Postgraduate Programmes in Occupational Hygiene, September 2015
Centre for Occupational & Environmental Health
Centre for Epidemiology, Institute of Population Health
University of Manchester
http://www.coeh.manchester.ac.uk

- Postgraduate Certificate in Occupational Hygiene (4 modules over 1 year, part time)
- Postgraduate Diploma in Occupational Hygiene (8 modules over 2 years, part time)
- MSc in Occupational Hygiene (8 modules, plus a dissertation over 3 years, part time)

UNIVERSITY ACCREDITED POSTGRADUATE PROGRAMME:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG Certificate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG Diploma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

1 year = 60 credits 2 years = 120 credits 3 years = 180 credits

Programme aims

The programme aims to:

- Provide you with an appreciation of the skills necessary to recognise, evaluate and control hazardous substances in the workplace, encompassing hazards such as chemical, physical (e.g. noise, radiation), biological and ergonomic agents;
- Introduce you to the wide variety of aspects covered within the occupational hygiene discipline such as legislation, toxicological basis for standard setting, methods commonly used to evaluate hazardous agents and related and overlapping health professions;
- Provide you with an academic qualification that is accredited by the Faculty of Occupational Hygiene (FOH), of the British Occupational Hygiene Society (BOHS) and
- Give you a good foundation on which to build and extend your knowledge of occupational hygiene during the changes and developments which lie in the years ahead.

For those of you proceeding to the MSc, the third year aims to:

- Encourage critical evaluation of ideas and concepts in occupational hygiene and explore other philosophical and practical approaches to minimising ill-health in the workplace and
- Develop powers of critical appraisal, analytical thinking and logical argument.

Please also note: occupational hygiene is an applied science, and as such, legislation and the profession are inseparable. As UK/European legislation has jurisdiction for this university, a working knowledge of UK legislation will be expected for examinations – regardless of the students’ country of origin.

Learning outcomes

Each level has its own set of learning outcomes and objectives. These are:

Postgraduate Certificate/Diploma

When you have completed the taught course you should:
• Have acquired a thorough understanding of the theoretical principles and research methodologies underpinning all aspects of occupational hygiene;
• Have the knowledge base necessary for understanding adverse effects of workplace hazards on humans and for prediction of the magnitude of risk;
• Have sampling and analysis skills in occupational hygiene laboratory and field work;
• Appreciate the role of occupational hygiene within the broader sphere of occupational health practice and
• Have the basic skills to follow a professional career in occupational hygiene.

In addition, students exiting at Postgraduate Certificate or Postgraduate Diploma level have the right to use the post-nominal letters of PG Cert Occ Hyg or PG Dip Occ Hyg respectively.

MSc

The dissertation elements of the MSc aim to equip the holder to:
• Display an awareness of the theoretical principles and research methodologies underpinning all aspects of occupational health;
• Develop powers of critical appraisal, analytical thinking, and logical argument to allow evaluation of concepts and/or approaches to occupational health issues;
• Carry out a piece of independent research, including the ability to design, analyse, interpret results and write up a dissertation and
• Utilise research methods skills within day-to-day practice, or within a career involving postgraduate research and study.

In summary, the MSc aims to give training and experience in formulating a research question, designing and executing an appropriate study, and drawing valid conclusions through writing a dissertation for the MSc.
Applications for this programme are made online, via the University's Postgraduate website.

**NOTE:** Students from overseas will need to apply for ‘student visitor immigration permission’ in order to attend the seminars and exams in Manchester.

**Tuition fee refunds**

In accordance with the University’s policy on tuition fee refunds, the amount of any tuition fee refunded is dependent on the date of withdrawal from the programme of study. Tuition fees are charged on a daily basis up to and including the date that the Education Team is informed that a student has left the programme.

Any refunds will be processed to the original payee by the original method it was paid. If a student has a university debt, they will be contacted by Credit Control before any refunds are agreed.

Tuition fee refunds (due to withdrawal from the programme) are calculated according to the number of days in attendance on a programme of study. The maximum number of days for the Occupational Medicine programmes covers a 42 week period.

Students who withdraw from their studies will be charged as follows:

\[
\frac{\text{Number of weeks attended}}{\text{Possible number of weeks}} \times £ \text{ tuition fee}
\]

However, once registered, students who withdraw within the first 11 weeks of the course will be charged a minimum of 25% of the year’s tuition fee.

