

Module name	General and medical virology
Module code	
ISCED code	0511: Biology
Study cycle	I (II ⁰).
Semester	summer
Responsible for this module	Agnieszka Szuster-Ciesielska Department of Virology and Immunology email: szusterciesielska.agnieszka@poczta.umcs.lublin.pl
Language of instruction	English
Website	
Prerequisites	completed biochemistry and microbiology course
ECTS	5
ECTS points hour equivalents	Contact hours (work with an academic teacher) – - lectures: 30 - labs: 30 Non-contact hours (students' own work) – 60 - preparation for the exam: 25 - preparation for labs: 10 - preparation of reports from laboratory exercises: 10 - literature study: 15 Total number of ECTS points for the module - 5
Learning outcomes verification methods	final written exam, continuous assessment of laboratories
Course full description	Lecture contents: General virology (definitions, structure of viruses, classification, replication). Characterization of main families of DNA and RNA viruses pathogenic for humans. Laboratory exercise contents: Isolation of viruses propagated in laboratory animals and chick embryos. The establishment of primary cell culture of chicken fibroblasts. Maintenance of continuous cell lines; tissue bank - the freezing and thawing the culture. Propagation of viruses in cell cultures. Virus titration methods (biological and cytometry based methods). The biological methods of testing virucidal and antiviral activity of natural and synthetic substances.
Bibliography	1. „Human and Medical Virology” ed. B.W.J. Mahy (2010) 2. „Clinical Virology” ed. A.J. Zuckerman (2009)
Learning outcomes	KNOWLEDGE 1. Explain the origin, structure, and replication of viruses, as well as host cells attack methods. 2. Characterize of viruses families pathogenic for

	<p>humans.</p> <p>3. Indicate the way of prophylaxis against viruses.</p> <p>SKILLS</p> <ol style="list-style-type: none"> 1. Use the biological models for the isolation of viruses. 2. Work with cell cultures. 3. Apply cell cultures to propagation and titration of viruses. <p>SOCIAL COMPETENCES</p> <ol style="list-style-type: none"> 1. Conducting according the ethical principles and work safety regulations. 2. Awareness of viral diseases risk. 3. Care of the health-oriented personal behavior.
Practice
Teaching methods	Informative lecture, explanation, description, multimedia presentation, direct and indirect observation, discussion, experiment