UNIVERSITY OF WOLVERHAMPTON

Course Specification

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Core Information

Awarding Body / Institution:	University of Wolverhampton		
School / Institute:	School of Pharmacy and Life Sciences		
Course Code(s):	BM064H01UM	Full-time	3 Years
UCAS Code:	B120		
Course Title:	BSc (Hons) Healthcare Science (Physiological Sciences)		
Hierarchy of Awards:	Bachelor of Science with Honours Healthcare Science (Physiological Sciences) Bachelor of Science Healthcare Science (Physiological Sciences) Diploma of Higher Education Healthcare Science (Physiological Sciences) Certificate of Higher Education Healthcare Science (Physiological Sciences)		
Language of Study:	English		
Date of first cohort:	14/Sep/2026		
Specification valid from:	2025/6		

Academic Staff

Course Leader:	Marie Tolley
Head of Department:	

Course Information

Location of Delivery:	University of Wolverhampton
Category of Partnership:	Standard Provision (Not delivered in partnership)
Teaching Institution:	University of Wolverhampton
Open / Closed Course:	This course is open to all suitably qualified candidates.

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS

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GCSE English and Maths at grade C+/4 or above. Equivalences are accepted.

PLUS EITHER

A Level minimum of BBB (120 UCAS points) to preferably include Biology.

BTEC L3 Extended Diploma or OCR Cambridge L3 Technical Extended Diploma in Applied Science - grades DDM.

Access to HE Diploma Full Award (60 credits), with 45 L3 credits of which 36 credits must be Science based and achieved at Distinction with the remainder at Merit (120 UCAS points equivalent).

T Level: Science, Healthcare Science at grade M

Completion of a foundation year at university in a relevant subject area.

You will be required to complete a Disclosure and Barring Service (DBS) check and an Occupational Health assessment.

Students must usually have studied for a minimum of two years post GCSE level. However, we will consider applications from mature students who do not have two years of post-16 study, where they have relevant work experience.

Distinctive Features of the Course:

The BSc (Hons) Healthcare Science (Physiological Sciences) course prepares you for a career as a Healthcare Science Practitioner through a strong integration of academic learning and extensive clinical placement experience. Unlike purely academic pathways, this programme embeds clinical training throughout all years of study, giving you early and sustained experience in NHS diagnostic departments.

This course is designed to develop your knowledge and understanding of normal anatomy and physiology of your chosen specialism, cardiac or respiratory and sleep physiology. For your specialism you will learn about normal physiology and pathophysiological changes diagnostic techniques and therapeutic options. During your clinical placement, you will put the theoretical knowledge into practice, developing practical competencies in diagnostic investigations to record physiological measurement, patient interaction, and therapeutic interventions.

Clinical placements are a core and mandatory component of this programme. You will complete supervised training in NHS Cardiac Physiology or Respiratory and Sleep departments, depending on your chosen specialism. Training includes both observation and hands-on practice under supervision, with progressive development from basic tasks to more advanced diagnostic procedures. These placements are aligned with the National School of Healthcare Science (NSHCS) Practitioner Training Programme (PTP) expectations and help you build confidence and readiness for practice. By working

alongside registered physiologists and wider multidisciplinary teams, you will learn how clinical data is acquired, validated, and used to guide patient care.

Key features of the course include;

- Mandatory, structured clinical placements embedded throughout the programme, beginning at Level 4, enabling early exposure in the clinical skills laboratory and progressing to clinical environments.
- Development of core patient-facing skills, including communication, consent, professionalism, and patient-centred care.
- Specialist pathways in Cardiac Physiology or Respiratory and Sleep Physiology.
- Practical learning embedded within NHS services, guided by clinical educators and workplace supervisors.
- Clear alignment to NSHCS PTP curriculum and AHCS Standards of Proficiency.
- Access to simulation facilities to support skills development to prepare for real-world practice.
- Strong employer engagement to support employability and future career planning.
- A final-year research project linked to clinical practice or service development.

Through academic study and structured clinical learning, supervised practice, and a competency-based portfolio, you will develop the professional, technical, and interpersonal skills required for registration as a Healthcare Science Practitioner.

Educational Aims of the Course:

Intakes:

September

Major Source of Funding:

Office for Students (OFS)

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2025/6	H	Full Time / Sandwich	£9535.00
2025/6	Overseas	Full Time / Sandwich	£17000.00
2026/7	H	Full Time / Sandwich	£9790.00
2026/7	Overseas	Full Time / Sandwich	£18700.00

PSRB:

None

Course Structure:

September (Full-time)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Part time students study alongside full time students. However, they do not study more than 90 credits in each academic calendar year.

