

Course Specification

Course Summary Information			
1	Course Title		BSc (Hons) Biomedical Sciences
2	BCU Course Code	UCAS Code	US0625 C900
3	Awarding Institution		
4	Teaching Institution(s) (if different from point 3)		
5	Professional Statutory or Regulatory Body (PSRB) accreditation (if applicable)		

6	Course Description
	<p>Overview</p> <p>Do you want a career in biomedical sciences? Our practice-led degree offers a unique insight into human life processes, as well as disease and health within the population. You'll develop a range of practical and analytical skills, with the opportunity to put them into practice during an optional sandwich year work placement. This course is based at our newly extended state-of-the-art £71 million campus in Edgbaston, Birmingham.</p> <p>What's covered in this course?</p> <p>Biomedical sciences embrace a number of important disciplines, including physiology, biochemistry, cell biology, microbiology and genetics. These subjects are of great importance in the provision of healthcare, medical research and underpin the biotechnology and pharmaceutical industries. On this course you will learn about how the human body functions in health and disease, and develop an understanding of the diagnosis, management and treatment of a range of diseases. This degree emphasises critical thinking and independent problem solving skills, which will help you to navigate a successful career after graduation.</p> <p>Throughout this course you will acquire important practical and scientific skills whilst being taught in our new state-of-the-art life sciences laboratories. You will have the opportunity to take an optional sandwich-year placement in an industrial, clinical or research setting between years 2 and 3 of this course. In the final year you will undertake an independent Research Project where you will execute your own experiments under supervision.</p> <p>Graduates may go on to a range of careers directly or after further post-graduate training and study. These careers include medical laboratory assistants, trainee biomedical scientists, physician associates, clinical trials for drug companies, research assistants and research technicians, marketing assistants and medical and scientific representatives. Graduates may also use their qualifications to progress into teaching careers, as well as post-graduate study to obtain MSc, MPhil, Physician Associate/Assistant and PhD qualifications. Exceptional graduates may be able progress into post-graduate Medicine and Dentistry.</p>

7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
	Bachelor of Science with Honours Biomedical Sciences	6	360
7b	Exit Awards and Credits Awarded		
	Certificate of Higher Education Biomedical Sciences	4	120
	Diploma of Higher Education Biomedical Sciences	5	240
	Bachelor of Science Biomedical Sciences	6	300

8	Derogation from the University Regulations		
	Not applicable		

9	Delivery Patterns		
	Mode(s) of Study	Location	Duration of Study
	Full Time	City South	3 years
			Code
			US0625

10	Entry Requirements		
	<p>The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk/ or may be found by searching for the course entry profile located on the UCAS website.</p>		

11	Course Learning Outcomes		
1	Demonstrate understanding and scholarship of the diverse subjects encompassed by the biomedical sciences.		
2	Develop the learning qualities and reflective practices required to enhance your knowledge and further your professional training.		
3	Assess the breadth and complexities of human diseases and demonstrate knowledge of the underpinning causes, and the contemporary technologies, being developed to combat them.		
4	Demonstrate knowledge and understanding of the theory and application of the diverse subjects encompassed by the biomedical sciences		
5	Demonstrate aptitude and proficiency in a range of laboratory skills and techniques.		
6	Plan, implement and complete a piece of original scientific research and appropriately analyse and present data.		
7	Evidence networking and professional relationship skills and demonstrate elements of leadership and teamwork.		
8	Communicate effectively through different media and demonstrate competencies using different oral and visual methods for disseminating information to a range of audiences.		

9	Assess the advantages of collaborative working in a research and workplace environment in order to optimise the generation of ideas and information flow.
10	Demonstrate understanding of the requirements required for a career in a professional workplace or research environment.
11	Evidence the development of your portfolio detailing scientific skills and professional transferable employability skills acquired throughout the degree.
12	Assess the demands on the academic and professional scientific community to continue to combat current and emerging human diseases.
13	Assess the impact of disease and infection on different populations around the world and appreciate the ethical implications of contemporary therapies and treatments in culturally diverse societies.
14	Demonstrate an awareness of the spread of disease across international borders and the interventions of the global community to combat this.

