

<b>General Information</b>			
<b>Course name and code</b>	<b>General microbiology and virology</b> <b>ÚBEV/MKV/15</b>	<b>ECTS Credits</b>	<b>5</b>
		<b>Semester</b>	<b>1st (Winter)</b> <b>Bachelor Degree</b>
<b>Aims</b>			
<p>Students will obtain a basic informations on viruses, prokaryotic and eukaryotic microorganisms, their cytology, physiology, genetics, ecology, classification, and importance. Information on basic methods for studying microorganisms will be provided.</p>			
<b>Contents</b>			
<p>Microbiology as a biological science. History of microbiology. Prokaryotic and eukaryotic microorganisms, systematics, physiology, genetics, and metabolis of microorganisms. Methods for microorganismss study. Basic techniques in microbiology laboratory. Bacteriology, cytology, morphology, and reproduction of bacteria. Eukaryotic microorganisms, micromycetes. Microorganisms and environment, water, soil, and air microbiology. Natural cycles of elements. Symbiotic relationships between micro- and macroorganisms. Important microbial diseaseas. Regulation of growth of microorganisms, antibiotics. Applied microbiology. Basis of virology, classification and architecture of viruses. Interactions between viruses and host cells. Plant and animal viruses, bacteriophages, sub-viral agents: viroids, prions.</p>			
<b>Evaluation</b>			
<p>Attendance of practicals (at least 90%), 2 written examinations during semester, final oral examination.</p>			
<b>Bibliography</b>			
<ol style="list-style-type: none"> <li>1. Madigan, MT, et al. Brock's Biology of Microorganisms. Prentice Hall College Div; 1996</li> <li>2. Prescott, LM, et al. Microbiology. Wm. C. Brown Publishers, 1996</li> <li>3. Pepper, LI et al., Environmental Microbiology (Second Edition). Elsevier, 2009</li> </ol>			