B.Sc. (Hons) Environmental Health

Programme Specification

1. Programme title	BSc (Hons) Environmental Health BSc (Hons) Environmental Health with Foundation Year
2. Awarding institution	Middlesex University
3a. Teaching institution	Middlesex University, Hendon
3b. Language of study	English
4a. Valid intake dates	September
4b. Mode of study	Full Time 3 years, Part Time 6 years
4c. Delivery method	☒ On-campus/Blended ☐ Distance Education
5. Professional/Statutory/Regulatory body	Chartered Institute of Environmental Health
6. Apprenticeship Standard	
7. Final qualification(s) available	BSc (Hons) Environmental Health Cert HE Environmental Health
8. Academic year effective from	2024-25

9. Criteria for admission to the programme

Evidence that you have capacity to work at level 4+ for example:

5 GCSEs (Grade 4 or above) or 5 GCEs (Grade C or above) including: English Language and Mathematics and Science **PLUS** one of the following:

Three A-Levels with a minimum of 112 UCAS Tariff points with at least one A-level in a science or technology subject drawn from Chemistry, Biology, Human Biology, Physics, Geography, Geology, Environmental Science, Nutrition, Food Science or similar OR

A BTEC National Diploma or Certificate in an appropriate area (e.g. Applied Science) normally with a minimum of DMM OR

Applicants who have successfully completed a relevant Diploma in Access to Higher Education (Science or similar) which must include 45 credits at level 3, of which all 45 credits must be at Merit or higher OR

A combination of A Level, BTEC and other accepted qualifications that total 112 UCAS tariff points including 32 from a science subject

Mature students will be interviewed by the team to discuss suitability for study at level 4 applicants who have successfully passed a HE Foundation Science programme.

Applicants must be competent in English to study this course. For those for whom English is not their first language, the most commonly accepted evidence of English language ability is an IELTS score of 6.0 and over (minimum component score of 5.5 for each element)

Please refer to the programme specification for the Foundation Year for criteria for admission to the BSc (Hons) Environmental Health with Foundation Year programme.

10. Aims of the programme

This programme is vocationally orientated and designed to provide graduates with the skills necessary to analyse and evaluate environmental and health problems in scientific, technical and managerial terms. The programme is designed to produce high quality practitioners, whose skill profile ensures that they can be efficiently and effectively employed in a variety of settings including local authorities, Public Health agencies, commercial and industrial businesses, and consultancies. Graduates will have received a coherent body of theoretical and applied professional knowledge, transferable skill development, and a fundamental competency in the fields of environmental health that incorporate the ethical and moral dimensions of practice to ensure good, safe, inclusive and supportive Environmental Health Practitioners.

The teaching team has sought to develop a programme that is directly relevant to environmental health professionals working in, or aspiring to work, in a wide variety of contexts but which fosters the development of an informed, critical and imaginative attitude to professional practice. This has entailed the development of a programme that concentrates on the acquisition of knowledge, together with the skills to appraise and evaluate such theoretical knowledge in a practice context.

The programme offers a balanced approach to managing environmental and health in a range of settings and is designed to meet the changing face of professional practice.

The programme aims, on successful completion. to:

a. Provide a multi-disciplinary understanding of the complexities of environmental and public health practice
b. Provide a balance of scientific, technical, communication and legislative skills on which to base professional competence in relation to environmental health
c. Enable students to identify, implement and evaluate appropriate control strategies to reduce harm to health
d. Integrate leadership and influencing skills into professional practice
e. Enable students to identify principal environmental health stressors and their impact on human health.
f. Respond positively and flexibly to a changing environment and facilitate the development of problem-solving skills, resilience and agility
g. Justify appropriate research methodology to underpin a research and development ethos within the profession.
h. Evaluate and appraise new information, review evidence and critically analyse conflicting theories and assimilate best professional practice.

11. Programme outcomes*

A. Knowledge and understanding

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

1. Scientific, technological, evidence based, legislative and managerial principles that impact on Environmental Health practice.
2. Principle environmental and occupational stressors and vectors of diseases and how to control them
3. How social, cultural, emotional and psychological factors influence environmental health and the health of the public
4. Hazard analysis, risk assessment organisational culture and management.
5. Professional scope of practice including the complex political and corporate environment in which environmental health practitioners' practice and the role of leadership, management of change and influencing skills within this practice
6. Legislation, application of relevant Acts, regulations, guidance and codes of practice, together with the technical and scientific knowledge to effect environmental health interventions in complex situations
7. The chemical, biological, physical, social and psychosocial stressors and their implications for health.
8. Comprehensive and detailed knowledge of environmental health intervention areas: Public Health; Food Safety; Health and Safety; Housing and Health; Environmental Protection
9. Critical awareness of business principles to enable effective advice and guidance to be provided in a range of business contexts.