Module	Title	Credits	Period	Type
4BM049	Succeeding at University in Healthcare Science	30	YEAR	Core
4BM050	Scientific Basis of Cardiovascular Respiratory and Sleep Science	30	YEAR	Core
4BM042	Molecular and Cell biology	30	SEM1	Core
4BM043	Introduction to Human Anatomy and Physiology	30	SEM2	Core

September (Full-time)

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

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Module	Title	Credits	Period	Type
5BM100	Physiology and Pathophysiology	30	YEAR	Core
5BM103	Professional Development in Healthcare Science I	30	YEAR	Core

Option Group 01 | Min Value: 30 | Max Value: 30

Select 5BM098 if you are following the cardiac route.
Select 5BM101 if you are following the respiratory and sleep physiology route.

5BM098	Cardiac Physiology I	30	SEM1	Core/Option	Marie Tolley
5BM101	Respiratory and Sleep Physiology I	30	SEM1	Core/Option	Emma Munro

Option Group 02 | Min Value: 30 | Max Value: 30

Select 5BM099 if you are following the cardiac route.
Select 5BM102 if you are following the respiratory and sleep physiology route.

5BM099	Cardiac Physiology II	30	SEM2	Core/Option	Marie Tolley
5BM102	Respiratory Physiology II	30	SEM2	Core/Option	Emma Munro

September (Full-time)

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Part time students study alongside full time students. However, they do not study more than 90 credits

in each academic calendar year.

Module	Title	Credits	Period	Type
6BM080	Professional Development in Healthcare Science II	20	YEAR	Core
6BM067	Research Project	30	YEAR	Core
6BM081	Professional Final Assessment	10	SEM2	Core

Option Group 01 | Min Value: 60 | Max Value: 60

Select 6BM079 if you are following the cardiac route.
Select 6BM078 if you are following respiratory and sleep physiology route.

6BM079	Advanced Respiratory and Sleep Physiology	60	YEAR	Core/Option	Emma Munro
6BM078	Advanced Cardiac Physiology	60	YEAR	Core/Option	Marie Tolley

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

Learning, Teaching and Assessment

Regulations Exemption:

Section 3.6.9 - Exemption to offer an alternative degree, if a student takes a break in study, as a placement cannot be guaranteed after returning from a period of absence.

Section 4.2.1 - Exemption in accordance with competency requirements stipulated by the National School of Healthcare Science (NSHCS). All pieces of summative assessment should be components and must achieve a passing grade.

Section 4.5.1 - Exemption to align compulsory placement activity in NHS Trusts with the completion of taught modules. Progression from Level 4 to Level 5 and from Level 5 to Level 6 is based upon the successful completion of at least 90 credits within one academic year in full-time mode of study which must include all of the specialist modules at Level 4 and Level 5.

Section 4.5.2 - There will be no right to re-take specialist modules at Level 4 or Level 5 prior to prior to progressing to the next level of study. Students who are unable to progress will be offered a transfer to an alternative degree which does not include compulsory NHS placement activity.

Section 4.6.2 - Exemption in accordance with competency requirements stipulated by the NHS National School of Healthcare Science (NSHCS). Compensation will not be permitted for any modules.

Reference Points:

UK Quality Code for Higher Education

Qualifications and Credit Frameworks

Subject Benchmark Statements

University Policies and Regulations

Equality Act 2010: guidance - GOV.UK

Practitioner Training Programme (PTP) - BSc (Hons) Healthcare Science - Cardiovascular, Respiratory and Sleep Sciences 2016/17

Good Scientific Practice (GSP). Professional Standards of Behaviour and Practice for Healthcare Scientists (2025; v1.7)

AHCS Standards of Education and Training (SET) for Undergraduate and Postgraduate Programmes (2024; v2.2)

Overview of Assessment:

As part of the course approval process, the course learning outcomes were mapped to each of the modules forming the diet of the programme of study. This process confirmed that all course learning outcomes can be met through successful completion of the modules. This mapping applies to the final award as well as to all of the intermediate awards.

