MEDIZINISCHE FAKULTÄT

Master of Science Biochemistry (M. Sc. Biochemistry)





Title of module Special Lecture in the Focal Point Programme "Molecular Medicine" VZ: 209 040 "Virology for students of natural science" Credit points 5 Available in semester(s) 2 2 Hours per week Compact course Prof. Dr. M. Tenbusch, Dr. A. Stang, Dr. R. Kohlmann, Dr. Lecturer(s) B. Grewe, Dr. G. Nabi, Dr. V. Temchura Lecture: 2 hours per week Teaching methods Evaluation of learning Active participation in lectures progress 45 min end-of-term written exam Mode of examination Learning objectives The students will get acquainted with relevant topics of virology. Aspects of the course are virus families and their induced pathology particularly in humans. Furthermore, the students will obtain knowledge how viruses interact on molecular and immunological level with their environment or hosts. Soft skills

Contents of module

Topics covered:

- 1. Virus structure, pathogenesis, working methods, clinical diagnostics
- 2. Respiratory infections (Influenza, RSV, Adenovirus)
- 3. Herpesviruses / viral immune escape strategies
- 4. Viral hepatitides
- 5. Ecology and evolution of viruses
- 6. Intestinal infections (Rotavirus, Adenovirus, Calicivirus, Norwalk)
- 7. Viral diseases of children
- 8. Viral oncogenesis
- 9. Viral zoonoses / Hämorrhagic viruses
- 10. HIV part 1
- 11. HIV part 2
- 12. Prions and security of blood products