Teaching/learning methods

Students gain knowledge and understanding through engagement with concept videos, workshops, seminars, laboratory and practical sessions and through a variety of directed and self-directed learning activities e.g. group projects, case study analysis, critical literature appraisal laboratory-based learning and data analysis, portfolio development and use of real-world examples. Classroom conversations consolidate knowledge and seminars, and practical sessions embed understanding. The use of case studies (with examples co-created with employers) that reflect actual workplace environments are used to enable students to relate knowledge to practice situations in which they are likely to operate in the future. Use of e-learning strategies is also integrated into the teaching and learning strategies through the use of professional online data bases. Online learning is also used to encourage independent study including links to external sources of information, podcast presentations and guidance notes which are available for download. Formative assessment, using interactive exercises and quizzes is designed to encourage interaction with learning materials

Assessment methods

Formative assessment such as online learning exercises, peer evaluation, group activities and feedback of sample work will be used.

Students' knowledge and comprehension are assessed by case study portfolios, problem solving activities, coursework essays, management reports, reflection. case studies and presentations couple with the completion of an undergraduate dissertation

B. Skills

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

1. Develop audit skills and competently undertake investigations spanning the scope of practice of environmental health and make recommendations on the most appropriate course of action to employ where remedy is required

2. Apply knowledge of health and environmental stressors on which to develop solutions and appropriate environmental health interventions to a range of environmental health challenges
3. Carry out appropriate numerical calculations together with the ability to retrieve, collate and interpret information and data gained in a variety of contexts and critically evaluate contradictory options to a given problem in complex and unpredictable situations.
4. Critically evaluate the results of an academic investigation and be able to extract data using a range of techniques appropriate to their chosen fields
5. Synthesise environmental health needs at the individual, neighbourhood and regional level and incorporate political, environmental and social contexts into decision making
6. Employ regulatory and non-regulatory controls, as appropriate, across the scope of practice and consider the role of partnership working in the development of this practice.
7. Demonstrate cultural competence, empathy and awareness of ethical considerations applicable to a range of environmental health issues to effect inclusive environmental health interventions
8. Effectively communicate through a range of different methods and to a range of audiences
9. Respond positively to changes within and to environmental health practice through adaptability, agility and resilience.
10. Demonstrate technological agility to support their curiosity in learning;
11. Reflect on personal and career development.

Teaching/learning methods

Students learn skills through interactive participation in modules, case study analysis, laboratory based learning and data analysis exercises and experiments together with group work and workshops.

Students are encouraged to challenge and discuss concepts. Students must consider options and issues surrounding interventions.

Assessment methods

Cognitive (thinking) skills are assessed by management reports, problem solving activities, essays, and oral examination and laboratory data analysis reports and development of a dissertation.

Practical skills are assessed by presentation, problem solving exercises, and oral examinations. The latter relates to the final year Practical Food Inspection as part of the accreditation of the award with the CIEH.

Graduate competencies

Graduate competencies are integrated into formative and summative assessment. The Preparing for Professional Practice module seeks to enhance technological ability, collaboration and innovation in practice and problem solving and delivery. The Communications and Public Health Delivery module seeks to underpin communications, empathy and inclusion to tackle public health as well as supporting resilience and adaptability. Leadership and influence is specifically targeted in the Interventions in occupational Health and Safety module. These skills are developed through written reports, case studies, presentations, and portfolio writing. Skills may also be assessed through online exercises and presentations.

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

12.1 Structure of the programme

An undergraduate BSc honours degree is comprised of 360 credits of learning. In each year you will take 120 credits of learning, and this will enable you to complete your award as a full-time student in 3 years.

If you are Part-time, you will normally undertake 60 credits of learning per year and so will complete their study in 6 years.

Modules are delivered as 30 credit modules studied over 12 weeks in either semester 1 or 2.

