

Course Specification

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| Published Date: | 14-Sep-2020 |
| Produced By: | Laura Clode |
| Status: | Validated |

Core Information

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|---|--|------------------------|--------------------|
| Awarding Body / Institution: | University of Wolverhampton | | |
| School / Institute: | Wolverhampton School of Sciences | | |
| Course Code(s): | BM039H01UV BM039H31UV | Full-time Part-time | 3 Years 6 Years |
| Course Title: | BSc (Hons) Medical Physiology and Diagnostics | | |
| Hierarchy of Awards: | Bachelor of Science with Honours Medical Physiology and Diagnostics Bachelor of Science Medical Physiology and Diagnostics Diploma of Higher Education Medical Physiology and Diagnostics Certificate of Higher Education Medical Physiology and Diagnostics University Statement of Credit University Statement of Credit | | |
| Language of Study: | English | | |
| Date of DAG approval: | 06/Jun/2017 | | |
| Last Review: | 2018/9 | | |
| Course Specification valid from: | 2015/6 | | |
| Course Specification valid to: | 2024/5 | | |

Academic Staff

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| Course Leader: | Mrs Jacqueline Laverty |
| Head of Department: | Dr Elizabeth O'Gara |

Course Information

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| Location of Delivery: | University of Wolverhampton |
| Category of Partnership: | 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)

2017 Entry

GCSE English, Maths and Science at Grade C+/4

Plus:

- A Level minimum of AA or BCD to include Biology passed with at least grade B
- Access to HE with 60 credits, 45 Level 3 credits of which 36 must be in Science with at least 27 at Distinction and the rest Merit. No pass grades are accepted
- BTEC QCF Level 3 Extended Diploma in Applied Science grade DMM
- If you've got other qualifications or relevant experience, please contact [The Gateway](#) for further advice before applying.
- International entry requirements and application guidance can be found [here](#)
- Successful completion of the foundation year of our [BSc \(Hons\) Science and Engineering with Foundation Year](#) guarantees entry on to this course
- Successful completion of the [International Foundation Year in Science and Engineering](#) guarantees entry on to this course

Other Requirements

Those successful in application will subsequently be required to meet a Disclosure and Barring Service (DBS) Check

Those who do not meet the entry requirements may be offered an alternative course.

Distinctive Features of the Course:

This innovative course is designed to provide you with education and training in cardiovascular, respiratory and sleep sciences, and is particularly designed for those of you who are interested in disease processes, diagnosis and improving the quality of life of patients. If so, this might be the course for you, especially if you would like to work hands-on with people, rather than in a laboratory. Following successful completion of your first year, you will be able to apply to transfer onto our accredited BSc (Hons) Healthcare Science (Physiological Science) practitioner training programme (having satisfied Disclosure and Barring Service and Occupational Health checks). This course has a work-based placement embedded throughout your study, which will allow you to undertake the practical training associated with the role of a healthcare scientist. The first placement, taken at the end of your first year of study, following selection, involves practical training in cardiac physiology, respiratory and sleep science, and you can then choose to specialise in one discipline for the final two years. If you do not transfer at this stage you can continue with your study towards a degree in Medical Physiology & Diagnostics. You will follow one of two pathways, either Cardiovascular Physiology or Respiratory Physiology and Sleep Science. This will give you the essential skills for you to be able to work as a Healthcare Associate Practitioner, and gain experience in the workplace via this route. This may then allow you to become a practitioner via the newly developing recognition scheme, or it will allow you to apply for entry to the Scientist Training Programme.

Opportunities for progression:

This innovative course is designed to provide you with education and training in cardiovascular, respiratory and sleep sciences, and is particularly beneficial if you're interested in disease processes, diagnosis and improving the quality of life of patients. If you've already decided that your ambitions lie within clinical practice then we do offer BSc (Hons) Healthcare Science (Physiological Science) which is an accredited degree programme as an alternative to the BSc (Hons) Medical Physiology and Diagnostics. BSc Healthcare Science (Physiological Science) is accredited by Health Education England and the Registration Council for Clinical Physiology and opens opportunities for you to undertake clinical placements throughout your time at university, providing excellent employment opportunities on graduation.

If you are not certain that a clinical career path is for you, or do not feel able to commit to work-based placement as well as your studies, then Medical Physiology and Diagnostics may be a more suitable course for you. Medical Physiology and Diagnostics provides similar academic content to that within the Healthcare Science programme but without the need to commit to clinical placement and can offer you the opportunity to enter clinical practice on graduation.

