**Module title** | Practical Course in Immunology and Virology  
**Abbreviation** | 03-98-PIV-152-m01

**Module coordinator** | holder of the Professorship of Immune Regulation, holder of the Chair of Virology  
**Module offered by** | Faculty of Medicine

**ECTS** | 5  
**Method of grading** | numerical grade  
**Only after succ. compl. of module(s)** | --

**Duration** | undergraduate  
**Module level** | --  
**Other prerequisites** | --

### Contents

Part immunology: how antigen recognition, uptake and presentation by dendritic cells lead to induction of activation markers, transcription factors, cytokines and proliferation of CD4+ T lymphocytes. Part virology: fundamental methods to demonstrate viral infections and to recognise viral pathogenesis using the microscope.

### Intended learning outcomes

Section immunology: The students acquire theoretical and practical knowledge about mechanisms that cells of the innate immune system use to sense pathogens and how this information is translated in the activation of T lymphocytes. They learn fundamental techniques of sterile cell culture, flow cytometry and confocal microscopy analysis techniques and ELISA. Section virology: Practical knowledge about the detection of viral infections and pathogenetic alterations following viral infections.

### Courses

(type, number of weekly contact hours, language — if other than German)  
P (5) + S (1)  
Module taught in: German / English

### Method of assessment

(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  
a) written examination (45 to 90 minutes) or b) log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes) or d) oral examination in groups of up to 3 candidates (approx. 20 minutes per candidate) or e) presentation (20 to 30 minutes).  
Students will be informed about the type and length of assessment at the beginning of the course.

### Allocation of places

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### Additional information

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### Referred to in LPO I (examination regulations for teaching-degree programmes)

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### Module appears in

Bachelor’ degree (1 major) Biomedicine (2015)  
Bachelor’ degree (1 major) Biomedicine (2018)