GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2026-2027

Immunology (I002622)

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

Credits 5.0 **Study time 150 h**

Course offerings in academic year 2026-2027

A (semester 2)	English	Gent

Lecturers in academic year 2026-2027

Vanrompay, Daisy	LA22	lecturer-in-charge

Offered in the following programmes in 2026-2027	**crdts**	**offering**
Master of Science in Bioscience Engineering: Cell and Gene Biotechnology	5	A
Exchange Programme in Bioscience Engineering: Cell and Gene Biotechnology (master's level)	5	A

Teaching languages

English

Keywords

Immunobiology, innate and adaptive immunity, inflammation, humoral and cellular immunity, infectious diseases

Position of the course

This course aims to give students an overview of the main aspects of immunology and its related techniques and applications

Contents

Antigens, innate immune cells, inflammation, the major histocompatibility complex, antigen presentation, tissues of the immune system, T cell mediated immunity, Immunoglobulins, antibody responses, cytokines, the complement system, pathogen recognition receptors and immune signaling pathways

Initial competences

Immunology builds on certain learning outcomes of course units Microbiology, Cell Biology; or the learning outcomes have been achieved differently.

Final competences

1 Demonstrates advanced and broad knowledge of immunobiology in health and disease
2 Explain ongoing immune mechanisms in health and disease
3 Demonstrate the principles of a variety of immunological laboratory techniques
4 Design and produce immunolgoical dianostics
5 Communicates effectively with peers, immunologists, professionals in the biomedical sector, and the general public, both orally and in writing, regarding research, immunological concepts, and research proposals.

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, Practical, Independent work

Extra information on the teaching methods

Theory: lecture using power point presentations which will be made available via

the electronic learning platform, with recordings where available.
Practicals: immunological assays to be performed by the student in the laboratory.

Study material

Type: Syllabus

Name: GENERAL IMMUNOLOGY
Indicative price: € 15
Optional: no
Language : English
Number of Pages : 162
Available on Ufora : No
Online Available : No
Available in the Library : No
Available through Student Association : No
Additional information: Available for sale during the first lecture.

Type: Slides

Name: GENERAL IMMUNOLOGY
Indicative price: Free or paid by faculty
Optional: no
Language : English
Number of Slides : 590
Available on Ufora : Yes
Online Available : No
Available in the Library : No
Available through Student Association : No
Additional information: Available on UFORA a few days before each lecture.

Type: Handouts

Name: GENERAL IMMUNOLOGY - Practical Protocols etc.
Indicative price: € 5
Optional: no
Language : English
Number of Pages : 28
Available on Ufora : Yes
Online Available : No
Available in the Library : No
Available through Student Association : No
Usability and Lifetime within the Course Unit : regularly
Usability and Lifetime within the Study Programme : one-time
Usability and Lifetime after the Study Programme : not
Additional information: Available for sale during the first lecture. The student is expected to bring the Protocol to the Practical.

References

1) Immunobiology. Kenneth Murphy and Casey Weaver. 10th Edition, (2022).
Garland Science Publishing. Book is also known as Janeway's Immunobiology.
2) Abul K. Abbas & Andrew H. Lichtman, S. Pillai (2021). Cellular and Molecular
Immunology. 10th edition. Elsevier Science/Saunders, Philadelphia.

Course content-related study coaching

Teacher and assistant available for student counselling

Assessment moments

end-of-term and continuous assessment

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

Written assessment

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

Written assessment

Examination methods in case of permanent assessment

Participation, Written assessment, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is not possible

Extra information on the examination methods

Lectures: written examination
Practical: written assignment and participation

Calculation of the examination mark

Lectures: 85% and practical 15%
Students who eschew period aligned evaluations for this course unit may be failed by the examiner.