



1. Programme title	BSc (Hons) Medical Physiology BSc (Hons) Medical Physiology with Foundation Year
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	
5. Final qualification	BSc (Hons) Medical Physiology DipHE Medical Physiology Cert HE Medical Physiology
6. Academic year	2022/23
7. Language of study	English
8. Mode of study	Full-time and Part-time

9. Criteria for admission to the programme

Candidates normally require Maths and English equivalent to at least GCSE grade 4 as well as 112 UCAS tariff points or equivalent from one of the following awards.

- A-levels (including two A2s with at least one science subject, preferably in biology or chemistry at grade C or better)
- Or Two AVCEs or one double award in Science
- Or EDEXCEL National Diploma or Certificate in biology, chemistry, forensic science, laboratory and industrial science, or medical science
- Or Access course in applied science, clinical physiology, human or life sciences, medical or paramedical science, or science.
- Or high school equivalent, such as an International Baccalaureate

Applicants can make a claim for entry onto the programme with or without advance standing on the basis of either accreditation of prior certified learning or experiential learning.

Overseas Candidates should also be competent in English and have achieved, as a minimum, one of the following standards: an overall of 6.0 in IELTS with a minimum of 5.5 in each component or an equivalent English qualification.

Please refer to the programme specification for the Foundation Year for criteria for admission to the [BSc \(Hons\) Medical Physiology with Foundation Year](#) programme.

The programme welcomes applications from students with disabilities. As this is a laboratory based programme students will be required to undertake an assessment to determine what necessary adjustments should be made and if they are able to work in the laboratory safely.

10. Aims of the programme

The programme aims to provide students with the opportunity to:

- Gain an understanding of the human physiology and how body's physiological systems respond to extreme ambient pressures and temperatures, extreme accelerations and space environment;
- Understand the causes of and pathophysiology of diseases of the cardiovascular, respiratory, musculoskeletal and the nervous systems;
- Appreciate how instruments record, store and analyse anthropological and physiological data;
- Acquire knowledge and skills required to carry out a range of investigative techniques used to assess the health status of an individual or to evaluate human performance in response to extreme environmental conditions;
- Understand the scientific method, approaches to research, development and innovation;
- Develop a range of employability skills required for effective life-long learning, communication, teamworking and leadership.

11. BSc Programme outcomes

A. Knowledge

On completion of this programme the successful student will have knowledge and understanding of:

1. How the human body adapts or respond to environmental stressors;
2. The causes of and pathophysiology of diseases of the cardiovascular, respiratory, musculoskeletal and the nervous systems and the treatment of human disease;
3. How data are recorded, securely stored and analysed;
4. Techniques used to monitor and assess the function of the respiratory and cardiovascular systems to determine health status or evaluate human performance;
5. Techniques used to monitor and assess the function of the musculoskeletal and the nervous systems to determine health status or evaluate human performance;
6. The importance of research in the advancement of scientific knowledge and evidence-based practice.

Teaching/learning methods

Students gain knowledge and understanding through either online or on campus lectures and seminars, laboratory classes, peer presentations, debates, designing and undertaking a research project, role-play and practical sessions.

Assessment Method

Students' knowledge and understanding is assessed by summative and formative assessment, including peer presentations, laboratory reports, laboratory books and online test.

B. Skills

On completion of this programme the successful student will be able to:

1. Critically evaluate research evidence in the context of current theory or practice;
2. Solve physiological problems;
3. Reflect on own learning and practice to develop personally and professionally;
4. Present information in the most effective format to communicate ideas clearly;
5. Design and carry out a research project;
6. Perform a wide range of physiological techniques and procedures to assess human performance or health status;
7. Communicate their ideas effectively to different audiences using a variety of media;
8. Formulate learning and career development plans;
9. Use a range of information technologies;

Teaching/learning methods

Students acquire skills through either online or on campus lectures and seminars, peer presentations, a research project and debates, through reading, group work, problem-based solving exercises, structured and directed learning, analysis of case studies, and through reflection, and development of portfolio material.

Assessment Method

Students' skills are assessed by formative and summative assessment as written work, online quizzes, case studies, assessment of practical skills and peer

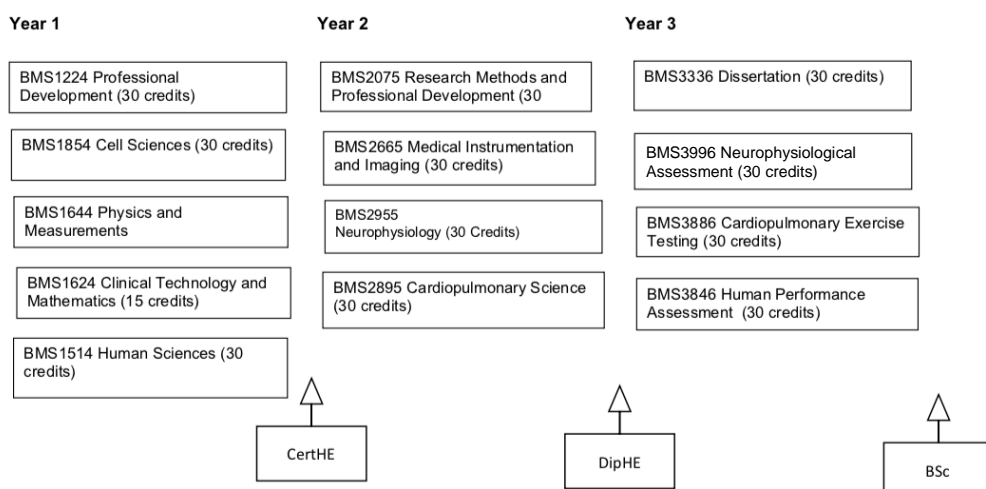
10. Demonstrate a high level of numeracy and problem-solving skills.

presentation, work in the form of portfolios, and project and research work.

