

Course Specification

Course Summary Information		
1	Course Title	Foundation Certificate in Health Sciences Leading to BSc (Hons) Biomedical Science with Foundation Year
2	Course Code	US1504F
3	Awarding Institution	Birmingham City University
4	Teaching Institution(s) (if different from point 3)	
5	Professional Statutory or Regulatory Body (PSRB) accreditation (if applicable)	

6	Course Description
	Overview Our practice-led degree offers a fascinating insight into human life processes, as well as disease and health within the human population. You will develop a range of practical and analytical skills using our state-of-the-art life sciences labs. Our aim is to equip you with the skills and knowledge needed to progress into a variety of Biomedical Science careers. The course is in the final stages of approval for accreditation by the Institute of Biomedical Science (IBMS) Foundation Year The BSc (Hons) Biomedical Sciences with a Foundation Year course has been specifically designed to support your transition to degree-level study in Health Sciences. As a student, you will undertake a foundation year situated at level 3 study, which has been designed as a prelude to your chosen degree course, providing opportunities for you to develop your knowledge, skills and understanding. Your learning journey through your foundation year will provide a secure platform on which you can build throughout your academic career in higher education. As part of the foundation year, you will explore and develop number of essential academic, interpersonal and professional skills that will help you succeed in your future degree level studies. On successful completion of your foundation year, you are guaranteed to progress on to the first year of the BSc (Hons) Biomedical Sciences degree. If you are interested in progressing on to one of our other Health Sciences degrees, this will be subject to space available on those courses and meeting the relevant entry requirements, which may include passing an interview. What's covered in this course? Biomedical Science embraces a range of disciplines, including clinical biochemistry, human molecular genetics, cell biology, infection and immunity, and haematology and transfusion

	science. These subjects are of immense importance in healthcare provision and medical research, as well as underpinning the biotechnology and pharmaceutical industries. On this course you will learn how the human body functions during health and disease, and develop an understanding of the diagnosis, management, and treatment of a range of diseases. Throughout the programme you will gain important practical and scientific skills, developed by learning in our state-of-the-art life sciences laboratories where you will use industry standard equipment. In the final year you will complete an independent research project under the guidance of one of our academic staff, providing you with the opportunity to consolidate your learning on the course. When you graduate, a range of careers are open to you as well as the option for further postgraduate training and study. These careers include medical laboratory assistant, trainee biomedical scientist, conducting clinical trials for drug companies, research assistant and research technician, marketing assistant and medical and scientific sales representative. You could also use your qualification to progress into teaching, or undertake postgraduate study to obtain Master's, Physician Associate/Assistant or PhD qualifications. Exceptional graduates may be able to progress into postgraduate entry Medicine or Dentistry courses. You will be taught by our team of specialist academic staff who have a wealth of industry, clinical and research experience and will provide the expertise to support your learning throughout the course. We encourage a collaborative culture, so students feel able to seek support and guidance from academic and support staff and you will have the opportunity to contribute to the ongoing development of the course as part of the biomedical science community at the University.
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7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
7b	Exit Awards and Credits Awarded		
	Foundation Certificate in Health Sciences	Level 3	120

8	Variation from the University Regulations
	Not applicable

9	Delivery Patterns		
	Mode(s) of Study	Location(s) of Study	Duration of Study
	Full Time	City South	1 year
			Code(s)
			US1504F

10	Entry Requirements		
	Home:	The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk or may	
	EU:		
	International:		

	Access:	be found by searching for the course entry profile located on the UCAS website.
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11	Course Aims
1	Pursuing excellence: To establish a clear understanding of the requirements and expectations of academic study in higher education.
2	Practice-led, knowledge applied: To apply your knowledge and understanding to the processes and protocols of studies in higher education, and to begin to recognise their relevance in a range of subject disciplines and related professional context.
3	Interdisciplinarity: To recognise the interrelated nature of subjects and topics across a range of disciplines and their potential impact on related professions.
4	Employability-driven: To provide a foundation upon which knowledge and understanding can be built in preparation for related and relevant employment.
5	Internationalisation: To promote a global understanding of higher education.