Medical Physiology and Diagnostics covers the theoretical knowledge required for you to pursue a career as a scientist within a healthcare environment or other areas that require detailed knowledge of human physiology and understanding of disease processes. Knowledge of the normal structure and function of the human body will be developed so that you can appreciate the range of clinical abnormalities that occur as a result of disease. Although the main focus will be either Cardiac Physiology or Respiratory and Sleep Science, depending on your choice of specialist area, the academic provision will not be limited to these areas but will also cover the physiology and pathophysiology of the wider systems to provide an extensive knowledge base. You will consider the diagnostic tests used within your specialist professional area and be able to understand how test results are used to plan subsequent treatment. It will provide you with a comprehensive appreciation of a number of specialisms in physiological sciences through broad experiential components in cardiovascular, respiratory and sleep sciences in order to develop a more holistic view of the areas contributing to high-quality care.

If you pass all of your first year modules in Medical Physiology and Diagnostics gaining 120 credits, and would like to, you will be able to apply to transfer onto our accredited BSc (Hons) Healthcare Science (Physiological Science) practitioner training programme. Transfer onto the Healthcare Science award will also need you to be successful at interview, to demonstrate that you have the necessary attributes to follow a career in Healthcare and satisfy Disclosure and Barring Service and Occupational Health checks. The Healthcare Science course has work-based placement embedded throughout your study, which will allow you to undertake the practical training associated with the role of a healthcare scientist. The first placement, taken at the end of your first year of study, following selection, involves practical training in cardiac physiology, respiratory and sleep science, and you can then choose to specialise in one discipline for the final two years.

If you do not transfer at this stage you can continue with your study towards a degree in Medical Physiology and Diagnostics. You will follow one of two pathways, either Cardiovascular Physiology or Respiratory Physiology and Sleep Science. This will give you the essential skills for you to be able to work as a Healthcare Associate Practitioner, and gain experience in the workplace via this route. This may then allow you to become a practitioner via the newly developing recognition scheme, or it will allow you to apply for entry to the Scientist Training Programme.

Educational Aims of the Course:

This course covers the theoretical knowledge required for participants to pursue a career as a Scientist within a healthcare environment or other areas that require detailed knowledge of human physiology and understanding of disease processes. Knowledge of the normal structure and function of the human body will be developed so that the student can appreciate the range of clinical abnormalities that occur as a result of disease. Although the main focus will be Cardiac Physiology and Respiratory and Sleep Science the academic provision will not be limited to these areas but will also cover the physiology and pathophysiology of the wider systems to provide an extensive knowledge base. Students will consider the diagnostic tests used within a specific professional area and be able to understand how test results are used to plan subsequent treatment. It will provide the student with a comprehensive appreciation of a number of specialisms in physiological sciences through broad experiential components in cardiovascular, respiratory and sleep

sciences in order to develop a more holistic view of the areas contributing to high-quality care.

The encouragement of good professional practice will be paramount at all stages of training and students will be encouraged to develop research skills which can be used to improve practice in their chosen specialism. The programme aims to include patient participation in its design, delivery and assessment of students in order to produce a Healthcare Science Practitioner that is focused on patient-centred care.

Changes and innovations in technology and the landscape of the NHS, including the move to 24/7 working, mean that the healthcare science workforce needs to have the ability to adapt and adopt new knowledge and skills. This presents opportunities and is resulting in new roles and services. Graduates from this programme will have the capability to effectively adapt both their knowledge and skills within a rapidly changing healthcare environment. Graduates may gain employment within a hospital where further in-house training in practical competences will be needed before being able to perform the physiological measurements in cardiac physiology required as part of the patient care pathway. Graduates will be able to use their transferable skills to enter a variety of jobs, both at home and internationally. Skilled graduates are needed for Medical Sales companies, and with graduates focussing on either cardiology or respiratory and sleep physiology, there will be roles available in these specialist fields.

Successful completion of the course will provide graduates with an appropriate qualification for admission to the Healthcare Science Scientist Training Programme.