Learning Outcomes	Modules
CERTHE01 Demonstrate knowledge of the underlying concepts, theories and principles associated with your area(s) of study (Knowing).	
CERTHE02 Evaluate, interpret and apply data, to develop ideas and discussion in your subject(s) of study (Knowing).	
CERTHE03 Use different approaches to solving problems related to your area(s) of study (Doing).	
CERTHE04 Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments (Doing).	
CERTHE05 Identify and undertake further training and develop new skills to support your learning (Being).	
CERTHE06 Identify personal qualities and transferable skills necessary for further study and/or employment (Being).	
DIPHE01 Demonstrate knowledge and application of the concepts and principles of your area(s) of study (Knowing).	
DIPHE02 Demonstrate the application of those principles in an employability and/or professional practice context (Knowing).	
DIPHE03 Identify and use methods of enquiry in the subject(s) and evaluate the appropriateness of different approaches to solving problems in study (Doing).	
DIPHE04 Use a range of new and established techniques to explore and critique data and sources of information, to solve problems within your subject (Doing).	
DIPHE05 Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences (Being).	
DIPHE06 Show personal responsibility and decision-making to developing existing skills and acquire new competences that will enable you to reach your employability goals (Being).	

Learning Outcomes	Modules
BHONSN01 Critically evaluate and apply knowledge relating to anatomy, physiology, pathophysiology and the principles underpinning healthcare investigations and therapeutic treatments (Knowing).	
BHONSN02 Critically evaluate the legal, ethical, and professional frameworks that govern healthcare science practice, including data protection, consent, equality legislation, and quality assurance (Knowing).	
BHONSN03 Devise and implement evidence-based practices and procedures to diagnose, record, monitor and treat health conditions (Doing).	
BHONSN04 Adapt, apply and critically reflect on communication strategies to engage compassionately, inclusively and accessibly with patients, carers and multidisciplinary teams (Doing).	
BHONSN05 Exercise professional judgement, autonomy and reflective practice to evaluate performance of self and healthcare services to drive continuous professional development and service innovation, within your scope of practice and personal competence (Being).	
BHONSN06 Demonstrate leadership and safeguard service users through promotion of dignified, inclusive, ethical and sustainable practices (Being).	
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BHONS02 Critically evaluate the legal, ethical, and professional frameworks that govern healthcare science practice, including data protection, consent, equality legislation, and quality assurance (Knowing).	
BHONS03 Devise and implement evidence-based practices and procedures to diagnose, record, monitor and treat health conditions (Doing).	
BHONS04 Adapt, apply and critically reflect on communication strategies to engage compassionately, inclusively and accessibly with patients, carers and multidisciplinary teams (Doing).	
BHONS05 Exercise professional judgement, autonomy and reflective practice to evaluate performance of self and healthcare services to drive continuous professional development and service innovation, within your scope of practice and personal competence (Being).	
BHONS06 Demonstrate leadership and safeguard service users through promotion of dignified, inclusive, ethical and sustainable practices (Being).	

Teaching, Learning & Assessment Strategy/(Learning and Teaching):

Teaching on the Healthcare Science (Physiological Sciences) course is designed to help you build your knowledge and confidence step by step. You will begin with core concepts in human anatomy and physiology, and develop scientific and academic skills, before moving on to more advanced topics such as pathophysiology, diagnostics, and data interpretation. This gradual progression helps you feel

prepared as the academic level increases, and ensures you have a strong foundation to build on throughout the course.

Your learning will take place through a blend of in-person and online activities. Face-to-face sessions, such as lectures, practical labs, seminars, and workshops will give you hands-on experience and opportunities to discuss ideas with staff and classmates. Online learning supports this by providing interactive materials, recorded sessions, quizzes, and digital resources you can access at any time. These two modes are designed to complement each other and offer flexibility, so you can study in a way that suits your needs and commitments.

Throughout the course, you will be supported to develop the academic and digital skills needed for university study and future employment. Early modules introduce you to research skills, scientific writing, referencing, and data handling. You will also learn how to work effectively in groups, manage independent study, and use digital platforms confidently. Additional support, such as library workshops, academic skills sessions, and digital learning guidance, is available whenever you need it.

Professional and practice-based learning is woven into your academic experience. Depending on your pathway, this may include placements/work-based training, employer-linked activities, simulated clinical tasks, or case-based work that reflects real diagnostic and healthcare scenarios. These experiences help you apply your theoretical knowledge in practical settings and understand how physiology and diagnostics contribute to patient care.

Digital fluency is an important part of the course. You will use digital tools for research, data analysis, and collaboration, and you will be encouraged to engage with technology ethically and responsibly. This includes understanding the role of artificial intelligence and data security in modern healthcare, preparing you for digitally enhanced professional environments.

