

Subject	Microbiology and parasitology
Syllabus	Threeyear technical college for graduated nurse / technician
Code:	SM S/T-213
Study year	Second
Semester	First
Total number of lessons	35
Kredits	2
Kind of subject	Obligatory
Preconditions	Fulfilled conditions for attending the second study year
Author of the programme:	Chair for Microbiology and parasitology Head of the chair: Prof. d-r Elena Trajkovska-Dokic
Carry out:	Chair of Microbiology and parasitology
Responsible professor	Prof. d-r Kaca Popovska-Jovanovska, e-mail: kpopovska@medf.ukim.edu.mk
Address:	Institute for microbiology, Skopje Tel: + 389 2 3109 829
Key wards	Studies for nurses and technicians, basic subjects, microbiology and parasitology
Teaching aids	<ul style="list-style-type: none"> • Gaining of knowledge for the normal microflora in the human body • Gaining of knowledge for the pathogenic microorganisms and parasites that cause infective diseases • Gaining of knowledge for the procedures for control of antimicrobial activity
Short content	<p>Teoretical teaching (25 lessons):</p> <ul style="list-style-type: none"> • Morphology and physiology of bacteria • Normal microbial flora of the human body • Desinfection, Sterilisation, Asepsis and antisepsis • Antimikrobal agents: groups, mechanisms of activity and machanisms of resistance • Infections and immunity • Diagnosis, specific therapy and prophylacsis of infective diseases • Patogenic bakteria: kinds, bakterial infections • Fungi: structure, multipliiing, fungal infections • Viruses: multipliiing, isolation, identifikation, viral diseases • Parasites: kind, parasitic diseases <p>Practical teaching and seminars (5 + 5 lessons):</p> <ul style="list-style-type: none"> • Students learn for the proces of collectio and transportation of samples • Students learn for culturing and identifiing different microorganisms microscopicaly • Students learn for the principles of antimicrobial therapy
Organisation	Teoretical teaching: 25 lessons Seminars: 5 lessons Praktical teaching: 5 lessons
Learning methods	Interactive teoretical teaching, Exercises, Seminars
Predicted learning results	<p>Knowledge and understanding: Students will gain knowledge for microorganisms and their impact ubove developing of infective diseases as well as for the different kind of antimicrobial therapy</p> <p>Key skills: Students will be able for correctly collection and transportation of samples to the microbiological laboratory</p>
Specific recommendations	Student is charged to attend all predicted activies

for teaching	<p>Scoring of the student's activities:</p> <table border="1" data-bbox="480 342 1342 499"> <tr> <th>Kind of activity</th><th>Points</th></tr> <tr> <td>Theoretical teaching</td><td>7.5 – 15</td></tr> <tr> <td>Practical teaching</td><td>12.5 – 25</td></tr> <tr> <td>Colloquium</td><td>40 – 60</td></tr> <tr> <td>Total:</td><td>60 – 100</td></tr> </table> <p>Attendance on theoretical teaching:</p> <ul style="list-style-type: none"> • 51% - 60% -> 7.5 points • 61% - 70% -> 9.5 points • 71% - 80% -> 12 points • 81% - 90% -> 13 points • 91% - 100% -> 15 points <p>Scoring of practical teaching (10 lessons): any lesson is equal 2.5 points</p> <ul style="list-style-type: none"> • Presence -> 1 point • Activity (knowledge) -> 1.5 point <p>Conditional criteria: Student has to gain minimum 20 points from the theoretical and practical teaching for approaching to the final exam. The final exam is written. The final grade can be obtained according to the points shown in the table. Student has to obtain minimum 60% of the total points from the colloquium. In opposite, he/she must approach the complete final exam. .</p>	Kind of activity	Points	Theoretical teaching	7.5 – 15	Practical teaching	12.5 – 25	Colloquium	40 – 60	Total:	60 – 100				
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Checking of the knowledge	<p>Colloquium: Student has to attend regularly the theoretical and practical teaching as a condition for approaching the final exam. The final exam is written. Student has to obtain minimum points (60%) from the colloquium. In opposite he/she must apply to the complete final exam.</p> <p>Final exam: There is no. If the student pass the colloquium, than he can obtain the final grade.</p> <p>Complete final exam: That is the colloquium which is not passed.</p>														
Scoring	<p>Criteria for creating the final grade:</p> <table border="1" data-bbox="480 1406 1342 1626"> <tr> <th>Points</th><th>Grade</th></tr> <tr> <td>do 59</td><td>5 (F)</td></tr> <tr> <td>60-68</td><td>6 (E)</td></tr> <tr> <td>69-76</td><td>7 (D)</td></tr> <tr> <td>77-84</td><td>8 (C)</td></tr> <tr> <td>85-92</td><td>9 (B)</td></tr> <tr> <td>93-100</td><td>10 (A)</td></tr> </table>	Points	Grade	do 59	5 (F)	60-68	6 (E)	69-76	7 (D)	77-84	8 (C)	85-92	9 (B)	93-100	10 (A)
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Textbooks for learning	<p>Basic:</p> <ol style="list-style-type: none"> 1. Jawetz, Melnik and Adelberg: "Medical Microbiology" 21th edition., 2004 2. Grinvud D. And coworkers, "Medical microbiology", 17th edition 2006 3. Milena Petrovska and coworkers: "Practical textbook for medical microbiology and parasitology" ; fifth edition 2010 4. Kaca Popovska-Jovanovska: "Nosocomial infections " ; 2003 														