Students who exit the award having successfully passed 120 credits from year 1 will gain a certificate of higher education: environmental health

Year 1

Semester 1

- BIO1040 Sciences of Environmental and Public Health (30c)
- BIO1175 Foundations of Environmental Science (30c)

Semester 2

- BIO1280 Environmental and Public Health Stressors (30c)
- BIO1025 Introduction to Law and Health Protection (30c)

Year 2

Semester 1

- BIO2233 Food Safety and Control (30c)
- PRS2250 Housing Standards and Interventions (30c)

Semester 2

- BIO2050 Environmental Protection (30c)
- CHE2106 Research methods and Science Innovation (30c)

Year 3

Semester 1

- BIO3006 (30c) Interventions in Occupational Health and Safety
- PRS3988 Dissertation (30c)
- BIO3305 Food Inspection, Food Standards and Fraud (0c)

Semester 2

- BIO3060 Preparing for Professional Practice (30c)
- PRS3460 Communications and Public Health Interventions (30c)

Indicative Part Time Route

Year 1

Semester 1

- BIO1040 Sciences of Environmental and Public Health (30c)

Semester 2

- BIO1280 Environmental and Public Health Stressors (30c)

Year 2

Semester 1

- BIO1175 Foundations of Environmental Science (30c)

Semester 2

BIO1025 Introduction to Law and Health Protection (30c)

Year 3

Semester 1

- BIO2233 Food Safety and Control (30c)

Semester 2

- BIO2050 Environmental Protection (30c)

Year 4

Semester 1

- PRS2250 Housing Standards and Interventions (30c)

Semester 2

- CHE2106 Research Methods and Science Innovation (30c)

Year 5

Semester 1

- BIO3006 Interventions in Occupational Health and Safety (30c)
- BIO3305 Food Inspection, Food Standards and Fraud (0c)

Semester 2

- PRS3460 Communications and Public Health Interventions. (30c)

Year 6

Semester 1

- PRS3988 (30c) Dissertation

Semester 2

- BIO3060 Preparing for Professional Practice (30c)

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) Environmental Health with Foundation Year programme.

Level 4

Compulsory

Students must take all of the following:

- BIO1175 Foundations of Environmental Science
- BIO1025 Introduction to Law and Health Protection
- BIO1040 Sciences of Environmental and Public Health
- BIO1280 Environmental and Public Health Stressors

Optional

none

Progression requirements

Students must pass at least 90 credits to progress to Level 5.

To achieve Honours, failed credit will need to be repeated.

Level 5

Compulsory

Students must take all of the following:

- BIO2233 Food Safety and Control
- CHE2106 Research Methods and Science Innovation
- PRS2250 Housing Standards and Interventions
- BIO2050 Environmental Protection

Optional

none

Progression requirements

Students must have passed at least 210 credits to progress to Level 6.

To achieve Honours, failed credit will need to be repeated.

Level 6

Compulsory

- BIO3006 Interventions in Occupational Health and Safety
- PRS3988 Dissertation
- BIO3060 Preparing for Professional Practice
- PRS3460 Communications and Public Health Interventions
- BIO3305 Food Inspection, Food Standards and Fraud

Optional

none

Progression requirements

12.3 Non-compensable modules

Module level/Module code

Level 4

All modules

Level 5

BIO2233, BIO2050, PRS2250

Level 6

All modules

13. Information about assessment regulations

This programme will run in line with general University regulations: https://www.mdx.ac.uk/about-us/policies except in relation to compensation: see section 12.3 above in relation to non-compensable modules.

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

There are no placement requirements for this programme, but students are encouraged to seek short term or part time placements/work experience in suitable environmental health organisations as an extracurricular activity. The programme leader will make students aware of placement and work experience opportunities.

15. Future careers / progression

The Degree in Environmental Health produces graduates with a wide range of professional, graduate and transferable skills. Within the programme students are able to direct their learning to all aspects of professional practice so that on completion of the award they are able to offer employers broad underpinning knowledge and skills. The award has been matched to the needs of a variety of stakeholders and, in particular, the operational practice of future environmental and health agencies.

The degree is accredited by the Chartered Institute of Environmental Health (CIEH) and successful completion of the degree allows students to complete professional qualification pathways that qualify them as Environmental Health Practitioners and demonstrate their skills and competence in professional practice. Those that meet the CIEH professional requirements will be listed on the CIEH professional register.

Students also have the opportunity to continue their academic careers at Middlesex University on the MSc Occupational Safety Health Management awards, MSc Public Health or MSc Sustainability and Environmental Management further enhancing their future career development and opportunities. In addition, the university is expanding the range of doctoral opportunities, both work based and PhDs.

16. Particular support for learning

The University provides a number of points of support for students. Academic support is provided through an individually appointed Academic Advisor and by the Learning Enhancement Team who advise students on literacy, English language, and numeracy for example. The Disability and Dyslexia Support Service offers support to students with these needs during their time at Middlesex.

There is an on-line learning platform to provide module and programme support.

