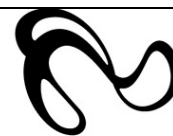


A. Programme Specification and Curriculum Map for BSc (Hons) Healthcare Science (Speciality)



**Middlesex
University**

1. Programme title	BSc (Hons) Healthcare Science (Speciality)
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	
5. Final qualification	BSc(Hons) Healthcare Science (Audiology) BSc(Hons) Healthcare Science (Neurophysiology)
6. Academic year	2012/2013 amended 2020-21
7. Language of study	English
8. Mode of study	Full-time and Part-time only for neurophysiology

9. Criteria for admission to the programme

Candidates normally require Maths and English equivalent to at least GCSE grade C or an IELTS score of 7 with no element less than 6 as well as 280 to 300 A level 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.

CRB and health clearances are also required, which must be achieved before the start of the placement. Students do not pay for the CRB and health checks. Students, who do not get either a CRB or health clearance, will be allowed to transfer to another degree, e.g. biomedical science.

10. Aims of the programme

The programme aims:

- To help the student to develop the knowledge, skills, attitude and ethical values required to provide patient-centred care and work safely and effectively in the NHS as a healthcare professional.
- To apply scientific principles and theories underpinning healthcare science to patient care.

- To carry out competently diagnostic and therapeutic investigations relevant to the role of a Healthcare Science Practitioner.
- To apply scientific methods and approaches to research, development and innovation in healthcare science.
- To develop a range of transferable academic skills required for effective life-long learning, communication, teamworking and leadership.

11. Programme outcomes	
<p>A. Knowledge and understanding On completion of this programme the successful student will have knowledge and understanding of:</p> <ol style="list-style-type: none"> 1. Knowledge, skills and attitude required to work as a healthcare practitioner 2. Normal and abnormal human physiology 3. The principles of diagnosis and management of human disease 4. The sciences underpinning quality healthcare 5. The importance of scientific research in the advancement of healthcare practice 6. The range of diagnostic and therapeutic investigations carried out by a Healthcare Science Practitioner 7. The role of a Healthcare Science Practitioner in and skills required for service improvement 	<p>Teaching/learning methods Students gain knowledge and understanding through engagement with lectures, seminars, laboratory classes delivered online or on campus, peer presentations, debates, placements in clinical physiology departments, designing and undertaking a research project, role play and practical clinical sessions delivered online or on campus</p> <p>Please note: In the event of extraordinary circumstances, such as those with the recent Covid 19 pandemic, placement may be subject to change and/or suspension. Relevant contingency plans will be deployed should such an event occur and students will be informed in a timely manner..</p> <p>Assessment Method Students' knowledge and understanding is assessed by summative and formative assessment, including peer presentations, data analysis exercises , objective-structured practical examinations facilitated online or on campus, online quizzes, and unseen theory examinations (online or on campus and assessment of clinical practice. Please note: In the event of placement suspension, alternative assessments may be deployed online.</p>
<p>B. Cognitive (thinking) skills On completion of this programme the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Critically evaluate research evidence in the context of current theory and practice 2. Solve clinical problems 3. Appraise and synthesise evidence-based information to gain new insights into aspects of current practice 4. Reflect on own learning and practice to develop personally and professionally 	<p>Teaching/learning methods Students learn cognitive skills through lectures, seminars, discussions, peer presentations which may be delivered online or on campus, a research project and debates, placements, practical clinical sessions.</p> <p>Please note: placement and clinical assessments may be subject to change</p>

	<p>Assessment Method Students' cognitive skills are assessed by formative and summative assessment as written work, examinations (either online or on campus, online quizzes, case studies, assessment of clinical practice and peer presentation Please note: placement and clinical assessments may be subject to change</p>
<p>C. Practical skills On completion of the programme the successful student will be able to: 1. Present information in the most effective format to communicate ideas clearly 2. Design and carry out research project or clinical audit 3. Perform a wide range of clinical procedures competently, and in accordance with health and safety guidelines 4. Work within scope of practice and professional codes of conduct</p>	<p>Teaching/learning methods Students learn practical skills through laboratory classes, clinical skills sessions, placements, and by undertaking a research project. Please note: placement and clinical assessments may be subject to change</p> <p>Assessment Method Students' practical skills are assessed formatively and summatively through written work, case presentations, laboratory reports, online quizzes, and in objective structured practical examinations, and assessment of clinical practice. Please note: placement and clinical assessments may be subject to change</p>
<p>D. Graduate Skills On completion of this programme the successful student will be able to: 1. Communicate their ideas effectively to patients, relatives, carers and colleagues using a variety of media 2. Work both collaboratively and with an appreciation of skills required for leadership 3. Demonstrate an autonomous and reflective approach to lifelong learning 4. Formulate learning and career development plans 5. Use a range of information technologies 6. Demonstrate a high level of numeracy and problem-solving skills</p>	<p>Teaching/learning methods Students acquire graduate skills through reading, group work, problem-based learning exercises, structured and directed learning, analysis of case studies, and through reflection, placement and development of portfolio material Please note: placement and clinical assessments may be subject to change</p> <p>Assessment method Students' graduate skills are assessed formatively and summatively using written work in the form of portfolios, and also in case studies, presentations, project and research work, and online examinations Please note: placement and clinical assessments may be subject to change</p>

