

Nottingham Trent University Course Specification

Basic Course Information		
1.	Awarding Institution:	Nottingham Trent University
2.	School/Campus:	Science & Technology, Clifton Campus
3.	Final Award, Course Title and Modes of Study:	BSc (Hons) Biomedical Science FT/SW
4.	Normal Duration:	3 years FT, 4 years SW
5.	UCAS Code:	B940/350C

6.	Overview and general educational aims of the course
	<p>BSc (H) Biomedical Science is designed to provide you with a multidisciplinary approach to biomedical science through the study of aspects of macromolecules, cells, tissues, organs, microbiology and pharmacology with a focus on disease and disease prevention. You will study the key aspects of disease and disease prevention in both practical and theoretical contexts and utilize these when considering complex health issues. There is an emphasis on developing knowledge and understanding such that you acquire the skills, qualities and attributes expected by employers or for postgraduate studies and research.</p> <p>Biomedical science provides you with opportunities to study subjects such as infectious diseases, molecular biology, cellular pathology, immunology and aspects of haematology and blood transfusion. We offer you high quality, modern facilities for practical work and lectures. Practical work forms a large proportion of learning to ensure that you have extensive skills for employment or research.</p> <p>The BSc (H) Biomedical Science degree is accredited by the Institute of Biomedical Science (IBMS) and, subject to completing the IBMS Portfolio satisfactorily and gaining a Certificate of Competence, will allow a graduate to apply to the Health and Care Professions Council (HCPC) for entry on the Register for Biomedical Scientists. There is a specific area on the IBMS website for students, please visit this for more information.</p> <p>https://www.ibms.org/estudents/</p> <p>This course is offered in full time mode (three years) and sandwich mode (four years). In the sandwich mode you will spend a period of one year, during year three of the course, in a placement, such as a pharmaceutical company or hospital pathology laboratory.</p>
7.	Course outcomes
	<p>Course outcomes describe what you should know and be able to do by the end of your course if you take advantage of the opportunities for learning that we provide.</p>
Knowledge and understanding	
By the end of the course you should be able to:	
	<ol style="list-style-type: none"> 1. demonstrate knowledge and understanding of the essential facts, terminology, classification systems, major concepts, principles and theories of biomedical science, critically evaluating concepts and applying them in problem solving 2. identify current developments in biomedical science and the applications arising out of them 3. acquire, interpret and analyse biological information from a variety of sources 4. use and assess the values of a range of practical and presentation techniques and methodologies, including data analysis and use of statistics 5. demonstrate and understand complex ethical issues that subsequently arise from these applications and perceive how debate informs concern about the quality and sustainability of life

6. make appropriate and informed career management choices and be knowledgeable about entrepreneurial issues concerning their biomedical science

Skills, qualities and attributes

By the end of the course you should be able to:

7. analyse, interpret and evaluate data from a variety of sources
8. critically interpret scientific knowledge and data
9. apply scientific principles and methodologies in investigations
10. use equipment and materials competently
11. communicate effectively in written, graphical and oral formats
12. prepare and present scientific reports to professional standards
13. apply numerical skills
14. select, use and critically evaluate a variety of appropriate information sources
15. work independently and as part of a team developing the ability to work autonomously
16. demonstrate the skills required to plan, implement, draw conclusions, evaluate and report on a programme of research.

Note: all course learning outcomes map to the QAA benchmark statement for biomedical sciences.

8. Teaching and Learning Methods

In the majority of modules, your teaching and learning are focused on lectures supported by practical, laboratory classes and workshops. Much of the theory introduced in lectures is consolidated through these laboratory sessions and through small group seminars. Lecture material is supported through e-resources. The University Virtual Learning Environment (NOW) is widely used to post summary slides of lectures, resources such as articles and recent research papers and information about the organization of modules and the course.

Opportunities will exist for you to enhance your communication skills by writing reports in various formats, by producing posters and by giving oral presentations to your colleagues. Seminars are used to offer a small group teaching environment, often led by students' needs, to review, discuss and consider aspects of taught material from either lecture or laboratory classes.