12	Course Learning Outcomes
1	Demonstrate a commitment to continuing personal and professional development and career planning.
2	Demonstrate an ability to adapt behaviours in accordance with diverse cultural and individual factors.
3	Conduct yourself in a manner that is consistent with the values of your future profession.
4	Become an autonomous learner, who is confident, adaptable and capable of independent enquiry.
5	Demonstrate a wide range of transferable skills to appropriately prepare for higher levels of study and employment. Such as: communication and literacy; problem solving; presentation skills; independent learning and working; collaboration and teamwork; IT skills; and a reflective approach to learning

13	Course Learning, Teaching and Assessment Strategy
	Course Learning and Teaching The learning, teaching and assessment strategy reflects the commitment of the course team to deliver high quality teaching and learning experiences that will transform lives and empower students to become independent learners. Our teaching sessions are interactive where students are engaged and active participants who feel confident to ask questions, clarify understanding and to challenge key ideas presented. We know that students learn in a wide range of ways, so we incorporate different strategies that respond to their needs. The learning approaches that students may expect to engage in, include: - Workshops - Seminars - Lectures - Tutorials - Small group work - Independent study - Online learning via the virtual learning environment (Moodle) - Peer discussion and peer learning - Online lessons We are committed to supporting students to develop their technological skills to prepare them for future work, so we incorporate technology where possible to facilitate learning and teaching. We

offer a blended learning approach which includes both face-to-face teaching, and some online learning to support students in engaging in modules in different ways, which we utilise to meet the needs of our students.

Whilst studying with us, we expect students to become autonomous learners; we will set tasks for them to complete either in preparation for their next session, or as a directed learning task after a session. These tasks are designed to support students in extending their knowledge and understanding of key concepts and we expect full engagement with these. A key part of being an active and engaged learner is attendance in sessions, and therefore attendance is a requirement in all scheduled learning activities. In class, we encourage and expect full participation. We are strongly committed to promoting collaborative learning and in sessions we will work with students to support their developing skills. The team collectively appreciate the varied needs of students and work to ensure all needs are adequately met.

Assessment

Our assessment methods are designed based on the modules offered and in line with practice. We recognise that students respond well when there is a clear connection to their learning and assessment, and we provide support within each module to support students in understanding the assessment tasks and ways that they can be approached. We assess students' knowledge and understanding of the key concepts explored, and we will support them to further develop skills to strengthen graduate attributes. We know that students will need to draw upon a wide range of skills when working in their intended professions, so our assessment methods are designed to help them develop these.

Throughout the course we will offer different assessments that draw on a wide range of written and verbal skills. These may include (but are not limited to):

- Essays
- Posters
- Portfolios
- Projects
- Reflective journals
- Patchwork assessments
- Presentations
- Exams

Support is ongoing in all modules where students can receive formative feedback. In the formative submissions, students will receive feedback from their tutor either verbally (which is recorded) or written to identify strengths and areas of improvement prior to final submissions. Students will be supported by module leaders throughout the modules to ensure they understand the assessment. After each summative assignment submission, students will receive written, detailed, and individual 'feedback' to enable them to understand the grade they achieved on the work submitted and 'feedforward' which will provide key points to improve upon for their next submission.

All information about the assignments, including the marking criteria is made available to students at the start of each module. Tutors refer to this throughout teaching sessions and will plan for formative teaching opportunities when, for example, students may be asked to peer review other students work or projects, complete self-assessment tasks against learning outcomes, demonstrate current learning and thinking about a particular concept through preparing a short presentation or piece of writing.