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 |
|--------|----------|----------------------|-----------|
| 2020/1 | H | Full Time / Sandwich | £9250.00 |
| 2020/1 | Overseas | Full Time / Sandwich | £12250.00 |
| 2020/1 | H | Part Time | £3050.00 |
| 2020/1 | Overseas | Part Time | £6125.00 |

PSRB:

None

Course Structure:

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 1

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

| Module | Title | Credits | Period | Type |
|--------|---|---------|--------|------|
| 4BM016 | Human Form & Function | 20 | SEM1 | Core |
| 4BM025 | Professional Practice and Study Skills | 20 | SEM1 | Core |
| 4BM028 | Introduction to the Principles of Cardiovascular Respiratory and Sleep Science | 20 | SEM1 | Core |
| 4BM024 | Introduction to Microbiology | 20 | SEM2 | Core |
| 4BM027 | Cell Biology | 20 | SEM2 | Core |
| 4BM029 | Introduction to the Clinical Applications of Cardiovascular Respiratory and Sleep Science | 20 | SEM2 | Core |

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 2

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

| Module | Title | Credits | Period | Type |
|--------|--|---------|--------|------|
| 5BM048 | Anatomy and Physiology | 20 | SEM1 | Core |
| 5BM058 | Instrumentation, Signal Processing and Imaging | 20 | SEM1 | Core |
| 5BM057 | Pathophysiology | 20 | SEM2 | Core |
| 5BM059 | Research Development and Innovation for Healthcare Science | 20 | YEAR | Core |

For this option group you must choose a minimum of 20 credits and a maximum of 20 credits

If you select 5BM049 in semester 1, you should select 5BM050 in semester 2.

If you select 5BM051 in semester 1, you should select 5BM052 in semester 2.

| | | | |
|--------|----------------------------------|----|------|
| 5BM049 | Respiratory and Sleep Physiology | 20 | SEM1 |
| 5BM051 | Cardiac Physiology | 20 | SEM1 |

For this option group you must choose a minimum of 20 credits and a maximum of 20 credits

You should select 5BM050 in semester 2, if you selected 5BM049 in semester 1.

You should select 5BM052 in semester 2, if you selected 5BM051 in semester 1.

| | | | |
|--------|--|----|------|
| 5BM050 | Further Respiratory and Sleep Physiology | 20 | SEM2 |
| 5BM052 | Further Cardiac Physiology | 20 | SEM2 |

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 3

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

| Module | Title | Credits | Period | Type |
|--------|---------------------------|---------|--------|------|
| 6BM040 | Research Project | 40 | YEAR | Core |
| 6BM017 | Advanced Human Physiology | 20 | SEM1 | Core |

For this option group you must choose a minimum of 0 credits and a maximum of 60 credits

| | | | | |
|--------|---|----|------|--|
| 6BM044 | Applying Respiratory and Sleep Physiology to Practice | 40 | YEAR | |
| 6BM046 | Applying Cardiac Physiology to Practice | 40 | YEAR | |

For this option group you must choose a minimum of 0 credits and a maximum of 60 credits

| | | | | |
|--------|---|----|------|--|
| 6BM045 | Recent Advances in Respiratory and Sleep Physiology | 20 | YEAR | |
| 6BM047 | Recent Advances in Cardiac Physiology | 20 | YEAR | |

Continuing students will follow the programme indicated below:

September (Full-time)

Year 3

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

| Module | Title | Credits | Period | Type |
|--------|---------------------------|---------|--------|------|
| 6BM014 | Honours Research Project | 40 | YEAR | Core |
| 6BM017 | Advanced Human Physiology | 20 | SEM1 | Core |

For this option group you must choose a minimum of 0 credits and a maximum of 60 credits

| | | | | |
|--------|---|----|------|--|
| 6BM020 | Respiratory Physiology in Practice | 40 | YEAR | |
| 6BM027 | Recent Developments in Respiratory and Sleep Physiology | 20 | YEAR | |

For this option group you must choose a minimum of 0 credits and a maximum of 60 credits

| | | | | |
|--------|---|----|------|--|
| 6BM019 | Cardiac Physiology in Practice | 40 | YEAR | |
| 6BM026 | Recent Developments In Cardiac Physiology | 20 | YEAR | |

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

Academic Regulations Exemption:

N/A

Reference Points:

UK Quality Code for Higher Education <https://www.qaa.ac.uk/quality-code>

UK Quality Code for Higher Education Advice & Guidance <https://www.qaa.ac.uk/en/quality-code/advice-and-guidance>

Subject Benchmark Statements <https://www.qaa.ac.uk/en/quality-code/subject-benchmark-statements>

Qualifications and Credit Frameworks <https://www.qaa.ac.uk/en/quality-code/qualifications-and-credit-frameworks>

Learning Outcomes:

CertHE Course Learning Outcome 1 (CHECLO1)

"Demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study, and an ability to evaluate and interpret these within the context of that area of study"

CertHE Course Learning Outcome 2 (CHECLO2)

"Demonstrate an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study."

