### **Liverpool** John Moores University

Title: MANAGEMENT OF BUILDING SERVICES PROJECTS

Status: Definitive

Code: **5500BEFDL** (118275)

Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment Teaching School/Faculty: Built Environment

Team	emplid	Leader
Derek King		

Academic Credit Total

Level: FHEQ5 Value: 24.00 Delivered 36.00

**Hours:** 

Total Private

Learning 240 Study: 204

**Hours:** 

**Delivery Options** 

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Tutorial	12.000

**Grading Basis:** 40 %

#### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	A case study report based on workplace experience(s).	50.0	
Essay	Essay	Reflective essay analysing and evaluating the students' record of work based experience.	50.0	

#### Aims

This module is designed to provide knowledge and understanding of the principles and application of the management of Building Services projects/contracts. It will enable students to demonstrate both knowledge and understanding of procurement and project management. Learners will be required to apply, analyse and evaluate the processes of management, effects of project management and identify opportunities for improvement.

## **Learning Outcomes**

After completing the module the student should be able to:

- Apply the theory of management processes and management techniques to the design, pre-contract planning and construction phases of a building services project.
- Describe the relationship of the Building Services Sector to the construction design and management team, the activities and roles of the professions, and the management structures appropriate to organisations within the industry.
- Apply the principle methods of procurement and contracting and their implications for the Building Services sector within the wider construction industry.
- 4 Understand the objectives, processes and skills of project management.
- 5 Describe management structures, team relationships and communication methods involved in project management.
- 6 Apply the techniques and procedures of project management.

# **Learning Outcomes of Assessments**

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

Case study report 1 2 3

Reflective essay 4 5 6

# **Outline Syllabus**

Principles of Management: work of founders of management thinking and evolution of management principles, principles and processes of management within the context of building services and construction projects. Management of human resources.

Application of Management Techniques: project organization and planning, layout and accommodation, method statements and plan of work, CDM and other regulatory and legislative requirements, Safety Plan and risk assessments. Use of charts, critical path and other manual or computer based planning methods. Use of budget and cost control methods. Procurement, scheduling and control of materials and plant, waste management. Scheduling, resourcing, utilisation of sub-contract and direct labour. Control of quality, management of liabilities and risks. Information verification and control, site meetings communications and reporting, client liaison. Project teams and organisational structures: Structures for project teams, the relationship of Building services within the construction industry and the role of the professions that form project teams. Organisational structures, strategies, missions and objectives. Team structures and team working. Influence of scale of contracts and method of procurement on the way an organisation/project is managed. Methods of Procurement and Contracting: Types of procurement methods. Traditional methods of tendering, 'Partnering' and PFI type contracts. Basic Law and contract, outline forms and stages of a contract, contractual obligations of performance. Risk: insurance and warranty arrangements. Project teams, best practice.

Objectives and processes of project management: definition of project management; identification of client objectives; interpreting project briefs; establishing project objectives e.g. prestige, profitability, expectations and quality.

Building services project cycles: project conception to post-handover phase. Processes and skills in resource management: management processes e.g. forecasting, planning, organising, motivating, controlling, coordinating and communicating; identification of management skills e.g. interpersonal skills, delegation, negotiation, decision making, planning and clarity of thinking. Improvement strategies: quality criteria; performance and quality improvement objectives

Management structures: features of alternative management and project team structures; building services project management and delivery teams (individual and collective roles and responsibilities); relationships and role of clients.

Team relationships: features of teamworking; roles within teams; team relationships; leadership; decision-making techniques; team membership; stages of team formation; equal opportunities within teams

Communication: effective formal and informal communication structures; personal communication skills; management of information; meetings; reporting.

Management forecasting: sources and management (current and historic information and data); forecasting techniques; potential error and risk analysis.

Planning and programming: techniques; for scheduling and programming material (diagrams and charts), equipment, financial and human resources.

Project progress and control: techniques and procedures (control, monitor and report progress e.g. completed work, work in progress, costs, claims for variations, delays, disruption, and cash control procedures)

Management of Commissioning, Completion and Hand-over: importance of commissioning and hand-over from contractual, operational, commercial and customer relations perspective. Documentation involved in the commissioning and hand-over. Planning for commissioning, completion and hand-over.

# **Learning Activities**

Work Based Learning, lectures, tutorials.

#### References

Course Material	Book
Author	Ashworth, A.
Publishing Year	2005
Title	Contractual Procedures in the Construction Industry
Subtitle	
Edition	5th
Publisher	Prentice Hall
ISBN	978-0131298279

Course Material	Book

Author	Clamp H., Cox S., AND Lupton S.
Publishing Year	2007
Title	Which Contract?
Subtitle	
Edition	4th
Publisher	RIBA Publishing
ISBN	978-1859462379

Course Material	Book
Author	Cooke, B. Williams, P.
Publishing Year	2009
Title	Construction Planning, Programming and Control
Subtitle	
Edition	3rd
Publisher	Wiley-Blackwell
ISBN	978-1405183802

Course Material	Book
Author	Parsloe, C. Wild, L.G.
Publishing Year	1998
Title	Project Management Handbook for Building Services
Subtitle	
Edition	
Publisher	BSRIA
ISBN	0-86022-502-X

#### **Notes**

The assessment of this module is via the work experience gained in the students' employment or work placement against the learning outcomes. The student in all cases should have a nominated workplace mentor or supervisor. The mentor must be familiar with the programme and modules and will be required to authenticate the work as being the learners own work. The tutor, the learner and the mentor should liaise to verify the suitability of work-based evidence.