



UNIVERSITY OF
PORTSMOUTH

COURSE SPECIFICATION

BSc (Hons) Applied Biomedical Science Degree Apprenticeship

**Academic Standards, Quality and Partnerships
Department of Student and Academic Administration**

October 2021

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COURSE SPECIFICATION

Course Title	<i>BSc (Hons) Applied Biomedical Science Degree Apprenticeship</i>
Final Award	<i>BSc (hons)</i>
Exit Awards	<i>CertHE, DipHE, BSc.</i>
Course Code / UCAS code (if applicable)	<i>U2849PDC</i>
Mode of study	<i>Part-time</i>
Mode of delivery	<i>Campus and Distance Learning</i>
Normal length of course	<i>4 years</i>
Cohort(s) to which this course specification applies	<i>2021-22</i>
Awarding Body	<i>University of Portsmouth</i>
Teaching Institution	<i>University of Portsmouth</i>
Faculty	<i>Faculty of Science</i>
School/Department/Subject Group	<i>School of Pharmacy and Biomedical Sciences</i>
School/Department/Subject Group webpage	<i>http://www2.port.ac.uk/school-of-pharmacy-and-biomedical-sciences/</i>
Course webpage including entry criteria	
Professional and/or Statutory Regulatory Body accreditations	<i>Institute of Biomedical Science</i>
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	<i>Level 6</i>

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the [Course and Module Catalogue](#) for further information on the course structure and modules.

Educational aims of the course

General Aims

- To provide a challenging, enterprising and coherent programme of study enabling apprentices to understand and apply the skills, knowledge and attributes required by Biomedical Scientists.
- To develop students' critical, analytical, practical, numeracy, research and communication skills.
- To equip students with the necessary transferable skills for life-long independent learning, acquisition of knowledge and employability and to engender an awareness of the needs for these skills.
- To provide students with the skills and knowledge required to register with the Health and Care Professions Council following graduation and become Biomedical Scientists.

Subject specific aims

- To provide students with a course of study that equips them with the knowledge and skills to complete the IBMS Registration Portfolio and integrated End Point Assessment (EPA).
- To provide an apprenticeship that meets the National Framework for Degree Apprentices which allows progression within a clinical laboratory setting.
- To provide students with the opportunity to gain the skills and knowledge necessary to complete their studies, register with the Health and Care Professions Council (HCPC) as a Biomedical Scientist, and to use this protected title following completion of their degree.
- To augment student's practical skills learned in the workplace with the theoretical knowledge required to understand the work required of them. This includes, but is not limited to: the theory underpinning a range of selected tests, normal biological processes, pathological processes of a range of health related conditions, basic statistics and their applications and reflective learning practice.
- To develop student's critical, analytical, practical, numeracy, research, problem solving and communication skills.
- To develop student's awareness, understanding and application of the ethical considerations and constraints of their work in both clinical practise and research.
- To equip students with the key and transferable skills necessary for life long independent learning and the acquisition of knowledge whilst engendering an awareness of the needs for these skills.
- To provide students with the skills, knowledge and abilities required to maximise their employability and their opportunities for post-graduation study and training in their chosen career.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The [Quality Assurance Agency for Higher Education \(QAA\)](#) sets out a national framework of qualification levels, and the associated standards of achievement are found in their [Framework for Higher Education Qualifications](#) document.

The Course Learning Outcomes for this course are outlined in the tables below.

A. Knowledge and understanding of:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
A1	the appropriate use of biomedical terminology and nomenclature such that complex anatomy, physiology, histology, haematology, biochemistry, genetics, immunology, microbiology and molecular biology can be related to, and reported on, human disease.	A broad foundation of knowledge is laid at stage 1. As students progress through stages 2 and 3 they gain a more detailed and advanced knowledge of the subject. Core knowledge is developed at University mainly via formal lectures, laboratory practical classes, seminars, problem-based and flipped learning workshops and directed study. In the workplace this is achieved by workshops, tutorials and practical demonstrations utilizing a watch – one, do-one approach. Following a demonstration of proficiency, students will be able to perform a limited range of practical techniques independently but under supervision. The three years of workplace learning provides sufficient evidence that the Institute of Biomedical Science (IBMS) Registration Portfolio and Healthcare Science (practitioner) apprenticeship standards can be achieved by the point of graduation. Theoretical knowledge is supported and applied specifically during laboratory investigations, seminars and problem-based learning workshops.	Assessment is by unseen examinations, in-class tests and MCQs, practical reports, essays, case studies, oral and poster presentations and project reports. Some assessments are by group work and others are produced by students on an individual basis. A series of portfolios will be completed, the evidence from which documents the students engagement with the apprenticeship training (including evidence that the minimum requirement of 20% off the job training has been adhered to) and can be used as evidence that the requirements of IBMS Registration Portfolio and End Point Assessment can be met. Formative assessment is included in all units and the approach varies and includes MCQ tests both online and during lectures, mock tests and feedback on draft essays, laboratory and project reports and portfolio contents. Assessment progresses from an emphasis on coursework and short answer assessments at level 4 towards fewer, more integrative and
A2	of how diseases develop, how they affect the normal function of the human body, and the interventions that can be utilised for their management.		
A3	the quantitative and qualitative evaluation of analytes employed to aid the diagnosis, screening and monitoring of health and disease.		
A4	the planning, design and performance of a research project and the awareness of the need for good laboratory practices, data analysis using appropriate statistics, health and safety and ethical considerations.		
A5	theoretical principles that underpin practical skills required to meet: The standards included within the IBMS registration portfolio and the Healthcare Science (practitioner) standards.	There is also a focus on rigorous experimental and research design, data analysis, the interpretation and reporting of experimental findings thus providing students with the opportunity to apply their knowledge. All apprenticeship students conduct an independent, practice-based research project, a part of which involves data analysis and carrying out a library-based interrogation of their research subject area.	

