### Programme Specification and Curriculum Map for BSc (Hons) Occupational Safety and Health

1. **Programme title**  
   BSc (Hons) Occupational Safety, Health and Environment

2. **Awarding institution**  
   Middlesex University

3. **Teaching institution**  
   Middlesex University

4. **Programme accredited by**  
   Institution of Occupational Safety and Health (IOSH)

5. **Final qualification**  
   BSc (Hons) Occupational Safety, Health and Environment

6. **Academic year**  
   2012/2013

7. **Language of study**  
   English

8. **Mode of study**  
   FT or PT

### 9. Criteria for admission to the programme

**Evidence that Students have the capacity to work at level 6, for example:**  
The Programme leader will review all applications and make offers on the following basis:-

- Students must be able to demonstrate that they have foundation level knowledge of Occupational Safety and Health to NVQ 3 domain knowledge e.g. NEBOSH National General Certificate in Occupational Safety and Health or equivalent.
- Students who can demonstrate appropriate level 4 and 5 learning obtained through existing study e.g. FdSc or BSc Environmental Health student or Cert HE Health &Safety Enforcement but who does not hold professional membership with IOSH will also be eligible.
- Students may also have appropriate experience that can be recognised at level 5.

Recognition and accreditation of learning (RAL) is available for those students who do not have evidence of level 4 or 5 learning but can demonstrate equivalent learning through other professional or work based activities and produce evidence of that
work along with a persuasive statement of how the work has contributed to the students understanding of health and safety practice.

IELTS 6.0 or equivalent.

10. Aims of the programme

The programme aims to:

- Provide a coherent body of theoretical and applied professional knowledge relevant to the area of occupational safety, health and environment.
- Develop a holistic, multi-disciplinary understanding of the scientific, legislative, policy, technical and managerial skills on which to base professional competence in relation to occupational safety, health and environment.
- Provide students with a critical awareness of the inter-relationship between organisational psychology and culture; the workplace environment; health and the natural environment based on risk management principles and methods.
- Facilitate the development of competence through professional practice through alignment with competency requirements for occupational safety, health and environment, specifically those from the Institute of Occupational Safety & Health and their requirements for Initial Professional Development.
- Respond positively and effectively in relation to occupational safety, health and environment with a minimum of supervision.
- Develop an informed, critical and imaginative attitude towards professional practice.
- Enhance abilities to critically appraise risk in a variety of complex situations and design and implement management solutions to reduce risk.
- Provide skills in design and conduct of research.

The professional body for Occupational Safety & Health (IOSH) have provided high level learning objectives from which the programme outcomes of this BSc have been aligned.
A. Knowledge and understanding

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

1. Detailed legislative, technical and scientific knowledge to effect decision making and problem solving for OHSE interventions in a wide range of complex situations.
2. A wide range of management strategies, methods and techniques to create, implement, review, use and control safe systems of work.
3. Risk management including hazard analysis, risk assessment, risk modelling and risk acceptability.
4. Organisational Culture and Psychology including the relationship to management functions; and influence on health, safety and environmental performance.
5. The chemical, physical and biological hazards in the workplace, together with their potential to act synergistically to impact detrimentally on health and the natural environment.
6. Individual and group behavioural issues in improving safety, health and environmental practice.
7. Comprehensive application of occupational health, safety and environmental management personally and within practice.
8. Experience in application of research approaches, techniques and methodology.

Teaching/learning methods

Students gain knowledge and understanding through attendance in lectures, seminars, and through a variety of directed and self directed learning activities, case study analysis, laboratory work, audits of the workplace. The use of case studies that reflect actual workplace environments are essential in enabling the student to relate knowledge to the practical situations in which they are likely to practice in the future. The use of e-learning strategies is also integrated into the teaching and learning strategies through the use of professional on line data bases such as Barbour index, HSE campaign sites. Online learning will also be used to encourage independent study and formative assessment through the use of interactive exercises and quizzes, links to external sources of information and Pod cast presentation and lecture notes available to the student for downloading. The use of the message board and interactive chat room facility will also be encourage to raise debate and discussion on key subject

Assessment Method

Students’ knowledge and understanding is assessed by a combination of coursework, and case studies designed to reflect current working, cultural and
B. Cognitive (thinking) skills
On completion of this programme the successful student will be able to:
1. Analyse and appraise good practice in the management of OHSE
2. Evaluate the design and results of audit, and investigative analysis and the application of tools and methods in formulating action plans and programmes of professional practice.
3. Reflect on own professional practice and select from a range of options, the best methods and mechanisms to manage OHSE and influence others to achieve best practice
4. Select appropriate approaches to investigations in complex situations.
5. Problem-solve at both an individual problem level and within the context of a range of problems, and prioritise a range of options and select appropriate communication formats to convey solutions.
6. Undertake academic research
7. Critically appraise risk perception influences of human behaviour, risk management and risk analysis

C. Practical skills
On completion of the programme the successful student will be able to:
1. Apply, autonomously, a range of physical environments likely to be experienced by students in their future professional activities.

Assessment will also include essays, management reports, reports on audits, examinations and online tests.

Teaching/learning methods
Students learn cognitive skills through case study analysis of practical workplace problems relevant to current working practices, group and mini seminars and Workshops will help students articulate ideas, reflect on their understanding and learn from others in a constructive environment. E-learning facilities available on Model plus other such interactive exercises and quizzes will help develop cognitive skills.

Assessment Method
Students’ cognitive skills are assessed by essay, case study and written examination, research proposal and research project. The assessment of cognitive skills are integrated into the examinations through the use of part-seen elements of the exams which relate to scenarios commonly experienced by health and safety professionals.

Teaching/learning methods
Students learn practical skills through interactive participation in modules. The modules have been
inspection, auditing and investigation techniques from both innovative and standard methodologies.

2. Make decisions, recommendations and articulate solutions on a proposed course of action in relation to OHSE problems to managers, safety representatives and enforcement bodies in a professional manner.

3. Critically appraise guidance, legislation and complex data and successfully communicate their implications to a wide range of personnel.

4. Work within teams to problem solve and improve safety and health practice.

5. Select and manage information in relation to safety and health.

6. Implement and ‘operationalise’ good management practice in OHS with minimal supervision.

7. Undertake a substantial academic investigation and articulate the findings designed to encourage practical work as appropriate, for example workplace inspections and risk assessments, practical workplace visits to view and identify a range of hazardous working environments. The use of the interactive workplace environment allows students the opportunity to view work equipment and machinery type hazards and handle and use a variety of occupational hygiene and noise monitoring equipment.

**Assessment Method**

Students’ practical skills are assessed by practical inspection and report writing and in part by the use of case study assessments. Some modules also assess presentation skills formatively as a way of improving verbal communications skills often required in professional practice.

**D. Graduate Skills**

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

1. Communicate effectively both written and verbally.

2. Team work in a professional manner with fellow students to solve problems.

3. Effectively learn through independent study; manage tasks and solving problems on their own with minimal supervision; and be self-reflective in professional practice.

**Teaching/learning methods**

Students acquire graduate skills through participation in all elements the programme, in particular group work, exercises and the completion of research methods and BSc dissertation process of planning, researching and resource for BSc students.

**Assessment method**

Graduate skills are integrated into all forms of assessment. In
12. Programme structure (levels, modules, credits and progression requirements)

12.1 Overall structure of the programme

Students will study for 24 weeks over two terms, Autumn and Winter terms for those starting in September. There are breaks at Christmas and Easter. Assessments are carried out throughout the semester in both terms with examinations being held at the end of Term 2.

There are six modules of 15 credits each and one module of 30 credits consisting of a module of research methods and completion of a research project. The 15 credit modules are undertaken over the 12 week terms. The 30 credit research project will be completed over both terms.

Part-time students normally study 45 credits a year with an additional 30 credit research project to include study of research methods across the two years of study. Part-time students have the same access to Middlesex University facilities and resources as full-time students.

One 15 credit module represents approximately 150 hours of student learning, endeavour and assessment. To obtain the B.Sc (Hons) Occupational Safety, Health and Environment a student will need to have achieved 120 credits of learning at level 6.

12.2 Levels and modules

<table>
<thead>
<tr>
<th>COMPULSORY</th>
<th>OPTIONAL</th>
<th>PROGRESSION REQUIREMENTS</th>
</tr>
</thead>
</table>

4. Use the range of Information technology on offer to search for peer reviewed, legislative and professional guidance literature
5. Demonstrate personal and career development in a professional capacity.
6. Undertake enhanced numeracy skills required at level 6
7. Effectively manage their time throughout the course of study

particular the research methods as an essential element of the course and final project for BSc programmes will ensure the development and assessment of the key skills.
Students must take all of the following:

- PRS3411 Toxicology and Science Foundation
- PRS3421 Management and Law
- PRS3431 Workplace Health and Safety
- PRS3702 Environmental Assessment and Management
- PRS3512 Occupational Hygiene, Health and Ergonomics
- PRS3522 Risk Management and Occupational Psychology
- PRS3999 Research Methods and Project

Students must also choose at least XX from the following:

### 12.3 Non-compensatable modules

<table>
<thead>
<tr>
<th>Module level</th>
<th>Module code</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>PRS3411</td>
</tr>
<tr>
<td>6</td>
<td>PRS3421</td>
</tr>
<tr>
<td>6</td>
<td>PRS3431</td>
</tr>
<tr>
<td>6</td>
<td>PRS3702</td>
</tr>
<tr>
<td>6</td>
<td>PRS3512</td>
</tr>
<tr>
<td>6</td>
<td>PRS3552</td>
</tr>
<tr>
<td>6</td>
<td>PRS3999</td>
</tr>
</tbody>
</table>

### 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.
Self deferral is not permitted.

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

Students are also encouraged to widen their exposure and knowledge in Occupational Health & Safety by visiting other workplaces at least once during the programme. See section on placements.

16. Future careers

Increased skills in Occupational Health, Safety & Environment; risk assessment, an enhanced knowledge of Occupational Health & Safety management will improve all value to the employer and profession. Students’ ability to take on an advisory or a management role within an organisation will be advanced. The programme enables students career in Occupational Health & Safety including Risk and Environment.

17. Particular support for learning (if applicable)

Facilities at Hendon, 3D workshops which includes printing, mechanical engineering, pottery kilns, media studios, Microbiology Laboratory, Science Laboratories, Barbour Index, specialist external lecturers, specialist safety and health equipment and materials.

18. JACS code (or other relevant coding system)

011 B920

19. Relevant QAA subject benchmark group(s) Health Studies, Bio-sciences

The following reference points were used in designing the programme:
- School of Health and Social Sciences. Learning, Teaching and Assessment Policy and Strategy (2008)
- Middlesex University Guide and Regulations (2012.13)
- Institute of Occupational Safety and Health standards (January 2011)
- IEMA environmental management accreditation approval
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) Occupational Health, Safety and Environment (Traditional Pathway)

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**

<table>
<thead>
<tr>
<th>Knowledge and understanding</th>
<th>Practical skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Detailed legislative, technical and scientific knowledge to effect decision making and problem solving for OHSE interventions in a wide range of complex situations</td>
<td>C1 Apply, autonomously, a range of inspection, auditing and investigation techniques from both innovative and standard methodologies.</td>
</tr>
<tr>
<td>A2 A wide range of management strategies, methods and techniques to create, implement, review, use and control safe systems of work.</td>
<td>C2 Make decisions, recommendations and articulate solutions on a proposed course of action in relation to OHSE problems to managers, safety representatives and enforcement bodies in a professional manner.</td>
</tr>
<tr>
<td>A3 Risk management including hazard analysis, risk assessment, risk modelling and risk acceptability.</td>
<td>C3 Critically appraise guidance, legislation and complex data and successfully communicate their implications to a wide range of personnel.</td>
</tr>
<tr>
<td>A4 Organisational Culture and Psychology including the relationship to management functions; and the influence on health, safety and environmental performance.</td>
<td>C4 Work within teams to problem solve and improve safety and health practice.</td>
</tr>
<tr>
<td>A5 The chemical, physical and biological hazards in the workplace, together with their potential to act synergistically to impact detrimentally on health and the natural environment.</td>
<td>C5 Select and manage information in relation to safety, health and environment.</td>
</tr>
<tr>
<td>A6 Individual and group behavioural issues in improving safety, health and environmental practice</td>
<td>C6 Implement and ‘operationalise’ good management practice in Occupational Safety, health and environment with minimal supervision.</td>
</tr>
<tr>
<td>A7 Comprehensive application of occupational health, safety and environmental management personally and within practice.</td>
<td>C7 Undertake a substantial academic investigation and articulate the findings</td>
</tr>
<tr>
<td>A8 Experience in application of research approaches, techniques and methodology.</td>
<td></td>
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<tr>
<td>Cognitive skills</td>
<td>Graduate Skills</td>
</tr>
<tr>
<td>B1 Analyse and appraise good practice in the management of OHSE</td>
<td>D1 Communicate effectively both written and verbally</td>
</tr>
<tr>
<td>B2 Evaluate the design and results of audit, and investigative analysis and the application of tools and methods in</td>
<td>D2 Team work in a professional manner with fellow students to solve problems.</td>
</tr>
<tr>
<td>Programme outcomes</td>
<td>A1</td>
</tr>
<tr>
<td>--------------------</td>
<td>----</td>
</tr>
<tr>
<td>Highest level achieved by all graduates</td>
<td>6</td>
</tr>
</tbody>
</table>

**Formulating action plans and programmes of professional practice.**

**B3** Reflect on own professional practice and select from a range of options, the best methods and mechanisms to manage OHSE and influence others to achieve best practice.

**D3** Effective learning through independent study: manage tasks and solving problems on their own with minimal supervision; and be self-reflective in professional practice.

**B4** Select appropriate approaches to investigations in complex situations.

**D4** Use the range of Information technology on offer to search for peer reviewed, legislative and professional guidance literature.

**B5** Problem-solve at both an individual problem level and within the context of a range of problems, and prioritise a range of options and select appropriate communication formats to convey solutions.

**D5** Demonstrate personal and career development in a professional capacity.

**B6** Undertake academic research.

**B7** Critically appraise risk perception influences of human behaviour, risk management and risk analysis.

**D6** Enhanced numeracy skills required at level 6.

**D7** Effectively manage their time throughout the course of study.
<table>
<thead>
<tr>
<th>Module Title</th>
<th>Module Code</th>
<th>Programme Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicology and science foundation</td>
<td>PRS3411</td>
<td>A1 A2 A3 A4 A5 A6 A7 B1 B2 B3 B4 B5 B6 B7 C1 C2 C3 C4 C5 C6 C7 D1 D2 D3 D4 D5 D6 D7</td>
</tr>
<tr>
<td>Management and law</td>
<td>PRS3421</td>
<td>x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x</td>
</tr>
<tr>
<td>Work place health and safety</td>
<td>PRS3431</td>
<td>x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x</td>
</tr>
<tr>
<td>Environmental assessment and management</td>
<td>PRS3702</td>
<td>x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x</td>
</tr>
<tr>
<td>Occupational hygiene, health and ergonomics</td>
<td>PRS3512</td>
<td>x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x</td>
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<tr>
<td>Risk Management and Occupational psychology</td>
<td>PRS3522</td>
<td>x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x</td>
</tr>
<tr>
<td>Research Methods and Project</td>
<td>PRS3999</td>
<td>x x x x x x x x x</td>
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Curriculum Assessment Map