14	Course Requirements																							
14a	Level 3: In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits): <table><tr><th>Module Code</th><th>Module Name</th><th>Credit Value</th></tr><tr><td>LSS3001</td><td>Academic Skills for Success</td><td>20 credits</td></tr><tr><td>LSS3003</td><td>Interpersonal and Communication Skills</td><td>20 credits</td></tr><tr><td>LSS3005</td><td>Negotiated Studies</td><td>20 credits</td></tr><tr><td>LSS3004</td><td>Health and Wellbeing in Society</td><td>20 credits</td></tr><tr><td>LSS3002</td><td>Introduction to Human Biology</td><td>20 credits</td></tr><tr><td>LSS3008</td><td>Analytical Skills for Life Sciences</td><td>20 credits</td></tr></table>			Module Code	Module Name	Credit Value	LSS3001	Academic Skills for Success	20 credits	LSS3003	Interpersonal and Communication Skills	20 credits	LSS3005	Negotiated Studies	20 credits	LSS3004	Health and Wellbeing in Society	20 credits	LSS3002	Introduction to Human Biology	20 credits	LSS3008	Analytical Skills for Life Sciences	20 credits
Module Code	Module Name	Credit Value																						
LSS3001	Academic Skills for Success	20 credits																						
LSS3003	Interpersonal and Communication Skills	20 credits																						
LSS3005	Negotiated Studies	20 credits																						
LSS3004	Health and Wellbeing in Society	20 credits																						
LSS3002	Introduction to Human Biology	20 credits																						
LSS3008	Analytical Skills for Life Sciences	20 credits																						

14b	Structure Diagram
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Level 3

SEMESTER ONE	SEMESTER TWO
LSS3001: Academic Skills for Success (20 credits) LSS3003: Interpersonal and Communication Skills (20 credits) LSS3002: Introduction to Human Biology (20 credits)	LSS3005: Negotiated Studies (20 credits) LSS3004: Health and Wellbeing in Society (20 credits) LSS3008: Analytical Skills for Life Sciences (20 credits)

15	Overall Student Workload and Balance of Assessment
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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 3

Workload

16% time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	196 hours
Directed Learning	280 hours
Private Study	724 hours
Total Hours	1200 hours

Balance of Assessment

Assessment Mode	Percentage
Coursework	56.5%
Exam	26.5%
In-Person	17%

Course Specification

Course Summary Information		
1	Course Title	BSc (Hons) Biomedical Science
2	Course Code	US1504
3	Awarding Institution	Birmingham City University
4	Teaching Institution(s) (if different from point 3)	Not applicable
5	Professional Statutory or Regulatory Body (PSRB) accreditation (if applicable)	Institute of Biomedical Science (IBMS)

6	Course Description
	Course overview: Accredited by the Institute of Biomedical Science (IBMS), our practice-led degree offers a fascinating insight into human life processes, as well as disease and health within the human population. You will develop a range of practical and analytical skills using our state-of-the-art life sciences labs. Our aim is to equip you with the skills and knowledge needed to progress into a variety of Biomedical Science careers. If your goal is to work within the NHS as a Biomedical Scientist, completion of an IBMS-accredited degree will mean you can apply for trainee Biomedical Scientist roles. You could then go on to complete the IBMS registration training portfolio, which is a pre-requisite for full qualification in this role and potential registration with the Health and Care Professions Council. What is covered in this course? Biomedical Science embraces a range of disciplines, including clinical biochemistry, human molecular genetics, cell biology, infection and immunity, and haematology and transfusion science. These subjects are of immense importance in healthcare provision and medical research, as well as underpinning the biotechnology and pharmaceutical industries. On this course you will learn how the human body functions during health and disease, and develop an understanding of the diagnosis, management, and treatment of a range of diseases. Throughout the programme you will gain important practical and scientific skills, developed by learning in our state-of-the-art life sciences laboratories where you will use industry standard equipment. In the final year you will complete an independent research project under the guidance of one of our academic staff, providing you with the opportunity to consolidate your learning on the course. When you graduate, a range of careers are open to you as well as the option for further postgraduate training and study. These careers include medical laboratory assistant, trainee biomedical scientist, conducting clinical trials for drug companies, research assistant and research technician, marketing assistant and medical and scientific sales representative. You could also use your qualification to progress into teaching, or undertake postgraduate study to obtain Master's, Physician Associate/Assistant or PhD qualifications. Exceptional graduates may be able to progress into postgraduate entry Medicine or Dentistry courses.