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

12.1 Overall structure of the programme

BSc(Hons) Healthcare Science (Audiology) – Full-time

Year 1

BMS1234 Professional Practice (10 Week Placement) (30 Credits)	BMS1444 Healthcare Science 1 (30 Credits)	BMS1604 Healthcare Science 2 (15 Credits)	BMS1814 Physiological Sciences 1 (15 Credits)	BMS1894 Physiological Sciences 2 (30 Credits)
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Year 2

BMS2005 Research Methods and Professional Practice (15 Week Placement) (30 Credits)	BMS2625 Medical Instrumentation and Imaging (15 Credits)	BMS2935 Diagnostic Audiology (45 Credits)	BMS2965 Practical Diagnostic Audiology (30 Credits)
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Year 3

BMS3336 Dissertation (30 Credits)	BMS3236 Professional Practice (25 Week Placement) (30 Credits)	BMS3936 Aural Rehabilitation and Amplification (30 Credits)	BMS3966 Practical Aural Rehabilitation (30 Credits)
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BSc(Hons) Healthcare Science (Neurophysiology) – Full-time

Year 1

BMS1234 Professional Practice (10 Week Placement) (30 Credits)	BMS1444 Healthcare Science 1 (30 Credits)	BMS1604 Healthcare Science 2 (15 Credits)	BMS1814 Physiological Sciences 1 (15 Credits)	BMS1894 Physiological Sciences 2 (30 Credits)
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Year 2

BMS2005 Research Methods and Professional Practice (15 Week Placement) (30 Credits)	BMS2455 Neurological Conditions (45 Credits)	BMS2625 Medical Instrumentation and Imaging (15 Credits)	BMS2925 Clinical Neurophysiology (30 Credits)
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Year 3

BMS3336 Dissertation (30 Credits)	BMS3236 Professional Practice (25 Week Placement) (30 Credits)	BMS3916 Applied Clinical Neurophysiology 1 (30 Credits)	BMS3926 Applied Clinical Neurophysiology 2 (30 Credits)
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For both programmes, students, who pass all modules, can exit after year 1 with a CertHE or after year 2 with a DipHE in Healthcare Science.

12.2 Levels and modules

Starting in academic year 2010/11 the University is changing the way it references modules to state the level of study in which these are delivered. This is to comply with the National Framework for Higher Education Qualifications. This implementation will be a gradual process whilst records are updated. Therefore the old coding is bracketed below.

Level 4 (1)		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
<p>Students must take all of the following: BMS1234 BMS1444 BMS1604 BMS1814 BMS1894 Note the placement learning modules may be affected by the ongoing covid 19 outbreak.</p>	<p>There are no optional modules.</p>	<p>All module assessments must be passed.</p>
Level 5 (2)		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
<p>Students must take all of the following: BMS2005 BMS2625 Note the placement learning modules may be affected by the ongoing covid 19 outbreak.</p>	<p>Students must also choose:</p> <ul style="list-style-type: none"> • BMS2935 for Audiology programmes • Or BMS2455 and BMS2925 for Neurophysiology Programme 	<p>All module assessments must be passed.</p>
Level 6 (3)		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
<p>Students must take all of the following: BMS3336 BMS3236 Note the placement learning modules may be affected by the ongoing covid 19 outbreak.</p>	<p>Students must also choose:</p> <ul style="list-style-type: none"> • BMS3936 and BMS3966 for Audiology programmes • Or BMS3916 and BMS3926 for Neurophysiology Programme 	<p>All module assessments must be passed.</p>

12.3 Non-compensatable modules (note statement in 12.2 regarding FHEQ levels)

Module level	Module code
4-6	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.
- A student, who is unable to complete the honours degree due to illness, will be eligible for aegrotat degree in healthcare science without a specialism in the title of the award; students will not have met the programme outcomes therefore will not be qualified to work as a healthcare science practitioner.