12	Course Requirements																																																												
12a	<p>Level 4:</p> <p><i>In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):</i></p> <table border="1"> <thead> <tr> <th>Module Code</th> <th>Module Name</th> <th>Credit Value</th> </tr> </thead> <tbody> <tr> <td>BMS4000</td> <td>Biochemistry</td> <td>20</td> </tr> <tr> <td>BMS4002</td> <td>Fundamentals of Cell Biology</td> <td>20</td> </tr> <tr> <td>BMS4001</td> <td>Essential Skills for the Biosciences</td> <td>20</td> </tr> <tr> <td>BMS4004</td> <td>Introduction to Human Physiology</td> <td>20</td> </tr> <tr> <td>BMS4003</td> <td>Genetics</td> <td>20</td> </tr> <tr> <td>BMS4005</td> <td>Microbiology</td> <td>20</td> </tr> </tbody> </table> <p>Level 5:</p> <p><i>In order to complete this course a student must successfully complete all the following CORE modules (totalling 100 credits):</i></p> <table border="1"> <thead> <tr> <th>Module Code</th> <th>Module Name</th> <th>Credit Value</th> </tr> </thead> <tbody> <tr> <td>BMS5005</td> <td>Research Methods in Science and Engineering</td> <td>20</td> </tr> <tr> <td>BMS5001</td> <td>Clinical Biochemistry and Cellular Analysis</td> <td>20</td> </tr> <tr> <td>BMS5004</td> <td>Fundamental Principles of Pharmacology and Drug Development</td> <td>20</td> </tr> <tr> <td>BMS5000</td> <td>Blood Science</td> <td>20</td> </tr> <tr> <td>BMS5002</td> <td>Infectious Disease</td> <td>20</td> </tr> </tbody> </table> <p><i>In order to complete this course a student must successfully complete at least 20 credits from the following list of OPTIONAL modules.</i></p> <table border="1"> <thead> <tr> <th>Module Code</th> <th>Module Name</th> <th>Credit Value</th> </tr> </thead> <tbody> <tr> <td>BMS5006</td> <td>Work Placement</td> <td>20</td> </tr> <tr> <td>BMS5007</td> <td>Exploring careers in Biosciences</td> <td>20</td> </tr> </tbody> </table> <p>Level 6:</p> <p><i>In order to complete this course a student must successfully complete all the following CORE modules (totalling 80 credits):</i></p> <table border="1"> <thead> <tr> <th>Module Code</th> <th>Module Name</th> <th>Credit Value</th> </tr> </thead> <tbody> <tr> <td>BMS6004</td> <td>Research Project</td> <td>40</td> </tr> <tr> <td>BMS6002</td> <td>Molecular Basis of Disease</td> <td>20</td> </tr> <tr> <td>BMS6006</td> <td>Pathophysiology</td> <td>20</td> </tr> </tbody> </table>	Module Code	Module Name	Credit Value	BMS4000	Biochemistry	20	BMS4002	Fundamentals of Cell Biology	20	BMS4001	Essential Skills for the Biosciences	20	BMS4004	Introduction to Human Physiology	20	BMS4003	Genetics	20	BMS4005	Microbiology	20	Module Code	Module Name	Credit Value	BMS5005	Research Methods in Science and Engineering	20	BMS5001	Clinical Biochemistry and Cellular Analysis	20	BMS5004	Fundamental Principles of Pharmacology and Drug Development	20	BMS5000	Blood Science	20	BMS5002	Infectious Disease	20	Module Code	Module Name	Credit Value	BMS5006	Work Placement	20	BMS5007	Exploring careers in Biosciences	20	Module Code	Module Name	Credit Value	BMS6004	Research Project	40	BMS6002	Molecular Basis of Disease	20	BMS6006	Pathophysiology	20
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In order to complete this course a student must successfully complete at least 40 credits from the following list of OPTIONAL modules.

Module Code	Module Name	Credit Value
BMS6001	Applied Toxicology	20
BMS6003	New Technologies in Biomedicine	20
BMS6000	Control of Global Infectious Disease	20
BMS6005	Neuroscience	20
BMS6007	Immunology	20
BMS6008	Medical Pharmacology	20

12b Structure Diagram

Please note list of optional modules is indicative only. Students' choice will not be guaranteed for optional modules but a fair and transparent process will be adopted and shared with students.

Level 4

SEMESTER ONE	SEMESTER TWO
Core BMS4000: Biochemistry (20 credits) BMS4002: Fundamentals of Cell Biology (20 credits) BMS4001: Essential Skills for the Biosciences (20 credits)	Core BMS4004: Introduction to Human Physiology (20 credits) BMS4003: Genetics (20 credits) BMS4005: Microbiology (20 credits)

Level 5

Core BMS5005: Research Methods in Science and Engineering (20 credits) BMS5001: Clinical Biochemistry and Cellular Analysis (20 credits) BMS5004: Fundamental Principles of Pharmacology and Drug Development (20 credits)	Core BMS5000: Blood Science (20 credits) BMS5002: Infectious Disease (20 credits)
Optional BMS5006 Work Placement (20 credits) BMS5007 Exploring careers in Biosciences (20 credits)	

Level 6

Core BMS6002: Molecular Basis of Disease (20 credits)	Core BMS6006: Pathophysiology (20 credits)
Optional BMS6001: Applied Toxicology (20 credits) BMS6003: New Technologies in Biomedicine (20 credits)	Optional BMS6000: Control of Global Infectious Disease (20 credits) BMS6005: Neuroscience (20 credits) BMS6007: Immunology (20 credits)

	BMS6008: Medical Pharmacology (20 credits)
BMS6004: Research Project (40 credits)	

13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- *Scheduled Learning* includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- *Private Study* includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

Level 4

Workload

% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	274
Directed Learning	461
Private Study	465
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	50%
Exam	43%
In-Person	7%

Level 5

Workload

% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	227
Directed Learning	422
Private Study	551
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	67%
Exam	28%
In-Person	5%

Level 6**Workload****% time spent in timetabled teaching and learning activity**

Activity	Number of Hours
Scheduled Learning	400
Directed Learning	280
Private Study	570
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	74%
Exam	0
In-Person	26%