Construction & Building Engineering Courses (CB)

Construction Management Courses Group

CB 416 – Construction Management 2

COURSE INFORMATION

Course Title: Construction Management 2

Code: CB 416

Hours: Lecture – 2 Hrs. Tutorial – 2 Hrs. Credit –3.

Prerequisite: CB 311

GRADING

Class Performance/Attendance:	10%
Midterm # 1/Assignments – (7^{th} Week):	30%
Midterm # 2/Assignments – (12^{th} Week):	20%
Final Exam:	40%

COURSE DESCRIPTION

The project life cycle and main project processes, project administration and documentation, construction productivity, value engineering, safety and health, risk management, procurement and supply chain management, sustainable construction and strategic management concepts.

TEXT BOOK

COMPUTER BASED CONSTRUCTION PROJECT MANAGEMENT by Hegazy, Tarek Publisher: John Pearson Education, Inc., Pearson Prentice Hall, Upper Saddle River, NJ USA.

REFERENCE BOOKS

A Guide to the Project Management Body of Knowledge by PMBOK Publisher: Project Management Institute, 2004.

Construction Project Administration by Fisk, R. Publisher: 2003

Managing Risk: In Construction Projects by Smith, N., Merna, T., and Jobling, P Publisher: Blackwell Publishing, UK, 2006

Construction Management by Halpin, D. W., Publisher: John Wiley & Sons, 2005

Sustainable Construction: Green Building Design and Delivery by Kibert, C., Publisher: Wiley, 2005

Project Management for Construction by LEVY S.M. Publisher: McGraw Hill Inc., N.Y., USA, 2002

COURSE AIM

The course aims at introducing the student to the basic concepts of construction management.

SPECIFIC OUTCOMES OF INSTRUCTION

The student should know the basic concepts of construction management.

COURSE OUTLINE

Week Number 1: Project phases and life cycle:
- Typical stages of the construction project, their sequence, and details.

Week Number 2: Main project processes:
- Project initiation; project planning; project execution; project control; and project closure.

Week Number 3: Project administration and documentation.

Week Number 4-6: Construction productivity:
- Definitions and concepts.
- Measuring construction productivity.

Week Number 7: Methods of productivity improvement:
- Major types of productivity improvement; advantages and disadvantages of each.

Week Number 8-10: Safety and health in construction:
- Importance of safety and health.
- Safety & health standards and management system.

Week Number 11: Risk management: identification of risk factors;
- Risk evaluation and analysis; contingencies; and risk response / treatment.

Week Number 12: Introduction to value engineering:
- Basic concepts of value engineering; and value engineering process.

Week Number 13: Procurement and supply chain management.

Week Number 14: Sustainable construction.

Week Number 15: Strategic management concepts

Week Number 16: Final Exam.

COURSE COORDINATOR AND DEMAND

Course Coordinator: Dr. Mohamed Emam.

Course Demand: *Required*