

# **Course Specification**

Cou	Course Summary Information			
1	Course Title		BSc (Hons) Biomedical Scier	nces
2	BCU Course	UCAS Code	US0625	C900
	Code			
3	Awarding Institution		Birmingham City University	
4	Teaching Institution(s)		N/A	
	(if different from point 3)			
5	Professional Statutory or		N/A	
	Regulatory Body (PSRB)			
	accreditation (if a	applicable)		

# 6 Course Description

#### Overview

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 state-of-the-art campus in Edgbaston, Birmingham.

#### What's covered in this course?

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.

Throughout this course you will acquire important practical and scientific skills whilst being taught in our 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.

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.

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	Code
Full Ti	ime	City South	3 years	US0625

# 10 Entry Requirements

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

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 Level 4:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
BMS4000	Biochemistry	20
BMS4002	Fundamentals of Cell Biology	20
BMS4001	Essential Skills for the Biosciences	20
BMS4006	Introduction to Human Anatomy and Physiology	20
BMS4003	Genetics	20
BMS4005	Microbiology	20

#### Level 5:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

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	20
	Drug Development	
BMS5000	Blood Science	20
BMS5002	Infectious Disease	20
BMS5008	Academic skills and career development	20

### Level 6:

In order to complete this course a student must successfully complete all the following

CORE modules (totalling 80 credits):

Module Code	Module Name	Credit Value
BMS6004	Research Project	40
BMS6002	Molecular Basis of Disease	20
BMS6006	Pathophysiology	20

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
BMS6008	Medical Pharmacology	20
BMS6003	New Technologies in Biomedicine	20
BMS6000	Control of Global Infectious Disease	20
BMS6007	Immunology	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	Core	
BMS4000: Biochemistry (20 credits)	BMS4006: Introduction to Human Anatomy and	
BMS4002: Fundamentals of Cell Biology (20	Physiology (20 credits)	
credits)	BMS4003: Genetics (20 credits)	
BMS4001: Essential Skills for the Biosciences (20 credits)	BMS4005: Microbiology (20 credits)	

## Level 5

Core	Core		
BMS5001: Clinical Biochemistry and Cellular	BMS5000: Blood Science (20 credits)		
Analysis (20 credits)	BMS5002: Infectious Disease (20 credits)		
BMS5004: Fundamental Principles of Pharmacology and Drug Development (20 credits)	BMS5005: Research Methods in Science and Engineering (20 credits)		
BMS5008 Academic skills and career development (20 credits)			

## Level 6

Core BMS6002: Molecular Basis of Disease (20 credits)	Core BMS6006: Pathophysiology (20 credits)
Optional  BMS6000: Control of Global Infectious Disease (20 credits)  BMS6003: New Technologies in Biomedicine (20 credits)  BMS6005: Neuroscience (20 Credits)	Optional  BMS6007: Immunology (20 Credits)  BMS6008: Medical Pharmacology (20 Credits)  BMS6009: Biology of Ageing (20 Credits)
BMS6004: Research Project (40 credits)	



## 13 Overall Student Workload and Balance of Assessment

#### Level 4

# **Workload**

22% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	276
Directed Learning	459
Private Study	465
Total Hours	1200

**Balance of Assessment** 

Assessment Mode	Percentage
Coursework	43 %
Exam	43 %
In-Person	14 %

### Level 5

# **Workload**

17% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	237
Directed Learning	336
Private Study	627
Total Hours	1200

**Balance of Assessment** 

Assessment Mode	Percentage
Coursework	55.00 %
Exam	18.00 %
In-Person	27.00 %

# Level 6

# **Workload**

30% time spent in timetabled teaching and learning activity

Please note that the exact hours will depend on which optional modules are taken.

Activity	Number of Hours
Scheduled Learning	394
Directed Learning	275
Private Study	531
Total Hours	1200

**Balance of Assessment** 

Assessment Mode	Percentage
Coursework	54 %
Exam	24 %
In-Person	22 %