Laboratory classes focus on hands-on acquisition of practical skills in the application of key principles, concepts and methods of Biomedical Science. Laboratory sessions involve problem solving, data collection and observation. Further time is allocated to the analysis, interpretation and evaluation of the results both inside and outside these practical classes. In this way you will develop your skills to undertake self-directed study and to become an autonomous, independent learner. You will also be expected to carry out supplementary reading and research to consolidate taught material. All of these practices are combined in your final year where you will undertake an individual period of research which will be laboratory or informatics based.

During the course of your studies, you will construct a Skills Portfolio. You will be required to compile a range of documents which will showcase your knowledge and skills and their usefulness for future employment. The skills portfolio may be viewed by potential employers to assess your suitability for taking on a particular role. The skills portfolio is an excellent way of demonstrating how employable you are in today's competitive job market.

9. Assessment Methods

The course uses a variety of assessment methods to enable you to demonstrate achievement of the learning outcomes. Subject knowledge and understanding are mainly tested through tests and examinations, preparation of case studies, write-ups of laboratory practical work and field work, oral and poster presentations.

Laboratory investigations are used to assess a range of intellectual and practical skills. Your ability to test hypotheses, observe, collate, present, interpret and evaluate findings of investigations is assessed through the preparation of laboratory reports.

Your communication skills, in written and oral formats are assessed at numerous points throughout the course. Laboratory reports, poster presentations, essays and examinations provide you with opportunities to demonstrate your writing skills. Oral presentations and verbal defences of posters offer ways for you to demonstrate your verbal communication skills, while the poster itself also allows for graphical and spatial skills to be expressed.

The overall balance of assessment on the course is 50% coursework and 50% examination at Level 4; 50% coursework and 50% examination at Level 5; and 40% coursework, 60% examination at Level 6. However, the assessment strategies used within a particular module are chosen to be the most appropriate for that aspect of study.

You will be given written feedback on all your assessed work to help you to develop your effectiveness as a learner and to achieve your goals.

10. **Course structure and curriculum**

The BSc (H) Biomedical Science degree is a 3-year full time or a 4 year sandwich course. The academic year comprises 30 weeks divided into 3 terms. Teaching and learning take place for 26 weeks with the final 4 weeks of each year being set aside for examinations. All modules on the degree are taught throughout the year, with the exception of Practical Techniques for Biology and Living Systems, which are taught in the first term of the first year, with the remaining modules being completed over terms 2 and 3.

Information on awards and degree calculations can be found at https://www4.ntu.ac.uk/adq/document_uploads/quality_handbook/138197.pdf

An Honours degree is awarded when you have successfully completed 360 credit points (cp) with 120 cp at each level.

The following interim awards can be achieved as outlined below:

An Ordinary degree is awarded if you have passed 120 cp at Level 4, 120 cp at Level 5 and a minimum of 60 cp at Level 6. Holders of an Ordinary Degree will have a wide knowledge of the essential concepts of a subject, and will have learned how to take different critical approaches and decision-making to solving problems. They will be able to communicate accurately in a variety of professional formats and will have the qualities needed for employment requiring the exercise of personal responsibility and some decision-making in complex and unpredictable contexts. The suggested minimum Course Learning Outcomes (CLO) are CLO1-6, 8-15, 18 allowing students to achieve a minimum of 300 cp.

A Diploma of Higher Education is awarded if you have successfully completed 120 cp at Level 4 and 120 cp at Level 5, but fewer than 60 cp at Level 6. Holders of a Diploma of Higher Education will have a wide knowledge of the essential concepts of the subject, and will have learned how to take different critical approaches to solving problems. They will be able to communicate accurately in a variety of professional formats and will have the qualities needed for employment requiring the exercise of personal responsibility and decision-making. The suggested minimum Course Learning Outcomes (CLO) are CLO1-6, 8-15 allowing students to achieve a minimum of 240 cp.

You can be awarded a Certificate of Higher Education if you have successfully completed 120 cp at Level 4 but fewer than 120 cp at Level 5. Holders of a Certificate of Higher Education will have a sound knowledge of the basic concepts of the subject, and will have learned how to take different approaches to solving problems. They will be able to communicate accurately and will have the qualities needed for employment requiring the exercise of some personal responsibility. The suggested minimum Course Learning Outcomes (CLO) are CLO1, 4, 8, 11, 12, 14 and 15 allowing students to achieve a minimum of 120 cp.

In addition to gaining one of the awards above, you can qualify for a Diploma in Professional Practice at pass, commendation or distinction level on successful completion of a one year placement. You can also be awarded a Certificate in Professional Practice on completion of a minimum of 6 weeks on placement (for example if you have completed a summer position).

