

1. Programme Title(s) and Code(s):

<i>Programme Title</i>	<i>UCAS Code</i>	<i>GU Code</i>
BSc Honours in Immunology	C550	C550-2105

2. Academic Session:

2018-19

3. SCQF Level (see [Scottish Credit and Qualifications Framework Levels](#)):

10

4. Credits:

480

5. Entrance Requirements:

Please refer to the current undergraduate prospectus at: <http://www.gla.ac.uk/undergraduate/>

6. ATAS Certificate Requirement (see [Academic Technology Approval Scheme](#)):

ATAS Certificate not required

7. Attendance Type:

Full Time

8. Programme Aims:

Immunology is the study of the immune system, the tissues and cells of the body which protect us from infection. In addition, aberrant immune responses are important causes of important diseases such as diabetes, thyroid disease, rheumatoid arthritis, asthma and other allergies, and inflammatory bowel diseases. Damage to the immune system is also the mechanism of disease in several infections, particularly HIV, while a number of inherited disorders cause severe immune deficiencies that produce abnormal susceptibility to infection. Thus a

¹ This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if full advantage is taken of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each course can be found in course handbooks and other programme documentation and online at www.gla.ac.uk/

The accuracy of the information in this document is reviewed periodically by the University and may be checked by the Quality Assurance Agency for Higher Education.

knowledge of immunology is central to several aspects of human health, including vaccine development and the treatment and prevention of chronic inflammatory disorders.

This Honours programme in Immunology is one of the few such programmes in the UK. Its graduates are widely sought after and are now distributed in research and other careers throughout the world.

Particular strengths of the programme are: 1) Teaching for the first two years on generic topics in general biology, followed by two final years which give students the opportunity to focus on Immunology for the entire course, giving them a comprehensive and detailed knowledge of the topic and allied subjects; 2) An emphasis on practical skills, with a comprehensive series of class practicals in 3rd year and 15-week laboratory-based research project in 4th year; 3) Coverage of both fundamental and applied aspects of immunology, providing a solid overview of the biological and clinical significance of the subject and insights into the mechanisms which govern host-pathogen interactions in infectious disease; 4) Teaching and practical experience in allied subjects including microbiology, molecular biology and genetics; 5) An emphasis on core skills such as critical thinking and experience in oral and written presentation of scientific information.

The Principal Aims are:

- To provide advanced knowledge and scholarship in Immunology and to develop critical judgement on scientific issues
- To stimulate interest in Immunology as a scientific discipline central to modern biology
- To prepare the student either for a career as an immunologist or for further studies leading to a higher degree in Immunology or an allied science
- To develop those advanced transferable, intellectual, interpersonal and practical skills which may be of advantage in a wide range of employment and further study
- To develop in students the flexibility to adapt to change throughout their working lives

9. Intended Learning Outcomes of Programme:

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills, qualities and other attributes in the following areas:

Knowledge and Understanding:

By the end of this programme students will be able to:

- demonstrate advanced knowledge and understanding of the central facts and concepts of Immunology
- demonstrate knowledge and understanding of the applications of Immunology to infectious and inflammatory disease
- demonstrate an understanding of professional ethics in science and of the principles that can guide ethical decision-making in biological controversies
- demonstrate competence in safe working in a immunology laboratory
- demonstrate advanced knowledge and understanding of the main investigative methods used in Immunology
- demonstrate their ability to learn advanced topics in immunology independently

Skills and Other Attributes:

By the end of this programme students will be able to:

Subject-specific/practical skills

- carry out, under supervision, a major research project in Immunology or a related subject and report its findings

Intellectual skills

- analyse and interpret scientific data, where appropriate choosing relevant statistical tests
- critically analyse research papers in Immunology and allied subjects
- select information from published sources and use this to present critical reviews of the current state of knowledge in Immunology

Transferable/key skills

- use computers to search databases, compose reports for written and oral presentation and analyse data

- give clear, well-constructed oral presentations on advanced immunological topics
- demonstrate an ability to manage time appropriately in order to prioritise tasks and meet deadlines

