

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 2nd Ed.
Hormine ISBN: 9780789738219

Software: None

Course Coordinator: Koenigseker

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/Program Outcomes

- a. an appropriate mastery of the knowledge, techniques, skills and modern tools associated with construction engineering technology;
- b. an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology;
- e. an ability to function as part of a team;
- f. an ability to identify, analyze and solve technical problems associated with construction engineering technology;
- g. an ability to communicate effectively;
- h. an understanding of the need for, and an ability to engage in lifelong learning;
- i. recognition of professional, ethical and social responsibilities;
- j. a respect for diversity and knowledge of contemporary professional, societal and global issues; and
- 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, 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