CertHE Course Learning Outcome 3 (CHECLO3)

Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work

CertHE Course Learning Outcome 4 (CHECLO4)

"Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments"

CertHE Course Learning Outcome 5 (CHECLO5)

Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility

DipHE Course Learning Outcome 1 (DHECLO1)

"Demonstrate knowledge and critical understanding of the well-established principles of your area(s) of study,

and of the way in which those principles have developed with an understanding of the limits of your knowledge, and how this influences analyses and interpretations based on that knowledge."

DipHE Course Learning Outcome 2 (DHECLO2)

"Demonstrate the ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context"

DipHE Course Learning Outcome 3 (DHECLO3)

"Demonstrate knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study"

DipHE Course Learning Outcome 4 (DHECLO4)

"Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis"

DipHE Course Learning Outcome 5 (DHECLO5)

"Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively"

DipHE Course Learning Outcome 6 (DHECLO6)

"Demonstrate the qualities and transferable skills necessary for employment, requiring the exercise of personal responsibility and decision-making and undertake further training, developing existing skills and acquire new competences that will enable them to assume significant responsibility within organisations."

Ordinary Course Learning Outcome 1 (ORDCLO1)

"Demonstrate knowledge of the anatomical structure and development of the human body and an understanding of the integrated function and control of the component parts of the major systems, enabling an appreciation of normal human function to be shown."

Ordinary Course Learning Outcome 2 (ORDCLO2)

"Demonstrate knowledge and understanding of cell structure and function at the molecular level, enabling an appreciation of the interplay of complex molecular events that help to maintain cell homeostasis."

Ordinary Course Learning Outcome 3 (ORDCLO3)

Demonstrate a knowledge and understanding of disease processes to enable appreciation of the use of pharmacological and interventional treatments against them.

Ordinary Course Learning Outcome 4 (ORDCLO4)

"Demonstrate an understanding of the range of practical techniques employed within physiological sciences, either cardiac science or respiratory and sleep science, and be able to explain the rationale for the investigation and treatment of disease."

Ordinary Course Learning Outcome 5 (ORDCLO5)

"Demonstrate an understanding of the basic principles of physics and signal processing and be able to apply these to the recording, storage and analysis of information in the concept of physiological sciences."

Ordinary Course Learning Outcome 6 (ORDCLO6)

"Be aware of the requirements for good professional practice in physiological sciences, including safe and ethical working practices, the importance of good communication in a therapeutic relationship and how research can be used to advance evidence based practice in their chosen specialism."

Honours Course Learning Outcome 1 (DEGCLO1)

"Demonstrate knowledge of the anatomical structure and development of the human body and an understanding of the integrated function and control of the component parts of the major systems, enabling an appreciation of normal human function to be shown."

Honours Course Learning Outcome 2 (DEGCLO2)

"Demonstrate knowledge and understanding of cell structure and function at the molecular level, enabling an appreciation of the interplay of complex molecular events that help to maintain cell homeostasis."

Honours Course Learning Outcome 3 (DEGCLO3)

Demonstrate a knowledge and understanding of disease processes to enable appreciation of the use of pharmacological and interventional treatments against them.

Honours Course Learning Outcome 4 (DEGCLO4)

"Demonstrate an understanding of the range of practical techniques employed within physiological sciences, either cardiac science or respiratory and sleep science, and be able to explain the rationale for the investigation and treatment of disease."

Honours Course Learning Outcome 5 (DEGCLO5)

"Demonstrate an understanding of the basic principles of physics and signal processing and be able to apply these to the recording, storage and analysis of information in the concept of physiological sciences."

Honours Course Learning Outcome 6 (DEGCLO6)

"Be aware of the requirements for good professional practice in physiological sciences, including safe and ethical working practices, the importance of good communication in a therapeutic relationship and how research can be used to advance evidence based practice in their chosen specialism."