**Programme structure**

Modules 1-4 are studied in the first year (Postgraduate Certificate level) and Modules 5-8 are studied in the second year (Postgraduate Diploma level), as shown in the diagram above. If you are registered for the MSc you will embark on the dissertation elements in the third year of the course.

You are advised to find around 10 hours in which to study per week. Successful progression through the distance learning course relies on **self-directed learning**. It is up to you to plan your time and we strongly suggest that you consider the course calendar in conjunction with the syllabus to help you with this. Your success is dependent on considerable commitment and self-discipline. In order to get the most out of the course you will also need to participate **actively** in seminars and tutorials - not only to complete the course but to benefit from the resulting exchanges of ideas. We recommend that you allow approximately 150 hours of study time per module. This should include activities such as studying the teaching material, participating in supporting activities, completing online activities and revising for the examinations.

**Modes of study**

The programme is delivered through a blend of written materials in electronic format (PDFs) and interactive teaching material, supported by seminars (requiring attendance at The University of Manchester) and tutorials (facilitated via web-conference).

All materials are accessed solely online, via the University Virtual Learning Environment, Blackboard. Students are therefore advised that they will require ready access to a computer with a regular, reliable Internet connection and following **minimum** specification:

- 2 GB of RAM
- 1 GB of free disk space
- 64-bit operating system
• Soundcard and speakers/headphones
• Monitor resolution of 1024 x 768
• Broadband Internet connection
• Graphics memory of 64MB for the PC or 128MB for the Mac

Your computer will need one of the following operating systems:

**Microsoft® Windows® Operating System**

• Windows Vista (64-bit)
• Windows 7 (64-bit)

**Apple® Mac OS® Operating System**

• Mac OS X 10.5 'Leopard®'
• Mac OS X 10.6 'Snow Leopard®'

Your computer will need one of the following Blackboard-supported browsers:

**Windows**

• Internet explorer 10 (Windows 7 and 8 only)
• Internet Explorer 9 (Windows Vista and Windows 7 only)
• Firefox 24 ESR
• Firefox 24 (Stable Channel)
• Chrome (Stable Channel)

**Mac**

• Safari 6.0.1 (OSX 10.7 and 10.8 only)
• Safari 5.1
• Safari 5.0 (OSX 10.6 only)
• Firefox 24 ESR
• Firefox 24 (Stable Channel)
• Chrome (Stable Channel)

To run some of the interactive exercises, you will also need:

• [Windows Media Player 11](#) or [Quicktime Player](#)
• [Sun Java (JRE) version Java 7](#)
• [Adobe Acrobat Reader](#)
• [Adobe Flash Player - version is dependent on your system](#)

**ICT Skills**

We set only minimal requirements in terms of your prior technical knowledge. Below are the basic skills that we expect you to have:

• Basic word-processing
• Accessing Internet pages
• Downloading files
• Playing multimedia files from websites
• Sending email messages with attachments
• Using presentation software such as PowerPoint to create basic presentations
• A basic understanding of file management (i.e. the naming, organising, moving, etc. of data files).

PLEASE NOTE: Support is provided wherever possible for students experiencing technical issues, both via the Education Team and the University’s IT Helpdesk. However, we cannot be held responsible for problems arising from students failing to ensure they have the minimum specification. In addition, the quality of telephone/web connections for students based overseas is beyond the University’s control, although we will provide recordings of tutorials where requested.

Seminars

Modules 1 and 2 are supported by face-to-face seminars. Seminar 1 is a single-day meeting (associated with module 1), and will be held on **17th November 2015**. Seminar 2 is a single-day meeting (associated with module 2) and will be held on **7th January 2016**. In the second year, attendance is required for a 4 day practical course (**January 2017 – exact dates yet to be confirmed**).

The purpose of the seminars is to put into context the information covered by the teaching material. Each seminar will include a one hour best fit question examination based on the teaching material covered in the relevant module; therefore **you will be required to study the teaching material in advance of the seminar**.