Sheppard Library provides a wide range of physical and online resources and study spaces.

Students will be supported with their coursework and subject understanding in small group tutorials or on a 1:1 basis. Student Learning Assistants provide peer-learning support and can assist students with their work in class, as well as through 1:1 or small group discussion.

All students will have a named Academic Advisor each year who will provide programme support throughout their programme.

17. HECos code(s)

101317

18. Relevant QAA subject benchmark(s)

- Health Studies (2019);
- Earth Sciences, Environmental Sciences and Environmental Studies (2023)

19. Reference points

CIEH Professional Standards Framework
QAA subject benchmarks
QAA Framework for Higher Education Qualifications (2024)
Middlesex University Regulations
Middlesex University Learning and Quality and Enhancement Handbook
Middlesex University 2031 Learning Framework

20. Other information

Indicators of quality:

- Progression statistics and good awards
- Students' feedback
- External examiners communication, both formal reports and other engagement
- Student employability
- Academic Professional Panel

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 they take full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the rest of your programme handbook and the university regulations.

21. Curriculum map for B.Sc. Environmental Health

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	
A1	Scientific, technological, evidence based, legislative and managerial principles that impact on Environmental Health practice.
A2	Principle environmental and occupational stressors and vectors of diseases and how to control them
A3	How social, cultural, emotional and psychological factors influence environmental health and the health of the public
A4	Hazard analysis, risk assessment organisational culture and management.
A5	Professional scope of practice including the complex political and corporate environment in which environmental health practitioners practice and the role of leadership, management of change and influencing skills within this practice
A6	Legislation, application of relevant Acts, regulations, guidance and codes of practice, together with the technical and scientific knowledge to effect environmental health interventions in complex situations
A7	The chemical, biological, physical, social and psychosocial stressors and their implications for health
A8	Comprehensive and detailed knowledge of environmental health intervention areas; Public Health, Food Safety; Health and Safety; Housing and Health; Environmental Protection
A9	Critical awareness of business principles to enable effective advice and guidance to be provided in a range of business contexts.
Skills	
B1	Develop audit skills and competently undertake investigations spanning the scope of practice of environmental health and make recommendations on the most appropriate course of action to employ where remedy is required
B2	Apply knowledge of health and environmental stressors on which to develop solutions and appropriate environmental health interventions to a range of environmental health challenges
B3	Carry out appropriate numerical calculations together with the ability to retrieve, collate and interpret information and data gained in a variety of contexts and critically evaluate contradictory options to a given problem in complex and unpredictable situations.
B4	Critically evaluate the results of an academic investigation and be able to extract data using a range of techniques appropriate to their chosen fields
B5	Synthesise environmental health needs at the individual, neighbourhood and regional level and incorporate political, environmental and social contexts into decision making
B6	Employ regulatory and non-regulatory controls, as appropriate, across the scope of practice and consider the role of partnership working in the development of this practice
B7	Demonstrate cultural competence, empathy and awareness of ethical considerations applicable to a range of environmental health issues to effect inclusive environmental health interventions
B8	Effectively communicate through a range of different methods and to a range of audiences
B9	Respond positively to changes within and to environmental health practice through adaptability, agility and resilience.
B10	Demonstrate technological agility to support their curiosity in learning
B11	Reflect on personal and career development

Programme outcomes																		
A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
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

Module Title	Module Code by Level	A1	A2	A3	A4	A5	A6	A7	A8	A9	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11
Sciences of Environmental and Public Health	BIO1040	X										X								X	X
Foundations of Environmental Science	BIO1175	X	X					X				X	X							X	
Introduction to Law and Health Protection	BIO1025	X		X		X							X								
Environmental and Public Health stressors	BIO1280	X	X	X	X			X				X								X	
Food Safety and Control	BIO2233		X		X		X	X	X		X	X				X					
Research Methods and Science Innovation	CHE2106									X			X	X							
Housing Standards and Intervention	PRS2250		X	X	X	X	X	X	X		X	X			X	X	X	X	X		
Environmental Protection	BIO2050		X		X	X	X	X	X		X	X	X			X					
Interventions in Occupational Health & Safety	BIO3006		X		X	X	X	X	X	X	X	X				X					
Communications and Public Health Interventions	PRS3460			X		X									X		X	X	X		
Dissertation	PRS3988												X	X				X		X	
Preparing for Professional Practice	BIO3060	X	X	X	X	X	X		X	X		X	X			X	X		X		X
Food inspection, Food Standards and Fraud	BIO3305	X			X	X	X		X			X						X			