiology (bacteriology, virology, mycology and parasitology); characteristics, properties, pathogenity factors of microbes, antimicrobial therapy and specific prevention of microbial diseases; knowledge about different genera and species of medically important bacteria. | | | | | |
| Brief content of the course (syllabus): | | | | | |
| Lectures: | | | | | |
| Bacterial taxonomy. Structure and physiology of bacterial cell. Pathogenity and virulence. Antibacterial agents. Basic properties of viruses. Viral multiplication and genetic. Virology different genera of medical importance. General mycology. General parasitology. Gram+ a Gram- rods and cocci. Enterobacterales. Chlamydiaeae a Rickettsiaceae. Acidoresistant bacteria. Anaerobic bacteria. Spirochetes. | | | | | |
| Laboratory exercises: | | | | | |
| Organisation and safety measures in microbiological laboratory. Microscopic methods in microbiological diagnostic. Cultivation and identification of bacteria. Indirect microbiological diagnostic. Methods for detecting resistance of microbes to antimicrobial drugs. Basic virological laboratory diagnostic. Molecular methods in microbiological diagnostic. | | | | | |
| Recommended literature: | | | | | |
| 1. P. Murray et al.: Medical microbiology, MOSBY, 2008 and later | | | | | |
| 2. D. Greenwood a spol.: Lékařská mikrobiologie, GRADA Publishing, 1999 | | | | | |
| 3. D. Greenwood et al.: Medical Microbiology, Elsevier Books 2012 | | | | | |
| 4. A. Shunnar et al.: Manual for the practical exercises in microbiology, Comenius University Bratislava, 2011 | | | | | |
| . R. Goering a kol.: Mim's Medical Microbiology, Elsevier Science 2012 | | | | | |
| Language requirements: English | | | | | |
| Notes: | | | | | |
| The course runs in English and Slovak language. | | | | | |
| Course assessment | | | | | |
| Assessed students in total: 0 | | | | | |
| A | B | C | D | E | FX |
| 0% | 0% | 0% | 0% | 0% | 0% |
| Lecturers: | | | | | |
| prof. RNDr. Shubhada Bopegamage, CSc. | | | | | |
| doc. RNDr. Danica Valkovičová Staneková, CSc. | | | | | |

¹§ 108e ods. 2 zákona č.131/2002 Z.z. o vysokých školách

doc. Ing. Elena Piecková, PhD., MPH
MUDr. Miroslava Horniačková, PhD., MPH
MVDr. Girma Belay, CSc.
RNDr. Mária Takáčová, PhD.
RNDr. Brigita Benköová, PhD.
RNDr. Michaela Pospíšilová
Ing. Renáta Lehotská, PhD.
Mgr. Mária Borsányiová, PhD.
Mgr. Alena Ofukaná
Mgr. Renáta Baksová
Mgr. Mária Mazúrová
Mgr. Jana Bako

Date of last modification: 29.09.2021

Approved by: *person responsible for realization, development and ensuring of the study program quality*
prof. MUDr. Iveta Šimková, CSc.

| | | | | | |
|--|-----|-----|---------------------------------------|-----|-----|
| Higher education institution: Slovak Medical University in Bratislava | | | | | |
| Faculty: Faculty of Medicine | | | | | |
| Course code: GM 013B | | | Course title: Microbiology (2) | | |
| Type, extent and method of educational activity: | | | | | |
| Number of hours per semester: 56 | | | | | |
| Lectures: 28/2 hours per week | | | | | |
| Practicals: 28/2 hours per week | | | | | |
| (Total work load of the student is 150 h) | | | | | |
| Method of the education activity: full-time study (distance study) ¹ | | | | | |
| Form of the study: full-study | | | | | |
| Number of credits: 6 credits | | | | | |
| Recommended semester/trimester study: 5 th | | | | | |
| Level of higher education study: 1. + 2. level | | | | | |
| Prerequisite courses: GM 013A Microbiology (1) | | | | | |
| Requirements for completion of the course: | | | | | |
| 1. Participation on lectures is obligatory | | | | | |
| 2. Participation on practical exercises is obligatory | | | | | |
| - Student must be theoretically prepared for the actual exercise | | | | | |
| - Student may be excluded from the exercise if not prepared theoretically | | | | | |
| - Two absences are allowed with a excuse (etter/slip stamped and signed the physician, the excuse slip must be delivered at the next practical exercise), in case of a 2 nd absence, it is necessary to examine or prepare a written work on the topic of the missed exercise, length of which is about 2 A4 pages. | | | | | |
| 3. During the semester, there will be at least 2 multiple choice tests. Each test must be written to minimum 65% to pass | | | | | |
| Final exam | | | | | |
| - Written part - the final test fillfilled to at least 75 % is a prerequisite for the oral exam (The test is obligatory for the 1st examination and 1st re-examination. Student may be examined orally without the test only at 2nd re-examination date.) | | | | | |
| - Oral final exam, evaluation A, B, C, D, E, Fx | | | | | |
| Student workload is 94 hours | | | | | |
| Learning outcomes: | | | | | |
| To apply the knowledge of general microbiology (bacteriology, virology, mycology and parasitology), characteristics, properties and pathogenity factors of microbes and knowledge about different genera and species of medically important bacteria in antimicrobial therapy and specific prevention of microbial diseases. | | | | | |
| Brief content of the course (syllabus): | | | | | |
| Medical mycology. Medical parasitology. Medical virology. Microbial diseases, laboratory diagnosis and basic principles of treatment of respiratory tract, nervous system, uropoetic and genital tract, gastrointestinal tract, sepsis and endocarditis and infections of fetus and neonate. | | | | | |
| Laboratory diagnosis of genus Mycobacterium, Mycoplasma. Lab. dg of HIV and viral hepatitis. Lab. dg of mycotic infections. Lab. dg of parasitic infections. Microbial biofilm. | | | | | |
| Recommended literature: | | | | | |
| 1. P. Murray et al.: Medical microbiology, MOSBY, 2008 and later | | | | | |
| 2. D. Greenwood a spol.: Lékařská mikrobiologie, GRADA Publishing, 1999 | | | | | |
| 3. D. Greenwood et al.: Medical Microbiology, Elsevier Books 2012 | | | | | |
| 4. A. Shunnar et al.: Manual for the practical exercises in microbiology, Comenius University Bratislava, 2011 | | | | | |
| 5. R. Goering a kol.: Mim's Medical Microbiology, Elsevier Science 2012 | | | | | |
| Language requirements: English | | | | | |
| Notes: | | | | | |
| The course runs in English and Slovak language. | | | | | |
| Course assessment | | | | | |
| Assessed students in total: 0 | | | | | |
| A | B | C | D | E | FX |
| 13% | 13% | 14% | 18% | 22% | 20% |
| Lecturers: | | | | | |
| prof. RNDr. Shubhada Bopegamage, CSc. | | | | | |

¹§ 108e ods. 2 zákona č.131/2002 Z.z. o vysokých školách

doc. RNDr. Danica Valkovičová Staneková, CSc.
doc. Ing. Elena Piecková, PhD., MPH
MUDr. Miroslava Horniačková, PhD., MPH
MVDr. Girma Belay, CSc.
RNDr. Monika Hábeková, PhD.
Ing. Renáta Lehotská, PhD.
Mgr. Mária Borsányiová, PhD.
Mgr. Alena Ofukaná
Mgr. Renáta Baksová
Mgr. Mária Mazúrová
Mgr. Jana Bako

Date of last modification: 29.09.2021

Approved by: *person responsible for realization, development and ensuring of the study program quality*
prof. MUDr. Iveta Šimková, CSc.