

University of Toledo

Construction Engineering Technology

Master Syllabus

Course Title: Technical Project Management

Course Code & Number: ENGT-2500

Credit Hour Total: 3 **Weekly Contact Hours Lecture:** 3 **Lab Hours:** 0

Prerequisite(s): None

Text: Absolute Beginner's Guide to Project Management 3rd Ed.
Hormine ISBN: 978-0789750105

Software: None

Course Coordinator: Daugherty

A. Course Description (Approved catalog description.)

General methodology of managing a technical project from concept to operational use. Emphasis is on the functions and responsibilities of the project manager related to maintaining project control and team management.

B. Related Program Outcomes:

Upon successful completion of the Construction Engineering Technology program, graduates will have:

ABET/Student Outcomes

- a. an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
- b. an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
- e. an ability to function effectively as part of a team;
- f. an ability to identify, analyze, and solve broadly-defined engineering technology problems;
- g. an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- h. an understanding of the need for and an ability to engage in self-directed continuing professional development;
- i. an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
- j. a knowledge of the impact of engineering technology solutions in a societal and global context;
- k. a commitment to quality, timeliness and continuous improvement.

ABET/Program Outcomes

1. Effective communication skills related to the construction environment through the proper usage of oral, written and graphic techniques.

11. A development and understanding of the proper management techniques of construction projects relative to budget, schedule, safety, organization and contractual obligations.

Evidence of the success of these outcomes is provided by the collection and analysis of:

- Final Exam

C. Course Objectives:

At the completion of this course the student will:

1. Understand the key concepts and fundamentals of project management.
2. Recognize the importance of project budgets and schedules and the significance of the relationship between them.
3. Understand the difference between leadership and management.
4. Effectively apply project management principles to all types of projects.
5. Understand the importance of quality performance from all types of projects team members.
6. Recognize the significance of effective time management and adequate planning.

D. Course Outline – Major Content Areas

This course studies the fundamentals of project management for those students with little or no prior knowledge of project management. Lectures will include discussions on project definitions, contracts, scheduling, job conditions, delays and claims, strategies, budgets, communications and the relationship between clients (customers), contractors, vendors, engineers, architects and regulatory agencies.

E. Suggested Laboratory Tests

None