	You will be taught by our team of specialist academic staff who have a wealth of industry, clinical and research experience and will provide the expertise to support your learning throughout the course. We encourage a collaborative culture, so students feel able to seek support and guidance from academic and support staff and you will have the opportunity to contribute to the ongoing development of the course as part of the biomedical science community at the University.
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7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
	Bachelor of Science with Honours Biomedical Science	Level 6	360
	Bachelor of Science with Honours Biomedical Science with Foundation Year	Level 6	480
7b	Exit Awards and Credits Awarded		
	Unaccredited:		
	Bachelor of Science Human Biosciences	Level 6	300
	Diploma of Higher Education Human Biosciences	Level 5	240
	Certificate of Higher Education Human Biosciences	Level 4	120

8	Variation from the University Regulations
	This course has approved variations to the University's Academic Regulations. These can be accessed via the student contract page: https://www.bcu.ac.uk/student-info/student-contract

9	Delivery Patterns			
Mode(s) of Study		Location(s) of Study	Duration of Study	Code(s)
Full time		City South	3 years	US1504

10	Entry Requirements
	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.

11	Course Aims
	The BSc (Hons) Biomedical Science course aims to develop competent, professional, and independent graduates with the technical and transferable skills to succeed in a range of Bioscience careers.

12	Course Learning Outcomes
1	Apply and integrate a coherent and detailed knowledge of the core biomedical science disciplines of clinical biochemistry, cellular pathology, clinical immunology, human molecular genetics, medical microbiology and haematology and transfusion science to evaluate complex case studies
2	Critically analyse the underpinning causes of a range of human diseases, and the contemporary technologies being developed to prevent, diagnose, and treat them

3	Select and apply laboratory methods in biomedical science to generate and report experimental data, in the context of professional practice
4	Select, justify, and apply a range of qualitative and quantitative methods to analyse, interpret and report the results of laboratory tests
5	Apply a coherent and detailed knowledge of quality assurance to make judgements on the reliability of diagnostic laboratory test data
6	Develop and investigate original research questions using qualitative and quantitative methods, considering any safety, ethical and regulatory concerns
7	Select and critically evaluate information from data and current scientific literature, including journals, to develop and sustain a coherent argument
8	Apply a range of professional transferable skills required for graduate employment (e.g. communication, numerical, problem solving, critical analysis, resilience, team working, leadership, networking, digital ICT skills etc.)
9	Communicate complex scientific information effectively to a range of audiences in written and oral formats in an accurate, and clear manner following scientific conventions
10	Use evidence to evaluate personal and professional development in the context of biomedical science and engage in continuing professional development

13	Level Learning Outcomes
	<i>Upon completion of Level 4 / the Certificate of Higher Education, students will be able to:</i>
1	Explain and evaluate fundamental scientific concepts in biomedical science
2	Apply a range of fundamental laboratory techniques in biomedical science, to acquire and report experimental data
3	Organise, present, and interpret qualitative and quantitative data, to develop coherent arguments in accordance with basic theories and concepts in biomedical science
	<i>Upon completion of Level 5 / the Diploma of Higher Education, students will be able to:</i>
1	Explain and evaluate key scientific concepts in biomedical science and apply them outside the context in which they were first studied
2	Select and apply a range of fundamental laboratory techniques in biomedical science, to acquire and report experimental data
3	Apply knowledge of qualitative and quantitative research methods in biomedical science to assess scientific literature and to develop novel research questions, and hypotheses
4	Engage in teamwork, and communicate information and ideas clearly and accurately using a range of written and verbal formats
	<i>Upon completion of 60 credits at Level 6 / the Bachelor's Degree, students will be able to:</i>
1	Apply and integrate a coherent and detailed knowledge of a range of biomedical science disciplines to evaluate complex case studies
2	Critically analyse the underpinning causes of a range of human diseases, and the contemporary technologies being developed to prevent, diagnose, and treat them
3	Select and critically evaluate information from data and current scientific literature, including journals, to develop and sustain a coherent argument
4	Communicate complex scientific information effectively to a range of audiences in written and oral formats in an accurate, and clear manner following scientific conventions

14	Course Learning, Teaching and Assessment Strategy
	The curriculum design has been informed by the latest research and practice, with input from a range of employers, to ensure that graduates have the skills and experiences needed for a career in biomedical science, or more broadly in the life sciences sector.