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

Please note: In the event of extraordinary circumstances, such as those with the recent Covid 19 pandemic, placement may be subject to change and/or suspension. Relevant contingency plans will be deployed should such an event occur and students will be informed in a timely manner.

Placements are an integral part of the programme. Over the three years, students will spend a total 50 weeks in NHS clinical physiology departments in London or the South East: 10 weeks in year 1, 15 weeks in years 2 and 25 weeks in year 3. Placements will be from Monday to Friday.

Students are only placed in University approved learning environments. Placement Tutors in collaboration with placement providers will ensure that learning opportunities and support will be available in the placement area to help students meet the module learning outcomes and complete the Practitioner Training Programme (PTP) training manual. Both parties will also ensure that a robust quality monitoring processes will be in place and establish clear lines of communication.

Prior to going on placement, students are required to get an enhanced CRB and Occupational Health clearance. Students, who do not get either an enhanced CRB or Occupational Health clearance, may have to transfer to another programme at the University. Because students are not able to claim travel and accommodation expenses, the clinical facilitator will try to place each student with an NHS trust that is near to the student's home or term address. Placement is unpaid unless the student is being sponsored by a Trust.

Students are notified in advanced of their placement allocation and contact details of placement staff. Students are also required to attend placement Monday to Thursday during normal working hours. Their duty rota may include Bank Holidays. Friday is set-aside for protected study time.

At the start of each placement, students will receive an induction and support and guidance will be provided for students with diverse needs.

Each placement area is assigned a Placement Tutor and given a copy of the placement handbook, which outlines for example lines of communication, contact details of key academic staff, attendance policy and complaints procedures. Practice learning is assessed using the training manual and written assignments.

In the final year, students have an opportunity to undertake a research project, which could include a clinical audit. Research projects carried out on placement will normally require local ethical approval.

16. Future careers (if applicable)

On completion of programme, graduates could apply for band 5 physiological science posts in the NHS. Suitably qualified graduates can study to become physiological scientists, working in the NHS at Band 7 or higher. They would need to get onto an NHS Scientist Training Programme (STP). For STP training places, a 2:1 in a relevant science degree is the minimum required.

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 My Learning
Learning resource facilities at the University including computing suites and internet access
Access to English Language and Learning Support on campus
Dyslexic and Disability support

18. JACS code (or other relevant coding system)

Neurophysiology 144B91H (B140)
Audiology 144B91J (B610)

19. Relevant QAA subject benchmark group(s)

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20. Reference points

The following reference points were used in designing the Programme:

Internal documentation:

- i. Middlesex University (2006) *Learning Framework Document*
- ii. Middlesex University (2019-20) *Middlesex University Regulations*. MU
- iii. Middlesex University (2019-20) *Centre for Learning and Quality Enhancement Handbook*. MU

External Documentation:

1. Quality Assurance Agency (2001) *The QAA Framework for framework for higher education qualifications in England, Wales and Northern Ireland*. QAA
2. Quality Assurance Agency (2007) *Code of practice for the assurance of academic quality and standards in higher education - Section 9: Work-based and placement learning*. QAA
3. Department of Health (DH) (2011) *Modernising Scientific Careers Programme BSc (Hons) in Healthcare Science, Neurosensory Sciences (Physiological Sciences), Learning Outcomes and Indicative Content 2010/11*. DH
4. Department of Health (DH) (2010) *Modernising Scientific Careers Practitioner Training Programme. Physiological Sciences: Neurosensory Science Training Manual*. DH