The BSc (H) Biomedical Science degree is modular and addresses key aspects of biomedical science with particular relevance to the various pathology disciplines. The modules selected on the degree are designed to meet the course learning outcomes.

Modules are 20cp unless otherwise stated and are all core, i.e. there are no optional modules.

Level 4.

Introduction to Biochemistry
Living Systems

Practical Techniques for Biology
Genetics and Immunology
Human Physiology
Introduction to Microbiology

Level 5.

Metabolism and its Control
Molecular Biology and Protein Structure
Pathopharmacology
Clinical and Public Health Microbiology
Clinical Biochemistry
Biomedical Science in Practice

Level 6.

Research Project (40cp)
Immunology and Virology
Haematology and Transfusion Practice
Cellular Pathology
Infectious Diseases and their Control

11. **Admission to the course**

For current information regarding all entry requirements for this course, please see the 'Applying' tab on the course information web page.

The full UCAS entry profile for this course can be found at: <http://www.ucas.com/>

12. **Support for Learning**

We will work with you to ensure that you settle into your new academic environment and that your studies go well, and you will find that there are lots of people to support you at Nottingham Trent University.

All students at Nottingham Trent University have full access to Student Support Services. In addition, School based support networks are in place to offer you support, guidance and advice on academic and personal issues. Within the course, students experience the full support of the Biosciences Academic Team. The Academic Team Leader, with support from the Courses Manager, Course Leader, Module Leaders, and Tutors, takes responsibility for student support and guidance. The Module Leader will offer guidance and support to students taking each specific module.

Academic staff can be contacted by e-mail, telephone, letter, or in person.

As a new student you will experience a minimum of a 3 day induction period at the commencement of your first academic year. Induction will inform you about:

- Student Support Services at University, School and Course level;
- University policies and procedures on academic systems;
- Personal development planning;
- Timetable issues, room allocations and location;
- University, School and Course Handbooks;
- Enrolment procedures;
- Computing, IT and Library services;
- Health and Safety procedures.

During your induction you will be assigned a Tutor and informed about the best way to get in touch with your Course Leader and Module tutors. Every year, you will have regular time-tabled sessions with your Tutor, in small groups. Your course tutorials will help you to reflect on your approaches to study and make connections between modules, integrating material from across the curriculum and encouraging you to achieve your maximum potential. You will also have an opportunity to discuss and deal with any personal or course-related issues which may be affecting your studies and get advice on what support the university can offer. Course tutorials can also be used for personal development planning and skills development.

Student Mentors are also used to provide you with learning support. Student Mentors are typically students at Level 5 and above of their course, who provide some form of mathematics, academic writing or module-specific support. Such support is usually available on a 'help desk' basis.

The University provides a wide range of student services, where you can get support and advice on issues such as finance, dyslexia and disability, and personal problems.

http://www.ntu.ac.uk/student_services/index.html

For accommodation matters, University Accommodation Officers will provide you with information, guidance and continuing support, for example hall of residence, private rented accommodation, and the Landlord Approval Scheme. The Accommodation Services can be accessed through www.ntu.ac.uk.

13. **Graduate destinations / employability**

There is a wide range of career opportunities relation to biomedical science, or postgraduate studies, which our students enter on completion of the course. Employment opportunities include hospital laboratories, pharmaceutical industry laboratories, management and pharmaceutical sales, research and education.

14. **Course standards and quality**

The Course Committee, with staff and hospital and student representatives, operates to discuss matters arising on the course, review module feedback and consider the Course Standards and Quality report and external examiners' comments. Overarching responsibility for quality control lies with the School Academic Standards and Quality Committee whose remit is to provide guidance and support to academic courses. External Examiners offer further quality control through monitoring academic standards, moderation of assessment tasks and processes. An annual Biomedical Employers Forum ensures that our provision is relevant to NHS requirements.

15. **Assessment regulations**

This course is subject to the University's Common Assessment Regulations (located in its [Academic Standards and Quality Handbook](#)). Any course specific assessment features are described below:

16. **Additional Information**

Collaborative partner(s):

Course referenced to national QAA Benchmark Statements: Biomedical Sciences

Course recognised by: IBMS

Date implemented: September 2018

Any additional information: