

# Programme Specification and Curriculum Map for MSc Environmental Health

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<b>1. Programme title</b>	MSc Environmental Health
<b>2. Awarding institution</b>	Middlesex University
<b>3. Teaching institution</b>	Middlesex University
<b>4. Programme accredited by</b>	Chartered Institute of Environmental Health
<b>5. Final qualification</b>	MSc Environmental Health
<b>6. Academic year</b>	2020-21
<b>7. Language of study</b>	English
<b>8. Mode of study</b>	Full Time/Part Time

## **9. Criteria for admission to the programme**

Evidence that have capacity to work at level 6+, for example:

Good honours degree, 2.2 or above or equivalent qualification in a relevant branch of science e.g. food science and technology, environmental science, safety engineering or chemistry, physics or biology.

Professional Diploma e.g. NEBOSH diploma together with professional experience.

Applications from mature candidates without formal qualifications are welcomed provided they can demonstrate appropriate levels of relevant ability and experience. This equivalent work based experience may be considered at the discretion of the programme team and may require submission of a piece of work.

Overseas candidates must also be competent in English to study this course. The most commonly accepted evidence of English language ability is IELTS 6.5 (with minimum 6.0 in all four components)

The programme is open to students with disabilities. Students who have a disability are welcome to contact the programme leader prior to applications to discuss any specific needs.

## 10. Aims of the programme

At the end of the Masters programme that student will be able to:

- Identify, analyse, synthesise and evaluate environmental health stressors, developing an understanding of how they can impact on health.
- Display professional competence through development of skills based on scientific, legislative, technical and managerial knowledge.
- Critically appraise risk in a variety of settings, designing appropriate solutions to reduce risk.
- Communicate technical information in a clear, concise and persuasive style to appeal to particular audiences.
- Reflect on practice leading to changes in personal and professional understanding.
- Develop an ethical understanding of the context of their place as a student, researcher, and later as a practitioner.
- Undertake a major piece of research involving the design, planning, implementation and critical evaluation of an area of environmental health using appropriate methodologies, data collection and evaluation.

## 11. Programme outcomes

### A. Knowledge and understanding

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

1. Environmental Health Stressors and their potential or realised effects upon health.
2. The aetiology of communicable and non-communicable diseases.
3. A wide range of scientific, technological, legislative and managerial processes used to develop appropriate environmental health interventions.
4. The use of hazard analysis and risk assessment tools and techniques in environmental health management.
5. Risk management, communication, and application within practice.
6. The key areas of environmental health practice.
7. How to collect, synthesise, evaluate and use public health information

### Teaching/learning methods

Students gain knowledge and understanding through attending teaching activities such as lectures, seminars, laboratory and other practical sessions. These taught sessions are further augmented through a variety of directed and self-directed learning activities, e.g. projects, case study analysis, and portfolio development. These methods are designed to ensure that students learn the ability to use the knowledge gained in a way that achieves positive outcomes.

### Assessment Method

Students' knowledge and understanding is assessed by laboratory reports, written assignments, in-course tests, and oral and written examinations. The assessments are designed to evaluate the student's approach to risk, based on their scientific and legislative knowledge. An understanding of the subject is both summatively and formatively assessed.

<p>data to inform EH intervention activity.</p>	
<p><b>B. Cognitive (thinking) skills</b> On completion of this programme the successful student will be able to:</p> <ol style="list-style-type: none"> <li>1. Appraise good practice in environmental health;</li> <li>2. Critically analyse issues influencing environmental health and public health and safety;</li> <li>3. Develop audit skills that support the development of action plans;</li> <li>4. Reflect on own practice and select from a range of options to influence others to achieve the desired outcome;</li> <li>5. Problem solve within a range of problems and prioritise and communicate solutions;</li> <li>6. Select appropriate approaches to investigations in complex situations;</li> <li>7. Critically appraise residual risk after planned intervention has been delivered;</li> <li>8. Critically evaluate the results of an academic investigation and be able to extract data using a range of techniques appropriate to their chosen fields; and</li> <li>9. Undertake formal academic research.</li> </ol>	<p><b>Teaching/learning methods</b> Students learn these cognitive skills through case study analysis, laboratory based exercises and experiments. The importance of real life examples help student to learn how careful analysis can lead to appropriate action. Group seminars and workshops allow students room to discuss and develop the actions necessary to deliver change.</p> <p><b>Assessment Method</b> Students' cognitive skills are assessed by laboratory based reports, written assignments, in-course tests, and oral and written examinations, and in the development of a post graduate project/dissertation. The assessments are designed to evaluate the student's approach to risk, based on their scientific and legislative knowledge.</p>
<p><b>C. Practical skills</b> On completion of the programme the successful student will be able to:</p> <ol style="list-style-type: none"> <li>1. Critically appraise guidance, legislation, policies and complex data and communicate their implications to a wide audience;</li> </ol>	<p><b>Teaching/learning methods</b> The wide range of information from numerous sources e.g. legislation, guidance, technical and government reports, require students to learn the skill of appraisal. Students learn this skill and other practical skills through interactive participation in modules, laboratory exercises, formative assessment and through practical work.</p>

<ol style="list-style-type: none"> <li>2. Select, manage, analyse and interpret information;</li> <li>3. Undertake safe laboratory practice.</li> <li>4. Inspect, audit, and Investigate in a range of contexts;</li> <li>5. Make recommendations and articulate solutions in a professional manner;</li> <li>6. Successfully undertake a substantial academic investigation and articulate the findings.</li> </ol>	<p><b>Assessment Method</b> Students' practical skills are assessed by reports of laboratory sessions, oral and written examinations that evaluate their ability to analyse a wide range of information sources.</p>
<p><b>D. Post - Graduate Skills</b> On completion of this Masters programme the successful student will be able to:</p> <ol style="list-style-type: none"> <li>1. Communicate effectively;</li> <li>2. Work in a professional manner;</li> <li>3. Undertake effective learning through independent study.</li> <li>4. Use a range of information technology to search for and appraise peer reviewed, legislative and professional guidance literature.</li> <li>5. Demonstrate personal and career development in a professional capacity.</li> <li>6. Effectively manage their time throughout the course of study.</li> </ol>	<p><b>Teaching/learning methods</b> Students learn key skills through participation in all elements in the programme.</p> <p>Assessment method Post – graduate skills are integrated into all forms of assessment.</p>

<p><b>12. Programme structure (levels, modules, credits and progression requirements)</b></p>
<p><b>12. 1 Overall structure of the programme</b></p>
<p>The programme is normally studied over 1 calendar year full time or 2 years part time.</p> <p>The programme is modular with the modules being of 15 credits point value. Each credit represents approximately 10 hours of student learning, endeavour and assessment. In order to obtain the Masters award a student will need to have studied 8 15 credit modules with a total credit of 120, plus a 60 credit dissertation module, an additional 10 credits is required to complete the Practical Food Inspection element.</p>

<b>12.2 Levels and modules</b>		
Level 7		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
<p>Masters students must complete all modules:</p> <p>BIO 4502 Public Health Leadership (15 Credits)</p> <p>BIO 4115 Pollution and Health Protection (15 Credits)</p> <p>BIO 4215 Stressors and Vectors of Disease (15 Credits)</p> <p>PRS 4434 Factors Affecting Risk and Strategic Risk Intervention (15 Credits)</p> <p>PRS 4212 Management of Workplace Safety (15 Credits)</p> <p>PRS 4899 Interventions in Environmental and Health Intervention</p> <p>BIO 4404 Food Safety (15 Credits)</p> <p>BIO 4801 Practical Food Inspection (10 Credits)</p> <p>BIO 4106 Housing and Health (15 Credits)</p> <p>PRS 4499 Research Methods and MSc Project (60 Credits)</p>	<p>There are no optional modules.</p>	

<b>12.3 Non-compensatable modules (note statement in 12.2 regarding FHEQ levels)</b>	
<b>Module level</b>	<b>Module code</b>
7	BIO 4502 (15c), BIO 4115 (15c), BIO 4215 (15c), PRS 4434 (15c), PRS 4212(15c), PRS 4899 (15c) BIO 4404 (15c) BIO 4801 (10c) BIO 4106 (15c) PRS4499 (60c)

**13. A curriculum map relating learning outcomes to modules**  
See Curriculum Map attached.

**14. Information about assessment regulations**

The regulations applying to the programme are those common to the University, except that where modules are multiply assessed all elements need to be passed at a minimum grade of 16 on the University 20 Point Scale. Note – In respect of BIO 4801 Practical Food Inspection, this is a competency based assessment and so the pass mark is 70% for the identification element.

Self deferral is not permitted

Where a practical session is not attended, students cannot submit a laboratory report applicable to that session. A register of all laboratory sessions will be kept.

**15. Placement opportunities, requirements and support (if applicable)**  
N/A

**16. Future careers (if applicable)**

The Masters in Environmental Health produces postgraduates 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 and specialist knowledge in the key areas of environmental health.

The award has been matched to the needs of a variety of stakeholders and in particular in relation to the strategic management and operational practice of future environmental and public health agencies. Successful students will be able to complete professional qualifications pathways that qualify them as Environmental Health Practitioners and specifically meet the Food Standards Agency's competence requirement for food law intervention activity.

Students also have the opportunity to return to study on one of the expanding range of doctoral opportunities both work based and PhDs.

**17. Particular support for learning (if applicable)**

Facilities at Hendon include Microbiology Laboratory, Science Laboratories, and Pestology materials.

Use of specialist external lecturers.

Range of case studies based upon real practice scenarios, professionally accredited staff, e-learning medium, simulations.

**18. JACS code (or other relevant coding system)**

B910

**19. Relevant QAA subject benchmark group(s)**

Health Studies, Bio-sciences, Earth Science. Environmental Science and Environmental Studies.

**20. Reference points**

- Relevant multi-disciplinary subject benchmarks: Earth Sciences, Environmental Sciences and Studies (2014) and Health Sciences (2016)
- Middlesex University Learning and Quality Enhancement Handbook (LQEH) 2016-17
- Middlesex University Regulations 2016-17
- Chartered Institute of Environmental Health Curriculum 2011.

**21. Other information**

This programme is designed to provide graduates in related fields with the additional knowledge and skills necessary to analyse and evaluate environmental health problems in scientific, technical and managerial terms.

The programme is designed to produce high quality graduates whose skills profile ensures that they can be efficiently and effectively employed in a variety of contexts. Graduates will have received a coherent body of theoretical and applied knowledge, transferable skill development, and a fundamental competency in the field of environmental health, that incorporates the ethical dimension of practice.

The teaching team has sought to create a programme that is directly relevant to environmental health professionals working in, or aspiring to work, in a wide variety of contexts and locations but which fosters the development of an informed, critical and imaginative attitude. 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 practical context.

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

The following course-related costs are not included in the fees:

- Additional books to support study;

- Travel costs to field trips (where transport is not provided by the university, however these will be on London transport).

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.



## Appendix 2

### Curriculum map for MSc 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		Practical skills	
A1	Environmental Health Stressors and their potential or realised effects upon health.	C1	Critically appraise guidance, legislation, policies and complex data and communicate their implications to a wide audience.
A2	The aetiology of communicable and non-communicable diseases.	C2	Select, manage, analyse and interpret information.
A3	A wide range of scientific, technological, legislative and managerial processes used to develop appropriate environmental health interventions.	C3	Undertake safe laboratory practice.
A4	The use of hazard analysis and risk assessment tools and techniques in environmental health management.	C4	Inspect, audit, and Investigate in a range of contexts.
A5	Risk management, communication, and application within practice.	C5	Make recommendations and articulate solutions in a professional manner.
A6	The key areas of environmental health practice.	C6	Successfully undertake a substantial academic investigation and articulate the findings.
A7	How to collect, synthesise, evaluate and use public health information data to inform EH intervention activity.		
Cognitive skills		Graduate Skills	
B1	Appraise good practice in environmental health.	D1	Communicate effectively.
B2	Critically analyse issues influencing environmental health and public health and safety.	D2	Work in a professional manner.
B3	Develop audit skills that support the development of action plans	D3	Undertake effective learning through independent study.
B4	Reflect on own practice and select from a range of options to influence others to achieve the desired outcome.	D4	Use a range of information technology to search for and appraise peer reviewed, legislative and professional guidance literature.
B5	Problem solve within a range of problems and prioritise and communicate solutions.	D5	Demonstrate personal and career development in a professional capacity.
B6	Select appropriate approaches to investigations in complex situations.	D6	Effectively manage their time throughout the course of study.
B7	Critically appraise residual risk after planned intervention has been delivered.		
B8	Critically evaluate the results of an academic investigation and be able to extract data using a range of techniques appropriate to their chosen fields.		
B9	Undertake formal academic research.		

Programme outcomes

A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	D	D	D	D	D	D
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	1	2	3	4	5	6	
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

LO	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	B6	B7	B8	B9	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	D5	D6	
Module																													
BIO 4502 Public Health Leadership	X						X	X	X		X	X		X			X	X								X		X	
BIO 4115 Pollution and Health Protection			X			X											X									X		X	
BIO 4215 Stressors and Vectors of Disease		X							X										X							X		X	
PRS 4434 Factors Affecting Risk and Strategic Risk Intervention				X	X					X			X	X			X	X								X		X	
PRS 4212 Management of Workplace Safety				X	X	X				X			X				X			X						X		X	
BIO 4512 Interventions in Environmental Health			X	X	X	X	X	X		X	X	X	X				X			X	X	X	X	X	X	X	X	X	X
BIO 4404 Food Safety				X	X	X				X			X				X			X						X		X	
BIO 4801 Practical Food Inspection				X	X	X							X				X		X	X						X		X	
BIO 4106 Housing and Health				X	X	X							X	X			X									X		X	
PRS 4499 Research Methods and MSc Project															X	X	X	X				X	X		X	X	X	X	