



## **Module Specification**

### **Air Quality Management**

Version: 2021-22, v2.0, 19 Jul 2021

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## Part 1: Information

**Module title:** Air Quality Management

**Module code:** UBGMW7-15-M

**Level:** Level 7

**For implementation from:** 2021-22

**UWE credit rating:** 15

**ECTS credit rating:** 7.5

**Faculty:** Faculty of Environment & Technology

**Department:** FET Dept of Geography & Environmental Mgmt

**Partner institutions:** None

**Delivery locations:** Frenchay Campus

**Field:** Geography and Environmental Management

**Module type:** Standard

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** This module covers an introduction to the air quality management from UK and European perspectives, focusing on pollutants of concern, their sources and health effects, ways of monitoring and modelling air pollution and the implications of air quality assessment in development management as well as mitigation strategies through Air Quality Action Planning.

**Features:** Module Entry Requirements: Standard entry requirements if taken as credit-bearing standalone module. CPD only (i.e. without assessment) is not credit bearing so no entry requirements necessary.

**Educational aims:** The educational aims of the module are to provide a holistic approach to air quality management, that introduce core concepts and breadth of understanding, underpinned with the latest research, to contextualise topics on assessment methods (monitoring and modelling) and policy and management (air quality considerations in planning, development of air quality action plans). The theoretical knowledge is embedded through technical practicals (using for example Excel, ADMS-Roads) and non-technical practicals (reviewing air quality assessments, role playing action plan steering groups). The knowledge, arguments and practical skills developed studying this module would prepare students to work as, or with, air quality officers in local or national government, or to undertake air quality consultancy.

**Outline syllabus:** Topics include:

Air Quality Management

Air Quality Monitoring

Air Quality Dispersion Modelling

Air Quality and Development Management

Air Quality Action Planning

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** The module will be run by members of the Air Quality Management Resource Centre, a worldclass research group in the faculty, ensuring students benefit from first-hand experience and cutting-edge material.

Teaching and learning methods will comprise of a combination of seminars, class discussions, IT practicals (using Excel and ADMS Roads dispersion modelling software), and group work practicals, including role-play).

Independent learning includes hours engaged with essential reading, case study

preparation, assignment preparation and completion. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Nominal study hours:

Directed contact learning (seminar/tutorials): 37.5 hours

Independent learning: 75 hours

Assessment (including preparation): 37.5 hours

Total: 150 hours

**Module Learning outcomes:**

**MO1** Differentiate between the different sources and effects of selected air pollutants in the UK and critically evaluate how these have changed over the last century

**MO2** Critically review the key approaches adopted by European and UK legislation for air pollution

**MO3** Critically evaluate the effectiveness and limitations of the UK Local Air Quality Management (LAQM) framework for improving local air quality

**MO4** Demonstrate a critical understanding of methods of air quality assessment

**MO5** Determine the impactful relationship between development and air quality and critically evaluate how development control and planning can be used to reduce emissions and ambient concentrations of pollutant

**MO6** Critically discuss measures to reduce air pollution, including the development of emission controls on motor vehicles, and assess likely future scenarios for air quality abatement

**Hours to be allocated:** 150

**Contact hours:**

Independent study/self-guided study = 112.5 hours

Face-to-face learning = 37.5 hours

Total = 150

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ubgmw7-15-m.html) via the following link

<https://uwe.rl.talis.com/modules/ubgmw7-15-m.html>

## **Part 4: Assessment**

**Assessment strategy:** The assessment will comprise of two components (a blog or vlog, and a 2,500 word case study evaluation) in order to accommodate a range of learning styles.

Component A, the blog/vlog will give an opportunity to produce a creative output for a specific audience and will cover the learning objectives that are not assessed in component 2.

Component B will be a case study evaluation, enabling the student some freedom over their choice of case study. The assessment will test the student's skills of critical evaluation as well as their knowledge of local government air quality responsibilities, and will also enable them to contextualise the real-world application of their learning together with the challenges that that entails.

The assessment intrinsically embeds UWE's principles of Sustainable Development within the subject matter.

### **Assessment components:**

#### **Written Assignment - Component A (First Sit)**

Description: Blog/Vlog (1000 words)

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO4, MO5, MO6

#### **Case Study - Component B (First Sit)**

Description: Case study evaluation

Weighting: 50 %

Final assessment: No

Group work: No

Learning outcomes tested: MO3, MO4, MO6

**Written Assignment - Component A (Resit)**

Description: Blog/Vlog (1000 words)

Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO4, MO5, MO6

**Case Study - Component B (Resit)**

Description: Case study evaluation

Weighting: 50 %

Final assessment: No

Group work: No

Learning outcomes tested: MO3, MO4, MO6

**Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Environmental Consultancy [Sep][PT][Frenchay][2yrs] MSc 2020-21