**PLEASE NOTE THAT ATTENDANCE AT THE UNIVERSITY OF MANCHESTER IS REQUIRED FOR ALL SEMINARS.**

Tutorials

Modules 4-8 are supported by a tutorial system. The tutorials have been designed to include problem based learning and provide the opportunity to raise any academic queries with your tutor. The tutorials are **not** compulsory but we recommend that you take advantage of this additional academic support.

You will be assigned to a tutor who will be an experienced occupational hygiene professional. Tutorials are delivered via web conference. Module 4 has one tutorial and Modules 5-8 each have two associated tutorials: one general (for students to raise academic questions with their tutor/peers) and one structured (based on problem based learning exercises).

Assessment

Students are required to pass module examinations which are used to judge to progression through the course. Modules will have the following summative assessments:

• Module 1: best fit question examination to be taken at Seminar 1 (17th November 2015)
• Module 2: best fit question examination to be taken at Seminar 2 (7th January 2016)
• Module 3: best fit question examination to be taken at the end of Year 1 (9th June 2016)
• Module 4: written examination to be taken at the end of Year 1 (9th June 2016)
• Module 5: written examination to be taken at the Year 2 seminar programme (January 2017 – dates TBC)
• Module 6: written examination to be taken at the Year 2 seminar programme (January 2017 – dates TBC)
• Module 7: written examination to be taken at the end of Year 2 (June 2017 – dates TBC)
• Module 8: written examination to be taken at the end of Year 2 (June 2017 – dates TBC)
PLEASE NOTE THAT ATTENDANCE AT THE UNIVERSITY OF MANCHESTER IS REQUIRED FOR ALL EXAMINATIONS.

Pass marks
For best fit question examinations (i.e. Modules 1-3), the pass mark is **50%**. For written examination papers (i.e. Modules 4-8) the pass mark for the University of Manchester’s Postgraduate Certificate and Postgraduate Diploma is **40%**. However, students wishing to proceed to the dissertation year (in order to complete the MSc) must achieve a mark of **50%** or above in each modular examination.
SYLLABUS – Postgraduate Programmes in Occupational Hygiene

YEAR 1

Module 1: Introduction to Hazards, Risks and the Working Environment
- Occupational Health in Perspective
- Introduction to OH Law
- Historical Development of Occupational Health
- Hazards and Risks
- Introduction to Toxicology
- Introduction to Occupational Hygiene
- Introduction to Lighting
- Introduction to Temperature and Work
- Introduction to Noise and Vibration
- Introduction to Hazardous Substances

Module 2: Occupational Ill Health
- Occupational Dermatoses
- Respiratory Disorders
- Musculoskeletal Disorders
- Occupational Cancers
- Stress Disorders
- Work-Related Infections
- Introduction to Epidemiology
- Health Assessment, Surveillance and Screening
- Biological Monitoring

Module 3: Health and Workability
- Workplace Assessment Skills
- Advanced Occupational Health Law
- Ergonomics
- Shift Work and Daily Rhythms
- Solvents
- Plastics and Polymers
- Pesticides
- Pharmaceuticals and Fine Chemicals
- Choosing a Research Topic and Literature Review
- Developing the Research Question

Module 4: Hazardous Substances
- Factors in Dust Exposure
- Exposure in Manufacturing Processes
- Air Sampling
- Exposure Evaluation/Exposure Modelling
- Sample Analysis
- Occupational Exposure for Airborne Substances
YEAR 2

Module 5: Understanding Physical Agents
- Noise
- Vibration
- Radiation
- Compressed Air Work and Commercial Diving
- Temperature and Work
- Light and Vision

Module 6: Control of Workplace Hazards
- Process Control Strategy
- Ventilation
- Personal Protective Equipment (PPE)
- Human Behaviours
- Dermal Exposure

Module 7: Research Methods and Data Analysis
- Epidemiology and Statistics
- Evidence Based Practice
- Critical Appraisal
- Social Research Methods
- Information Technology

Module 8: Management of Workplace Hazards
- Industry and Environment
- Occupational Hygiene Practice
- Food Safety and Hygiene
- Prevention of Accidents
- Principles of Toxicology
- Global Aspects of Occupational Hygiene

Further information
Any queries can be directed to:

Reece Plunkett, Admissions Co-ordinator for Community Based Health Alliance (CBHA)
pgt.medicine@manchester.ac.uk
+44 (0)161 306 5438