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) Healthcare Science*

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 and understanding		Practical skills	
A1	Knowledge, skills and attitude required to work as a healthcare science practitioner	C1	Present information in the most effective format to communicate ideas clearly
A2	Normal and abnormal human anatomy and physiology	C2	Design and carry out a research project or clinical audit
A3	The principles of diagnosis and management of human diseases	C3	Perform a wide range of clinical procedures competently, and in accordance with health and safety guidelines
A4	The sciences underpinning quality healthcare delivery	C4	Work within scope of practice and professional codes of conduct
A5	The importance of scientific research in the advancement of healthcare practice		
A6	The range of diagnostic and therapeutic investigations carried out by a Healthcare Science Practitioner		
A7	The role of a Healthcare Science Practitioner in and skills required for service improvement		
Cognitive skills		Graduate Skills	
B1	Critically evaluate research evidence in the context of current theory or practice	D1	Communicate their ideas effectively to patients, relatives, carers and colleagues using a variety of media
B2	Solve clinical problems	D2	Work both collaboratively and with an appreciation of skills required for leadership
B3	Appraise and synthesise evidence-based information to gain new insights into aspects of current practice	D3	Demonstrate an autonomous and reflective approach to lifelong learning
B4	Reflect on own learning and practice to develop personally and professionally	D4	Formulate learning and career development plans
		D5	Use a range of information technologies
		D6	Demonstrate a high level of numeracy and problem-solving skills

BSc(Hons) Healthcare Science (Audiology)

Programme outcomes																									
A1	A2	A3	A4	A5	A6	A7		B1	B2	B3	B4		C1	C2	C3	C4		D1	D2	D3	D4	D5	D6		
Highest level achieved by all graduates																									
6	6	6	6	6	6	6		6	6	6	6		6	6	6	6		6	6	6	6	6	6		

Module Title	Module Code by Level	Programme outcomes																									
		A1	A2	A3	A4	A5	A6	A7		B1	B2	B3	B4		C1	C2	C3	C4		D1	D2	D3	D4	D5	D6		
Professional Practice	BMS1234	x			x	x	x			x	x	x	x		x		x	x		x	x	x	x	x	x		
Healthcare Science 1	BMS1444		x	x						x					x												
Healthcare Science 2	BMS1604		x		x					x																	
Physiological Sciences 1	BMS1814				x							x			x												
Physiological Sciences 2	BMS1894		x	x	x		x			x		x			x										x		
Research Methods and Professional Practice	BMS2005	x			x	x				x		x			x	x	x	x		x	x	x	x	x	x		
Medical Instrumentation and Imaging	BMS2625				x							x			x												
Diagnostic Audiology	BMS2935		x	x						x		x															
Practical Diagnostic Audiology	BMS2965				x		x	x		x		x			x		x										
Dissertation	BMS3336					x		x		x	x	x	x		x	x				x	x			x	x		
Professional Practice	BMS3236	x		x			x	x		x	x	x	x		x		x	x		x	x	x	x				
Aural Rehabilitation and Amplification	BMS3836		x	x						x		x															
Practical Aural Rehabilitation	BMS3866				x		x	x		x		x			x		x										

BSc(Hons) Healthcare Science (Neurophysiology)

Programme outcomes																									
A1	A2	A3	A4	A5	A6	A7		B1	B2	B3	B4		C1	C2	C3	C4		D1	D2	D3	D4	D5	D6		
Highest level achieved by all graduates																									
6	6	6	6	6	6	6		6	6	6	6		6	6	6	6		6	6	6	6	6	6		

Module Title	Module Code by Level	Programme outcomes																									
		A1	A2	A3	A4	A5	A6	A7		B1	B2	B3	B4		C1	C2	C3	C4		D1	D2	D3	D4	D5	D6		
Professional Practice	BMS1234	x			x	x	x			x	x	x	x		x		x	x		x	x	x	x	x	x		
Healthcare Science 1	BMS1444		x	x						x					x												
Healthcare Science 2	BMS1604		x		x					x																	
Physiological Sciences 1	BMS1814				x							x			x												
Physiological Sciences 2	BMS1894		x	x	x		x			x		x			x										x		
Research Methods and Professional Practice	BMS2005	x			x	x				x		x			x	x	x	x		x	x	x	x	x	x		
Neurological Conditions	BMS2455	x			x	x				x		x			x	x	x	x		x	x	x	x	x	x		
Medical Instrumentation and Imaging	BMS2625				x							x			x												
Clinical Neurophysiology	BMS2925		x	x	x		x			x	x	x			x		x										
Dissertation	BIMS3336					x		x		x	x	x	x		x	x				x	x			x	x		
Professional Practice	BMS3236	x		x			x	x		x	x	x	x		x		x	x		x	x	x	x				
Applied Clinical Neurophysiology 1	BMS3916		x	x						x																	
Applied Clinical Neurophysiology 2	BMS3926				x		x	x		x	x	x			x		x										