UNIVERSITY COLLEGE
OF ESTATE MANAGEMENT

Building Pathology and Maintenance

Module Descriptor

Module Code: TEC7BPA

Version: 10.00

Status: Final

Date: 15/09/2022

Summary Module Details

Module details

Module Title: Building Pathology and Maintenance

Module Leader: Jane Ballantyne

Module Mode: Supported online learning

Semester: Autumn (UK)

Level: 7

Credits: 20

Learning Hours: 200

Contact & Study Hours

Directed Study Time: 60hrs (30%)

Self-directed Study Time: 70hrs (35%)

Assessment Study Time: 70hrs (35%)

Assessment Type

Coursework: 100%

Computer Marked Assessment: 0%

Self-directed Research Project: 0%

Portfolio: 0%

Module summary

The module investigates building pathology and maintenance in the context of professional practice. It develops students' ability to recognise, analyse and remedy building defects in a range of scenarios, and provides an understanding of inspection, testing and monitoring techniques to ensure that the most appropriate diagnosis and reporting of building defects and planning is appropriate maintenance planning.

Taken on which Programmes

MSc Building Surveying (C)

Core (C) or Elective (E)

Module Aims

The module aims to examine:

- The core principles of building maintenance.
- Building pathology principles, materials, construction and specific situations.
- The analysis and remedy of building defects.
- The inspection, testing and monitoring techniques to ensure the most appropriate diagnosis and reporting of building defects is used.

Module Learning Outcomes

LO1. Critically appraise the core principles of building maintenance in the context of building pathology & the life cycle of buildings.

LO2. Critically evaluate the processes involved for accurate diagnosis of building defects.

LO3. Critically analyse consequences of failure, defects and rationale for repair and maintenance.

LO4. Critically appraise the information from building inspection testing and from a range of appropriate sources.

Indicative Module Content

Module topics

- **Principles of Building Pathology**

  Consideration of professional liability for those involved in building pathology and defect diagnosis. Analysis of skills, knowledge and attributes necessary for effective professional practice within a digital landscape

- **Building Maintenance**

  Examination of the purpose and types of building maintenance, value to the economy and to individuals and business. Exploration of the building lifecycle and maintenance issues.

- **Investigation and Diagnosis of Failure in Domestic and Non-Domestic Buildings**

  Consideration of the mechanisms of failure in buildings from failure of domestic foundations to performance and failure of steel and concrete frames.

- **The Building Lifecycle**

  Exploration of the building lifecycle and maintenance issues that can arise during this lifecycle, also taking into account sustainability factors.

- **Common Defects in Domestic and Non-Domestic Buildings**

  Covers common defects which building surveyors regularly encounter, including timber decay, dampness, cladding failures, corrosion of metal elements and defects in pitched and flat roofs.

- **Repairs**

  Methods of repair of building failure and defects, either as stand-alone specifications or as part of a maintenance cycle.

This content will be reviewed and updated regularly to reflect the legal, moral and financial changes in professional standards and practice.

Overview of Summative Assessment

Module learning outcomes	Assessment	Word count or equivalent	Weighting
LO2, LO3, LO4	**Assessment 1** Coursework	1,000	20%
LO1, LO2, LO3 & LO4	**Assessment 2** Coursework	4,000	80%

Module Pass Mark (as a weighted average of all assessments): 50%

Key Module Learning Resources

Core sources and texts

The core reading resources within each module will be provided via the specific Virtual Learning Environment (VLE) module pages and within the e-Library. Additional reference material and supplementary resources to support your studies are available through the UCEM e-Library.

Module tools

Students will have access to study materials, dedicated academic support, student forums, and learning activities via an online learning platform (VLE).

The module page on the VLE is broken down into structured study weeks to help students plan their time, with each week containing a mixture of reading, case studies, videos/recordings and interactive activities to go through. Online webinars/seminars led by the Module Leader can be attended in real time and provide opportunities to consolidate knowledge, ask questions, discuss topics and work through learning activities together. These sessions are recorded to support students who cannot attend and to enable students to recap the session and work through it at their own pace. Module forums on the VLE provide further opportunities to discuss topics with other students, complete collaborative work and get extra help from the module team.

Professional online resources

The e-Library provides access to trusted, quality online resources, selected by subject specialists, to support students' study. This includes journals, industry publications, magazines, academic books and a dissertation/work-based library. For a list of the key industry specific and education resources available please visit the VLE e-Library.

Other relevant resources

Access is also provided to further information sources that include the British Library and Open University UK catalogues, as well as providing a monthly current awareness service entitled, ***Knowledge Foundations*** - a compendium of news, research and resources relating to the educational sector and the Built Environment.

The module resource list is available on the module website and is updated regularly to ensure materials are relevant and current.