

Course Specifications

Valid as from the academic year 2018-2019

Course size (nominal values; actual values may depend on programme)

Credits	6.0	Study time	150 h	Contact hrs	60.0 h
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Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	Dutch	lecture	30.0 h
		practicum	30.0 h

Lecturers in academic year 2018-2019

Vanrompay, Daisy	LA22	lecturer-in-charge
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Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Bioscience Engineering: Cell and Gene Biotechnology	6	A

Teaching languages

Dutch

Keywords

Antigens, granulocytes, macrophages, innate immunity, inflammation, MHC, antigen presentation, tissues of the immune system, humoral immune response, T-cell mediated immunity, immunoglobulins and their receptors, cytokines, the complement system, pathogen recognition receptors

Position of the course

Immunology

Contents

1. Antigens
2. Neutrofielen, eosinofielen, basofielen en macrophages
3. Inflammation
4. The major histocompatibility complex
5. Antigen presentation
6. Tissues of the immune system
7. T-cell mediated immunity
8. Immunoglobulins and their receptors
9. The humoral immune response
10. Cytokines
11. The complement system
12. Pathogen recognition receptors

Initial competences

General knowledge on cell biology, microbiology

Final competences

Knowledge on the structure of the immune system and on mechanisms of the immune response

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

Demonstration, lecture, practicum

Extra information on the teaching methods

Theory: lecture using power point presentations which will be made available via Minerva and also movies on immune mechanisms

Practicals: demonstrations plus immunological assays to be performed by the student in the laboratory

Master's dissertation: possibility to prepare a Master's dissertation⁴

Learning materials and price

Syllabus (Dutch). Estimated price 15 euro.

References

1) Immunobiology. Kenneth Murphy and Casey Weaver. 9th Edition, (2016). Garland Science Publishing. Book is also known as Janeway's Immunobiology

2) Essential Immunology. P.J. Delves, S.J. Martin, D.R. Burton, Roitt, I.M. (eds) (2011). Wiley-Blackwell 12th edition.

3) Abul K. Abbas & Andrew H. Lichtman, S. Pillai (2017). Cellular and Molecular Immunology. 9th edition. Elsevier Science/Saunders, Philadelphia.

Course content-related study coaching

Teacher available for student counseling.

Evaluation methods

end-of-term evaluation and continuous assessment

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

Written examination, report

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

Written examination

Examination methods in case of permanent evaluation

Report

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

Practical course: written report on the practical courses and permanent evaluation – 1 written answer to a theoretical question on the practical courses during the official examination period

Theory: written examination

Calculation of the examination mark

Lectures: 16/20

Exercises: 4/20

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.

Addendum

CORRECTION 13/12/2013: the language of this course unit is Dutch