Overview of Assessment:

| Module | Title | Course Learning Outcomes |
|--------|---|---|
| 4BM016 | Human Form & Function | CHECLO1, CHECLO3, CHECLO5 |
| 4BM024 | Introduction to Microbiology | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4BM025 | Professional Practice and Study Skills | CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4BM027 | Cell Biology | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4BM028 | Introduction to the Principles of Cardiovascular Respiratory and Sleep Science | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 4BM029 | Introduction to the Clinical Applications of Cardiovascular Respiratory and Sleep Science | CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5 |
| 5BM048 | Anatomy and Physiology | DHECLO1, DHECLO2, DHECLO3 |

| Module | Title | Course Learning Outcomes |
|--------|--|--|
| 5BM049 | Respiratory and Sleep Physiology | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5BM050 | Further Respiratory and Sleep Physiology | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5BM051 | Cardiac Physiology | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5BM052 | Further Cardiac Physiology | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5BM057 | Pathophysiology | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5 |
| 5BM058 | Instrumentation, Signal Processing and Imaging | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5, DHECLO6 |
| 5BM059 | Research Development and Innovation for Healthcare Science | DHECLO1, DHECLO2, DHECLO3, DHECLO4, DHECLO5, DHECLO6 |
| 6BM014 | Honours Research Project | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM017 | Advanced Human Physiology | DEGCLO1, DEGCLO2, DEGCLO3, ORDCLO1, ORDCLO2, ORDCLO3 |
| 6BM019 | Cardiac Physiology in Practice | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM020 | Respiratory Physiology in Practice | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM026 | Recent Developments In Cardiac Physiology | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM027 | Recent Developments in Respiratory and Sleep Physiology | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM040 | Research Project | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM044 | Applying Respiratory and Sleep Physiology to Practice | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM045 | Recent Advances in Respiratory and Sleep Physiology | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM046 | Applying Cardiac Physiology to Practice | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM047 | Recent Advances in Cardiac Physiology | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM048 | Advanced Respiratory and Sleep Physiology (MP&D) I | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM049 | Advanced Respiratory and Sleep Physiology (MP&D) II | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM050 | Advanced Cardiac Physiology I (MP&D) | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |
| 6BM051 | Advanced Cardiac Physiology II (MP&D) | DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4, DEGCLO5, DEGCLO6, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4, ORDCLO5, ORDCLO6 |

Teaching, Learning and Assessment:

Opportunities to achieve the learning outcomes will be provided by the following teaching / learning activities:

- Lectures
- Tutorials (small group)
- Tutorials (one-to-one)

- Workshops
- Case studies
- Individual or group investigative practical exercises
- Individual and group research project investigations
- Computer based learning
- Supported learning using the University VLE (CANVAS) for information, synchronous and asynchronous communications
- Group work
- Individual structured assignment-based learning
- Directed study
- Seminar presentations
- Poster Presentation for Honours Project

Knowledge of the practical skills required within the workplace involving the observation of qualified practitioners, and reflection on student's own learning.

Students will also be encouraged to develop the three graduate attributes in the following ways:

Digital Literacy: Students on this programme of study will be confident users of digital technology and will be able to exploit the sources of connectivity digital working allows. Students will be required to interact with CANVAS to receive information relating to their modules and complete exercises in preparation for face to face tuition. Students will be required to communicate electronically with staff and other students through the use of email, CANVAS forums and blogs.

They will be required to use information technology for the retrieval of information to support all modules and assessments. They will be required to deliver presentations on key physiology related topics using Powerpoint. Students will also be required to use statistical software packages in the analysis of data relating to their Honours projects.

Knowledgeable and Enterprising: Students on this programme of study will know how to critique, analyse and then apply knowledge they acquire in an enterprising ways. They will have the opportunity to do this by the completion of an Honours project within the university which will have the aim of contributing towards the evidence base relating to their specialised discipline area.

They will use knowledge to seek out opportunities to advance their careers and entrepreneurial drive, through the successful completion of the award. They will be stimulated by engagement in dialogue with practitioners within their specialist area of study. Students will be encouraged to constantly nurture their own intellectual curiosity, and excite others to do the same through the delivery of seminar presentations relating to emerging topics in their subject specialism.

Global Citizenship: Students on this programme of study will bring informed understandings of their place and ethical responsibilities in the world through the completion of the professional learning modules associated with this course. They will have personal and professional values developed through professional practice modules that will help them to lead, and take a substantial role in their local, national and global communities associated with their chosen profession.