			synoptic assessments at level 6.
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B. Cognitive (Intellectual or Thinking) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	formulate and test hypotheses	Intellectual skills are developed through lectures, seminars, tutorials, workshops and practical classes, which encourage integration and application of concepts and analysis. Student-centred activities, such as selected essays, problem-based learning case studies using clinical data, presentations and projects encourage research, evaluation, synthesis and application of knowledge together with awareness of current issues. The final year practice-based research project develops skills in formulating and testing hypotheses and conducting a programme of research. Data analysis, evaluation and interpretation skills are developed through lectures, seminars, workshops and through a comprehensive programme of practice based training at the hosting clinical laboratory workplace. These skills are applied via practical components of the course, including the final year research project.	Assessment is by seen and unseen examinations including data interpretation and critique, practical reports, oral and poster presentations, essays, reviews and clinical case studies, a project report and a series of workplace-based portfolios. In general, assessments are directed towards interpretation at level 4, analysis at level 5 and critical evaluation and synthesis at level 6 although students are encouraged to develop these skills throughout the course. Cognitive skills are also assessed via the Practice-based portfolios which are aligned with generative evidence for the IBMS Registration Portfolio and demonstrating the student can meet the Healthcare Science (practitioner) apprenticeship standards. Formative assessment is used at all levels and the approach varies including MCQ tests both online and during lectures, mock tests and feedback on draft essays, laboratory and project reports, as appropriate.
B2	plan, conduct, evaluate and report a programme of research.		
B3	research, select, synthesise and apply information from a variety of sources, theoretical principles and practical procedures to a variety of situations.		
B4	analyse, evaluate, interpret and integrate data in a number of formats and from a variety of sources to make evidence-based decisions.		
B5	marshal thoughts to demonstrate an in-depth knowledge of selected topics and apply them to unfamiliar problems.		

C. Practical (Professional or Subject) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1	proficiently perform biomedical investigations in compliance with current good laboratory practises, health and safety, quality assurance and quality control guidelines in both university and diagnostic laboratories.	Practical skills and the application of theory to practice is predominantly by workplace training spanning the three years of the apprenticeship. Additional skills are developed via laboratory classes, demonstrations, workshops, video, simulations, and the practice-based project. Students learn the basic laboratory procedures, health and safety and the application of statistics to basic laboratory findings at level 4 at both the University and Workplace and then gain more in depth practical experience at level 5. At level 6, students complete their independent practice-based research project, providing a capstone experience, undergo IBMS Registration Portfolio verification and End Point Assessment.	Assessment is by laboratory, portfolio and project reports including practice-based proficiency testing at level 4. Continued assessment of practical skills is completed throughout the course by qualified staff within the NHS training laboratory. The workplace project supervisor's assessment of bench skills is summatively assessed during the level 6 project whereas assessing student engagement and understanding of the literature and data analysis is assessed via practical reports, case studies, project report and End Point Assessment.
C2	to demonstrate competence in a range of procedures and protocols to meet the requirements of the Healthcare Science (practitioner) level 6 degree apprenticeship standards.		
C3	critically appraise the literature, analyse primary and secondary data and prepare referenced scientific reports.		
C4	Evaluate published claims through a variety of means to inform decisions and make judgements in an evidence-based manner.		
C5	formulate and conduct a research investigation in accordance with ethical guidelines.		

D. Transferrable (Graduate and Employability) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	take responsibility for the planning and execution of their own current and future learning.	Transferable skills via lectures, practical/IT classes, worked examples, subject-specific and generic tutorials, oral and poster presentations, assignments (including careers-related exercises embedded within workplace training, literature review and project) individual and group work and review of	These are assessed through a variety of summative artefacts including peer-assessed group work reports, individual reports, worksheets, practice-based portfolios and the final project thesis.
D2	communicate effectively using a range of media and information technology.		
D3	demonstrate numerical and written skills appropriate to a scientist.		

D4	work effectively both independently and as part of a team.	personal development.	Students are required to plan their practice-based research projects, identify appropriate resources and propose action plans prior to the start of their project which are subject to summative assessment. Numerical and written skills are assessed throughout the course including data interpretation and critique, practical reports, oral and poster presentations, essays, reviews and clinical case studies.
D5	Identify and use appropriate resources (human and physical) to enable successful completion of a task.		

Academic Regulations

The current University of Portsmouth [Examination and Assessment Regulations](#) will apply to this course.

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the [MyPort](#) student portal.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our [Policy for Listening to and Responding to the Student Voice](#) where you can also find further information.

Reference Points

The course and outcomes have been developed taking account of:

Insert additional reference points or delete as required

- [University of Portsmouth Curriculum Framework Specification](#)
- [University of Portsmouth Vision 2030 and Strategy 2025](#)
- [University of Portsmouth Code of Practice for Work-based and Placement Learning](#)
- [Quality Assurance Agency UK Quality Code for Higher Education](#)
- [Quality Assurance Agency Qualification Characteristic Statements](#)
- [Quality Assurance Agency Subject Benchmark Statement Biomedical Sciences, 2019](#)
- [Quality Assurance Agency Framework for Higher Education Qualifications](#)
- Requirements of Professional and/or Statutory Regulatory Bodies: **Institute of Biomedical Science (IBMS)**
- [Healthcare science \(practitioner\) level 6 apprenticeship standards](#)

- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth’s academic members of staff

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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