UNIVERSITI TEKNOLOGI MARA

ARK876: CONSTRUCTION PROJECT MANAGEMENT

Course Name (English)	CONSTRUCTION PROJECT MANAGEMENT APPROVED
Course Code	ARK876
MQF Credit	2
Course Description	Students are introduced to basic management principles. Lectures and coursework will be given to enhance students understanding in the theory and practice of Project Management. Apart from lectures, a special programme called Integrated Simulation Project (ISP) will be organised involving students from 3 different disciplines namely architectural, quantity surveying and building. Simulation exercises based on given projects are conducted to tackle project issues, which are resolved through teamwork and understanding of the various disciplines mentioned.
Transferable Skills	Reflective Learner Ethically and Socially Sensitive Expert in Field
Teaching Methodologies	Lectures, Tutorial, Discussion
CLO	CLO1 Formulate the techniques of programming for construction project management. CLO2 Explain the understanding of roles and practices in construction project management.
Pre-Requisite Courses	No course recommendations

Topics
1. Introduction to management and its principles. 1.1) n/a
2. The Management Process 2.1) The seven processes of management of; 2.2) Thinking process; forecasting, planning and organising 2.3) Doing process; coordinating, controlling and motivating 2.4) Communicating
3. The elements of Project Management 3.1) 1. Roles and scope of services of Project Manager 3.2) 2. Managing of people, project team structure 3.3) 3. Participants/ selection of project team 3.4) 4. Organisation of management functions 3.5) 5. Stages of project / building process - inception, feasibility stage, pre-construction stage, construction stage, commissioning stage, completion, handing over stage, etc.
4. Project progress, delivery and Procurements 4.1) 1. Factors affecting progress of project; delays, fast building techniques 4.2) 2. procurement systems; Traditional approach and alternatives, i.e. Design & Build, Package Deal, Turnkey, Management Contracting, Construction Management, etc
5. Project planning, scheduling and cost planning 5.1) 1. Method statement 5.2) 2. Planning techniques 5.3) Gantt Chart / Bar Chart 5.4) Critical Path Method (CPM) 5.5) Precedence Diagram Method (PDM) 5.6) Line of Balance 5.7) 3. Project Master Programme (PMP)

6. Project control & performance elements of time, cost & quality control
6.1) 1. Objectives / the Control Cycle
6.2) 2. Time, cost, quality as evaluation of performance elements
6.3) 3. Time control (the S-curve)
6.4) 4. Cost control (the S-curve)
6.5) 5. Quality control
6.6) 6. Site control and site safety during construction stage

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	Assessment on the application of techniques of programming and procurement method for construction project management.	50%	CLO1

Reading List

Recommended Text

- **Harris, F., McCaffer, R., Edum-Fotwe, F. 2006, *Modern Construction Management*, 6 Ed., Wiley-Blackwell Oxford**
- **Oberlender, G.D. 2000, *Project Management for Engineering and Construction*, 2 Ed., McGraw Hill Boston**
- **Oxley, R., Poskitt, J. 1996, *Management Techniques Applied to the Construction Industry*, 5 Ed., Wiley-Blackwell Oxford**
- **Tan, A.A.L. 1996, *Project Management in Malaysia: A Comparative Approach for Successful Management of Property Development Project from Inception to Completion*, Synergy Book International**
- **Pilcher, R. 1992, *Principles of Construction Management*, 3 Ed., McGraw Hill**
- **Lockyear, K.G., Gordon, J. 1991, *Critical Path Analysis and Other Project Network Techniques*, 5 Ed., Pitman**

Reference Book Resources

- **Furmston, M 2006, *Powell-Smith & Furmston's Building Contract Casebook*, 4 Ed., Wiley-Blackwell Oxford**
- **Smith, K.A. 2003, *Project Management and Teamwork*, 2 Ed., McGraw Hill Professional New York**
- **Calvert, R.E., Coles, D.C.H., Bailey, G.J. 1995, *Introduction to Building Management*, 6 Ed., Butterworth Heinemann Oxford**

Article/Paper List: This Course does not have any article/paper resources

Other References: This Course does not have any other resources