Progression of Assessment Tasks at Each Level

Level 4

There are a range of summative assessment tasks employed in level 4 modules and these range from multiple choice question tests (MCQs), portfolio production, computer assisted assessments, short answer tests, and laboratory practical reports. All modules contain elements of formative assessment (practice MCQ tests, production of practice short answer tests, and practice laboratory report writing). These formative tasks are undertaken early in the module, allowing constructive feedback to be given to students prior to the summative assessments.

Module tutors will be able to identify those students who may require additional support early in the module. The general strategy at level 4 is to provide good quality and timely feedback to students, to encourage full attendance and participation and to support the development and acquisition of good study and key skills.

Module staff will use CANVAS to embed formative self-assessment exercises into the assessment structure of the module so that students can check their progress and their knowledge and understanding of the taught elements of the modules. If deficiencies in the knowledge base are seen then students will be able to request remedial support from the module team.

Further support is available from the School of Biomedical Science and Physiology team of demonstrators who provide drop-in sessions for students who require additional study skills support.

Level 5

There are a range of summative tasks employed in the assessment of level 5 theory modules and these include: examinations, short answer tests, patient study reports, patient case studies, laboratory reports, portfolios and reflective writing.

At level 5 students should be less dependent learners and should show evidence in their assessed work of some integration of knowledge, beginning to critically evaluate key facts, to solve problems and to use a wider range of information sources other than directed reading. The assessment tasks at this level are designed not just to test basic recall of knowledge but to test a student's ability to synthesise their knowledge in a contextual manner.

There are a range of formative assessment tasks available including practice exams, practice writing exercises and practice case studies. In all cases students will become aware of the criteria for the summative assessment and will be able to check their performance. Students will be given constructive feedback and encouraged to read around the subject further. There will be a range of self-assessment tasks available on CANVAS (practice MCQ tests, a mini quiz, and case studies). Students who perform less well will be able to ask for further help from the module team.

Level 6

There is a range of tasks utilised to assess level 6 modules. In general, the strategy at level 6 is for less frequent, high volume tasks designed to assess level 6 students as independent learners and test their ability to solve problems, apply numerical skills at an appropriate level, present information in writing to publication standards and to present information orally at a research seminar level. In all cases students will be expected to show evidence of integration of their knowledge base and contextual awareness.

The tasks include: critical reviews of primary literature sources on an advanced topic; short presentations; case studies including patient data interpretation exercises; extended essay writing; unseen examinations; seen question examinations and recent advances reports.

The honours project report will assess level 6 intellectual skills, scientific skills, practical skills and contextual awareness. Students will be assigned to an individual project supervisor who will work with the student and provide formative assessment and feedback as required.

Assessment Methods:

At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes)
Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation)
Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

Student Support:

General University support:

[University Learning Centres](#) are the key source of academic information for students. Learning Centres provide physical library resources (books, journal, DVDs etc.) and offer a range of study areas to allow students to study in the environment that suit them best: Social areas, quiet and silent areas. Learning Centres also provide access to wide range of online information sources, including eBooks, e-Journals and subject databases.

Learning Centres also provide students with academic skills support via the [Skills for Learning programme](#). Students on campus can attend workshops or ask for one-to-one help on a range of skills such as academic writing and referencing. Students can access a range of online skills material at: www.wlv.ac.uk/lib/skills

The [University Student Support website](#) offers advice on a variety of matters (careers, counselling, student union advice, etc.) Students can also access these services by booking appointment with the SU, careers, counselling services, etc.

Employability in the Curriculum:

Changes and innovations in technology and the landscape of the NHS, including the move to 24/7 working, mean that the healthcare science workforce needs to have the ability to adapt and adopt new knowledge and skills. This presents opportunities and is resulting in new roles and services. Graduates from this programme will have the capability to effectively adapt both their knowledge and skills within a rapidly changing healthcare environment. Graduates may gain employment within a hospital where further in-house training in practical competences will be needed before being able to perform the physiological measurements required in clinical practice as part of the patient care pathway

Graduates will be able to use their transferable skills to enter a variety of jobs, both at home and internationally. Skilled graduates are needed for Medical Sales companies, and with graduates focussing on either cardiology or respiratory and sleep physiology, there will be roles available in these specialist fields.

Successful completion of the course will provide graduates with an appropriate qualification for admission to the Healthcare Science Scientist Training Programme.



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