Assessment Methods/Assessments:

Assessment on the Healthcare Science (Physiological Sciences) course is designed to help you learn, build confidence, and develop the skills you will need for your future career. You will experience a balanced mix of tasks, such as case-based analyses, lab reports, written essays, presentations, and online quizzes, so you can show what you know in different ways. These assessments are spaced across the year to help you manage your workload effectively.

To support your progress, you will have regular opportunities to practise before completing your final assessments. This might include submitting a draft section of a report, trying out sample exam questions, completing short online activities, or taking part in peer-feedback sessions. These formative tasks allow you to experiment, learn from mistakes, and apply feedback from tutors without the pressure of grades.

Your assessments are designed to help you develop key intellectual and professional skills. You will learn how to analyse scientific data, evaluate evidence, solve problems, and build well-reasoned arguments, skills that are essential in science and in a clinical setting. Many assessments involve applying your knowledge to real-life scenarios or interpreting patient-focused case studies, helping you see how your learning connects to practice.

We aim to make all assessments inclusive and accessible. You will receive clear instructions, marking criteria, and when possible, examples to help you understand what is expected. If you have specific learning needs, support and reasonable adjustments are available to ensure you can demonstrate your abilities fully.

Where possible, you will also have the chance to personalise your assessment experience. You may be able to choose a topic, select a case study, or focus on an area of clinical practice that interests you. This allows you to shape your learning and build skills that align with your goals and career ambitions.

Further Information for Student:

We understand that students join with different levels of prior knowledge, so your first-year modules are designed to bring everyone to a shared foundation in scientific principles, preparing you to progress confidently to Level 5. Support is built into your learning experience, especially at level 4, but if you need additional support, with academic writing, referencing, critical thinking, or simply knowing where to go for advice, there are many avenues available.

ASK@WLV is your first point of contact for general enquiries, while the library's Skills for Learning workshops help you develop essential academic skills. You will also have a Student Success Coach to support your personal and academic development, and a Personal Tutor who provides ongoing academic and pastoral guidance. The course team is here to help you at every stage. If your studies are affected by health or wellbeing concerns, the Support to Study process offers a proactive and compassionate framework to help you continue successfully.

Learning is interactive and engaging, combining lectures, tutorials, case studies, lab practical's, workshops and support sessions. Early formative activities such as quizzes, online tasks, and group work help you prepare for assessments. You will receive clear briefs, guidance, and timely, constructive feedback to highlight your strengths, identify areas for improvement, and give clear advice on how to enhance your performance in future assessments to build your skills and confidence.

Your placement provider is audited to ensure they can provide an appropriate clinical practice environment, and training is provided so that your work-based assessors have a clear understanding of their roles and responsibilities for you whilst in placement. Whilst you are on placement you will have a primary work-based assessor who will oversee your training to ensure you are on track with your competencies. A university lecturer will check in on you and your work -based assessor at least twice a year to ensure everything is running smoothly with your placement, as well as weekly support sessions at university, during semester time, to check on your progress and offer support as required.

Your voice matters! It is central to shaping the ongoing development of the course. We actively seek student feedback through module evaluations, course reps and Student Voice activities and regular meetings with the course team helping shape teaching, assessment, and support. This collaborative approach ensures that the course remains relevant, inclusive, and responsive to your needs as learners and future professional.

The University provides a wide range of academic and pastoral support to help students succeed in their studies and personal development. This includes access to the Library and Skills for Learning service, academic coaching for Level 3 and 4 students, and tailored advice from the Careers and Enterprise teams. Students also benefit from 24/7 wellbeing support through WLV Student Life Connect, pastoral care via the Multi-faith Chaplaincy, and assistance from the Mental Health and Wellbeing team. Those living in university accommodation have additional access to Residential Life support, and all students can engage with the Students' Union for advocacy, societies, and further peer-led services.

Currency:

The Healthcare Science (Physiological Sciences) course is designed to stay current with the rapidly evolving fields of Healthcare Science. We have built in flexibility to allow for your learning to be shaped by a curriculum that is continuously reviewed against the latest research, emerging clinical technologies, and contemporary issues in healthcare science. Because the programme is taught by practising clinicians and active researchers, you can be confident that the breadth of content reflects up-to-date clinical expectations and best practice. Modules are refreshed regularly, and teaching staff bring cutting-edge insights directly into the classroom and laboratory.

Throughout the course, you are supported to develop strong inquiry skills and to engage directly with research. You will work with real datasets; critique published studies and explore research. Opportunities to design your own investigations, particularly in the final year project, help you develop as an independent, critical thinker.