12. Programme structure (levels, modules, credits and progression requirements)

12.1 Overall structure of the programme

Figure 1. BSc Medical Physiology - Full-time Programmes (Oct Start)



12.2 Levels and modules

Please refer to the programme specification for the Foundation Year for the modules to be taken during the foundation year of the [BSc \(Hons\) Medical Physiology with Foundation Year](#) programme.

Level 4

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
All students must take all of the following: BMS1854 BMS1514 BMS1224 BMS1624 BMS1644	There are no optional modules.	Normally all modules must be passed but a marginal failed module may be compensatable in accordance with University regulations.

Level 5

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
All students must take all of the following: BMS2075 BMS2665 BMS2895 BMS2955	There are no optional modules.	Normally all modules must be passed but a marginal failed module may be compensatable in accordance with University regulations.

Level 6

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
All students must take all of the following: BMS3336 BMS3866 BMS3886 BMS3996	There are no optional modules.	All modules must be passed.

12.3 Non-compensatable modules

Module level	Module code
5	BMS2075
6	All

13. A curriculum map relating learning outcomes to modules

See Curriculum Map attached.

14. Information about assessment regulations

The assessment regulations are the general university regulations.

All modules of the programme and module assessment components must be passed either by assessment or pre-accreditation.

15. Placement opportunities, requirements and support (if applicable)

Not-applicable

16. Future careers (if applicable)

- Examples of employment directly related to a medical physiology degree include: physiologist, teacher, medical research scientist.
- Examples of employment where a medical physiology degree would be useful include: applied physiologist, cardiac rehabilitation exercise physiologist, cardiopulmonary exercise testing practitioner, clinical scientist, specialising in cardiac science, neurophysiology, or exercise physiologist.
- Typical employers of medical physiology graduates include: the armed forces, NHS, health and fitness industry, research centres and academic institutions and, medical device and pharmaceutical companies.
- Examples of non-science related careers are market research or analysis, retail or operation management and public or private administration.

17. Particular support for learning (if applicable)

- Specialist laboratory facilities available on site to learn and develop practical skills.
- Online support for all modules in the programme available on MyLearning.
- Learning resource facilities at the University including computing suites and internet access.
- Access to English Language and Learning Support on campus or online.
- Dyslexia and disability support.

18. JACS code (or other relevant coding system)

B121

19. Relevant QAA subject benchmark group(s)

Biomedical Sciences

20. Reference points

The following reference points were used in designing the Programme:

Internal documentation:

Middlesex University (2006) *Learning Framework Document*. MU

Middlesex University (2018) *Middlesex University Regulations*. MU

Middlesex University (2018) *Learning and Quality Enhancement Handbook*. MU

External Documentation:

Quality Assurance Agency (2015) *Subject Benchmark Statements for Biomedical Sciences*. QAA

21. Other information

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the student programme handbook and the University Regulations.

Curriculum map for *BSc(Hons) Medical Physiology*

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme learning outcomes

Knowledge			
A1	How the human body adapts or respond to environmental stressors		
A2	The causes of and pathophysiology of diseases of the cardiovascular, respiratory, musculoskeletal and the nervous systems and the treatment of human disease		
A3	How data are recorded, securely stored and analysed		
A4	Techniques used to monitor and assess the function of the respiratory and cardiovascular systems to determine health status or evaluate human performance		
A5	Techniques used to monitor and assess the function of the musculoskeletal and the nervous systems to determine health status or evaluate human performance		
A6	The importance of research in the advancement of scientific knowledge and evidence-based practice		
Skills			
B1	Critically evaluate research evidence in the context of current theory or practice	B7	Communicate their ideas effectively to different audiences using a variety of media
B2	Solve physiological problems	B8	Formulate learning and career development plans
B3	Reflect on own learning and practice to develop personally and professionally	B9	Use a range of information technologies
B4	Present information in the most effective format to communicate ideas clearly	B10	Demonstrate a high level of numeracy and problem-solving skills
B5	Design and carry out a research project		
B6	Perform a wide range of physiological techniques and procedures to assess human performance or health status		

Programme outcomes																
A1	A2	A3	A4	A5	A6		B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
Highest level achieved by all graduates																
6	5	6	6	6	6		6	6	6	6	6	6	6	6	5	6

	Module Code	Programme outcomes																	
		A 1	A 2	A 3	A 4	A 5	A 6		B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B 10	
Cell Sciences	BMS1854	x	x							x									
Human Sciences	BMS1514	x																	
Professional Development	BMS1224						x		x	x	x	x	x		x	x	x	x	
Clinical Technology and Mathematics	BMS1624			x										x					
Physics and Measurements	BMS1644			x										x					
Research Methods and Professional Development	BMS2075						x		x		x	x	x		x	x	x	x	
Medical Instrumentation and Imaging	BMS2665			x										x			x		
Neurophysiology	BMS2955			x		x								x					
Cardiopulmonary Science	BMS2895	x	x	x	x					x		x		x					
Neurophysiological Assessment	BMS3996			x		x						x		x					
Human Performance Assessment	BMS3866	x		x	x					x		x		x					
Cardiopulmonary Exercise Testing	BMS3886	x		x	x							x		x					
Dissertation	BMS3336						x		x	x	x	x	x		x	x		x	