The course is delivered using a combination of scheduled and directed learning, supplemented with students own independent study. Scheduled classes will include lectures, smaller group workshops to consolidate students learning, and laboratory practical's to develop key lab and data handling skills.

Lectures may be delivered in-person or as hybrid and recorded to support accessibility. A range of digital technologies are used to enhance the students learning experience (e.g. LT LabStation, Anatomy TV & Anatomage tables, polling software), and each module has its own dedicated Moodle page.

A variety of assessment formats will be used including formal closed book examinations, as well as a range of authentic assessments to support the development of practical employability skills, including individual and group presentations, laboratory reports, case studies employing data analysis and problem solving, literature reviews, research proposals, and a capstone project. Opportunities for formative feedback will be provided in all modules to support students in preparing for summative assessments.

15 Course Requirements

15a 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
BMS4001	Essential Skills for the Biosciences	20
BMS4000	Biochemistry	20
BMS4008	Cell and Molecular Biology	20
BMS4005	Microbiology	20
BMS4010	Human Anatomy and Physiology	20
BMS4012	Introduction to Pharmacology	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
BMS5013	Professional Skills in Biomedical Science	20
BMS5011	Infectious Disease and Immunity	20
BMS5009	Clinical Biochemistry	20
BMS5010	Haematology and Transfusion Science	20
BMS5012	Pathophysiology and Cellular Pathology	20
BMS5014	Research Methods in Biosciences	20

Level 6:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 100 credits):

Module Code	Module Name	Credit Value
BMS6004	Research Project	40
BMS6014	Integrated Studies	20
BMS6013	Human Molecular Genetics	20
BMS6011	Clinical Immunology	20

In order to complete this course a student must successfully complete at least 20 credits from the following indicative list of OPTIONAL modules.

Module Code	Module Name	Credit Value
BMS6009	Biology of Ageing	20
BMS6000	Control of Global Infectious Disease	20

15b 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 BMS4001: Essential Skills for the Biosciences (20 Credits) BMS4000: Biochemistry (20 Credits) BMS4008: Cell and Molecular Biology (20 Credits)	Core BMS4005: Microbiology (20 Credits) BMS4010: Human Anatomy and Physiology (20 Credits) BMS4012: Introduction to Pharmacology (20 Credits)

Level 5

Core BMS5013: Professional Skills in Biomedical Science (20 Credits) BMS5011: Infectious Disease and Immunity (20 Credits) BMS5009: Clinical Biochemistry (20 Credits)	Core BMS5010: Haematology and Transfusion Science (20 Credits) BMS5012: Pathophysiology and Cellular Pathology (20 Credits) BMS5014: Research Methods in Biosciences (20 Credits)
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Level 6

Core BMS6013: Human Molecular Genetics (20 Credits)	Core BMS6014: Integrated Studies (20 Credits) BMS6011: Clinical Immunology (20 Credits)
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BMS6004 Research Project (40 Credits)

Optional

BMS6009: Biology of Ageing (20 Credits)

BMS6000: Control of Global Infectious Disease (20 Credits)

16 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 3rd year optional modules and research project 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

21 % time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	252
Directed Learning	312
Private Study	636
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	38
Exam	31
In-Person	31

Level 5

Workload

21 % time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	250
Directed Learning	272
Private Study	678
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	38.5
Exam	23
In-Person	38.5

Level 6

Workload

14 % time spent in timetabled teaching and learning activity

Activity	Number of Hours
Scheduled Learning	168
Directed Learning	259
Private Study	773
Total Hours	1200

Balance of Assessment

Assessment Mode	Percentage
Coursework	54.5
Exam	9.1
In-Person	36.4