The course prepares you to apply your knowledge creatively to real-world healthcare challenges, including those linked to sustainability, ethical practice, and social responsibility. Case-based learning, simulations, and problem-solving activities encourage you to consider the wider impact of clinical decisions on patients, services, and global health systems.

Our curriculum is deliberately designed to help you develop the University's Graduate Attributes. You will become a Knowledgeable and Digitally Fluent practitioner through hands-on experience with diagnostic equipment and digital tools. Activities focusing on professionalism, teamwork, and reflective practice help you grow as a Professional. Discussions around global health, equity, and evidence-based care support your development as a Global Citizen.

Finally, collaboration is embedded throughout the programme. You will learn alongside students from other health-related disciplines, and be taught by a diverse team of academics, and build the confidence to continue learning throughout your career. By the time you graduate, you will be well-equipped to adapt to future developments in healthcare science and to contribute meaningfully to your profession.

Personalisation Opportunities:

The Healthcare Science (Physiological Sciences) course is designed to help you shape your learning experience around your interests and career ambitions. Your learning will be active and interactive, with opportunities for group discussion and collaboration where we will relate lessons to real-world applications and incorporate technology to make learning more dynamic, with online quizzes and videos, as well as self-directed study to allow you to control your learning at a pace and style to fit you. Many modules will include flexible activities and assessments, for example, selecting case studies that reflect your interests or focusing projects on conditions that enthuse you. Your learning will be supported with material from classroom sessions as well as on Canvas (our virtual learning environment).

In level 4 you will study both cardiovascular and respiratory and sleep physiology, choosing your specialism as you progress to level 5 and specialising in one area to map with your career aspirations. In your final year research project, you will choose a topic to investigate that aligns with your academic passions or professional goals. You will be supported in making these choices by your Personal Tutor, course team and project supervisor.

Career support is built into the course, with a dedicated faculty advisor from the university's Careers, Enterprise and The Workplace team, supporting you with job applications, CV writing and interview preparation, as well as a job searching.

Inclusivity is central to your learning experience. The course integrates diverse perspectives and examples to reflect the global and multicultural nature of healthcare practice. Your own experiences and identity are valued in classroom discussions, assessments, and group activities, helping to make learning more relevant and meaningful.

You will also be encouraged to reflect on your personal and academic growth through reflective journals, tutorials, and portfolio activities. These reflections help you recognise your strengths, set goals, and use academic guidance to shape your development throughout the course and beyond.

Employability in the Curriculum/Employability and Professional Development:

The BSc Healthcare Science (Physiological Sciences) course is accredited by the National School for Healthcare Science, and is designed to support your employability and professional development by closely aligning academic study with the Practitioner Training Programme (PTP) curriculum set by the National School of Healthcare Science (NSHCS) and the Academy for Healthcare Science (AHCS)

Standards of Proficiency. Completion of this course enables you to register with the Academy for Healthcare Science as a qualified Healthcare Science Practitioner.

Throughout the course, you will be supported to explore, prepare for, and progress into a career as a healthcare scientist, but also develop an awareness of further professional training, and postgraduate study.

Career preparation is embedded through practice-informed teaching, applied assessments, and structured work-based learning opportunities. You will engage with clinical placements and placement-related activities that reflect real-world physiological science practice, enabling you to develop clinical skills, professional behaviours, and an understanding of multidisciplinary healthcare environments. You will also have access to simulated clinical environments. Case-based learning and assessment briefs provide authentic exposure to professional contexts and expectations.

The course supports the development of a strong professional identity building a portfolio of skills, competencies, and experiences aligned with AHCS standards. Reflective practice is embedded across modules, enabling you to evidence learning, evaluate your professional development, and demonstrate readiness for healthcare science roles. You are introduced to professional conduct, ethical practice, patient-centred care, equality and diversity, and lifelong learning as core aspects of your professional identity.

Professional standards and employer expectations are embedded within course content, assessments, and learning activities. Assessments are designed to reflect tasks undertaken by healthcare science practitioners, such as clinical reporting, data interpretation, reflective accounts, and professional presentations. This ensures that students graduate with skills that meet NHS values, workforce needs, and PSRB requirements.

Students are supported to reflect on their strengths and areas for development through formative feedback, personal tutoring, and structured employability activities. Opportunities are provided to practise key employability skills, including CV writing, interview preparation, application writing, and professional communication, with guidance from academic staff and the University’s careers services. Networking opportunities with healthcare professionals and alumni further support career awareness and confidence.

By engaging fully with these opportunities, you will graduate with a clear sense of direction, a strong professional identity, and the skills needed to thrive in your chosen career.