10. Typical Learning and Teaching Approaches:

A range of teaching methods are used during the programme, including:

- Lectures
- Practical classes
- Oral presentations of scientific papers
- Problem based learning sessions
- Tutorials
- Seminars
- Honours research project

11. Typical Assessment Methods:

A number of different methods are used to assess the courses which make up the programme, including:

Written degree examinations (essays and problem-solving)

Class examinations

Laboratory reports

Laboratory notebook

Essays

Dissertation

Honours project report and essay

Oral presentations

Viva voce examination

12. Programme Structure and Features:

The BSc Honours programme normally lasts 4 years, comprises both compulsory and optional courses, and comprises 480 credits (120 credits each year).

Structure

Course Title	Course Code	Credits	Core	Optional	Semester(s) taught
Year 1:					
Biology-1A	BIOL1001	20	✓		Sem 1
Biology-1B	BIOL1002	20	✓		Sem 2
EITHER Chemistry-1	CHEM1001	40	✓		Sem 1–2
OR Science Fundamentals-1X & -1Y	CHEM1002 CHEM1003	2 x 20			Sem 1–2
<i>other Level-1 course(s)</i>		40		✓	
Year 2:					
Fundamental Topics in Biology 2	BIOL2039	30	✓		Sem 1
Microbiology and Immunology 2	BIOL2044	30	✓		Sem 2
Key Skills in Biology 2	BIOL2040	30		✓	Sem 1
<i>other Level-1 or -2 course(s)</i>		30		✓	
Year 3 (Honours):					

Immunology 3A	BIOL4056	60	✓		Sem 1
Immunology 3B	BIOL4057	60	✓		Sem 2
Year 4 (Honours final year):					
Immunology Advanced Studies	BIOL4187	20	✓		Sem 1–2
<i>One of these project courses:</i>					
Life Sciences Investigative Honours Project	BIOL4246P	20	✓		Sem 1–2
Life Sciences Dissertation Honours Project	BIOL4247P				
Life Sciences Outreach Honours Project	BIOL4248P				
Life Sciences Internship Honours Project	BIOL4249P				
4 x Life Sciences Honours options		4 x 20		✓	

Life Sciences Honours Options:

The programme will prescribe a mixture of compulsory, recommended and/or suitable Honours options courses. In addition, the list of available Honours option courses is liable to change each session. The options available in the current session can be found via the University's Course Catalogue (www.gla.ac.uk/coursecatalogue/).

Features:

Students may apply to study abroad during either Year 2 or Year 3; this is subject to approval by the School of Life Sciences.

Years 1 and 2 may be available for part-time study. Years 3 and 4 are normally only available on a full-time basis.

Regulations:

This programme will be governed by the relevant regulations published in the University Calendar. These regulations include the requirements in relation to:

- (a) Award of the degree
- (b) Progress
- (c) Early exit awards
- (d) (For undergraduate programmes, where appropriate) Entry to Honours

www.gla.ac.uk/services/senateoffice/policies/calendar/

13. Programme Accredited By:

Not applicable

14. Location(s):

Glasgow

15. College:

College of Medical Veterinary and Life Sciences

16. Lead School/Institute:

Life Sciences [REG20100000]

17. Is this programme collaborative with another institution:

No

18. Awarding Institution(s):

University of Glasgow

19. Teaching Institution(s):

University of Glasgow

20. Language of Instruction:

English

21. Language of Assessment:

English

22. Relevant QAA Subject Benchmark Statements (see [Quality Assurance Agency for Higher Education](#)) and Other External or Internal Reference Points:

See QAA Benchmark Statement for Biosciences:

<http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/biosciences.asp>

23. Additional Relevant Information (if applicable):

Support for students is provided by the Postgraduate/Undergraduate Adviser(s) of Studies supported by University resources such LEADS (www.gla.ac.uk/myglasgow/leads/), Counselling & Psychological Services (www.gla.ac.uk/services/counselling/), the Disability Service (www.gla.ac.uk/services/studentdisability/) and the Careers Service (www.gla.ac.uk/services/careers/).

24. Online Learning:

No

25. Date of approval:

24/11/2017