

Subject	Microbiology and parasitology
Syllabus	Threeyear technical college for graduated physiotherapist
Code:	SSF-214
Study year	Second
Semester	Third
Total number of lessons	30
Kredits	1.5
Kind of subject	Obligatory
Preconditions	Fulfilled conditions for attending the second study year
Carry out:	Chair for Microbiology and parasitology Head of the chair: Prof. dr Elena Trajkovska-Dokic
Responsible professor	Prof. dr Kaca Popovska-Jovanovska
Address:	Institut za mikrobiologija, 50 Divizija br.6, 1000, Skopje Tel. +389 2 3109 829, e-mail: kpopovska@medf.ukim.edu.mk
Key wards	Studies for phisiotherapists, basic sciencies, 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>Theoretical 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 • Antimikrobial 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, multipling, fungal infections • Viruses: multipling, 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 identifying different microorganisms microscopically • Students learn for the principles of antimicrobial therapy <p>Seminars (5 lessons):</p> <ul style="list-style-type: none"> • Students learn the principles for acquiring the aseptic conditions during health care as well as the principles for the antimicrobial therapy
Organisation	<p>Theoretical teaching: 15 lessons</p> <p>Seminars: 5 lessons</p>
Learning methods	Interactive theoretical teaching , 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>
	Student is charged to attend all predicted activies

<p>Specific recommendations for teaching</p>	<p>Scoring of the student's activities:</p> <table border="1" data-bbox="467 338 1329 495"> <tr> <th>Kind of activity</th><th>Points</th></tr> <tr> <td>Theoretical teaching</td><td>7.5 – 15</td></tr> <tr> <td>Seminars</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>Presence on the seminars:</p> <ul style="list-style-type: none"> • 51%-60% -> 1 point • 61% - 70% -> 2 points • 71% - 80% -> 3 points • 81% - 90% -> 4 points • 91% - 100% -> 5 points 	Kind of activity	Points	Theoretical teaching	7.5 – 15	Seminars	12.5 – 25	Colloquium	40 – 60	Total:	60 – 100				
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<p>Chacking of the knowledge</p>	<p>Colloquium: Student has to attend regulary 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>														
<p>Scoring</p>	<p>Criteria for creating the final grade:</p> <table border="1" data-bbox="467 1379 1329 1597"> <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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<p>Textbooks for learning</p>	<p>Basic:</p> <ol style="list-style-type: none"> 1. Jawetz, Melnik and Adelberg: "Medical Microbiology" 21th eddition., 2004 2. Grinvud D. And coworkers, "Medical microbiology", 17th eddition 2006 3. Milena Petrovska and coworkers: "Practical textbook for medical microbiology and parasitology" ; fifth edition 2010 4. Kaca Popovska-Jovanovska: "Nosocomial infections " ; 2003 														