



# Course Specifications

Valid as from the academic year 2016-2017

## Immunology (O000050)

**Course size** (nominal values; actual values may depend on programme)  
**Credits** 5.0      **Study time** 150 h      **Contact hrs** 45.0 h

### Course offerings and teaching methods in academic year 2016-2017

A (semester 1)	seminar	5.0 h
	practicum	17.5 h
	lecture	22.5 h

### Lecturers in academic year 2016-2017

Magez, Stefan		lecturer-in-charge
Radwanska, Magdalena	WE14	co-lecturer

### Offered in the following programmes in 2016-2017

<a href="#">Bachelor of Science in Molecular Biotechnology</a>	crdts	offering
	5	A

### Teaching languages

English

### Keywords

Immunology, Inflammation, Infection

### Position of the course

This course provides basic knowledge of immune defense mechanisms on a cellular and molecular level. Insight in these mechanisms will then form the basis for an introduction to immunity dysfunction and the resulting immune system-related pathologies.

### Contents

1. What is immune defense? What are the cells and molecules of the immune system?
2. Innate immunity
3. Adaptive immunity
4. Integration of both immune compartments.
5. Immunological/inflammatory pathologies.
6. Medical and technological applications (vaccination, diagnosis, monoclonal antibodies)
7. The practical use of Immunology (laboratory practicals): ELISA, FACS, Western Blot.

### Initial competences

No prior immunology knowledge is required; a basis in molecular biology and cell biology is required. Students should have knowledge of The Living World 1, The Living World 2, The Living World 3 and Molecular Biological Analysis.

### Final competences

A solid understanding of the basis mechanisms in the mammalian immune system is acquired; the student can read and understand the immunological literature.

### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

### Conditions for exam contract

This course unit cannot be taken via an exam contract

### Teaching methods

Lecture, practicum, seminar

**Learning materials and price**

**References**

Understanding Immunology 3<sup>rd</sup> edition, Peter Woods, Printice Hall.  
Immunobiology 8th edition, K. Murphy, P. Travers, M. Walport, Garland Science

**Course content-related study coaching**

**Evaluation methods**

end-of-term evaluation and continuous assessment

**Examination methods in case of periodic evaluation during the first examination period**

Oral examination

**Examination methods in case of periodic evaluation during the second examination period**

**Examination methods in case of permanent evaluation**

Participation

**Possibilities of retake in case of permanent evaluation**

examination during the second examination period is possible in modified form

**Calculation of the examination mark**

Oral examination with open questions (written preparation time) 90%

Participation 10%

Participation in the practical courses is an obligatory requirement to pass this course