**Liverpool** John Moores University

| | |
|---|---|
| Title: | DESIGN PROCEDURES FOR CONSTRUCTION |
| Status: | Definitive |
| Code: | **4211BEHN** (119878) |
| Version Start Date: | 01-08-2016 |
| Owning School/Faculty: | Built Environment |
| Teaching School/Faculty: | Built Environment |

| Team | Leader |
|---|---|
| Spencer Kelly | Y |

| | | | | | |
|---|---|---|---|---|---|
| **Academic Level:** | FHEQ4 | **Credit Value:** | 20 | **Total Delivered Hours:** | 60 |
| **Total Learning Hours:** | 200 | **Private Study:** | 140 | | |

**Delivery Options**
Course typically offered: Standard Year Long

| Component | Contact Hours |
|---|---|
| Lecture | 24 |
| Tutorial | 12 |
| Workshop | 24 |

**Grading Basis:** BTEC

**Assessment Details**

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|---|---|---|---|---|
| Portfolio | AS1 | Project based tasks | 60 | |
| Test | AS2 | In class test | 20 | |
| Essay | AS3 | 1500 words | 20 | |

**Aims**

*To enable the student to describe and apply basic principles of successful design and to produce simple building design solutions.*
*• To establish competence in the practice of contract management for construction projects from both designer/client and contractor perspectives.*
*• To develop knowledge of project life cycles and project development issues.*

## Learning Outcomes

After completing the module the student should be able to:

1 Identify the principles of successful design.
2 Develop a brief through research and analysis for a medium size building and assess the feasibility of a site for development.
3 Research and develop alternative sustainable design solutions taking into consideration building performance and efficiency.
4 Identify the roles of and relationships between members of the project team.
5 Evaluate the systems available for the control and monitoring of construction works with regard to cost, time, quality and risk, and understand how these apply to different projects.
6 Explain the documentation required during the project and compare information retrieval systems.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

| | | | | |
|---|---|---|---|---|
| Project based tasks | 1 | 2 | 3 | 4 |
| In class test | 5 | | | |
| 2000 words | 6 | | | |

## Outline Syllabus

*Successful design: historic developments in building design and resultant design terminology; basis of design concepts.*

*Proposals and constraints: client requirements; site-specific issues; economics of design and production; specialist design requirements (e.g. disabled access); material selection.*

*Design development technologies, approaches and initiatives: current technologies to assist the designer; technological influence on design; sustainability and 'green' approaches (e.g. carbon neutral buildings); sustainable development frameworks such as Code for Sustainable Homes.*

*Design brief: appropriate information; stakeholder requirements; information coordination; legal aspects; specifications.*

*Design solution: meeting requirements of the design brief; architectural and structural drawings.*

*Presentation of drawings and justification of design: analysis of design options; review and modification of proposals.*

*Methods and techniques for preparing detailed designs. Preparation of design documentation for projects.*

*Contracts – form, type, selection, operation and documentation.*

*Inspection and certification of work; quality control: methods of quality control.*

*Contract completion: contractual conditions; handover; defects; liability; final certification.*

*Role of design technologist: effective team leadership and personnel management; Legal requirements and responsibilities; information retrieval; computer-aided design (CAD) packages; Building Information Modelling and future software for construction industry.*

**Learning Activities**

Lectures; tutorials; workshop /IT sessions

**Notes**

This module is a core module on HNC Construction & Property, Building Surveying pathway. It will enable the student to describe and apply basic principles of successful design and to produce simple building design solutions and it will also develop knowledge of project life cycles and project development issues.