STATE UNIVERSITY OF NEW YORK COLLEGE OF TECHNOLOGY CANTON, NEW YORK

COURSE OUTLINE

SOET 361 - PROJECT MANAGEMENT

Prepared By: D J Wells Revised By: Eric Y. Cheng

> CANINO SCHOOL OF ENGINEERING TECHNOLOGY May 2015

- A. <u>TITLE</u>: Project Management
- B. <u>COURSE NUMBER</u>: SOET 361 SHORT TITLE: N/A
- C. CREDIT HOURS: 3
- D. <u>WRITING INTENSIVE COURSE</u> (OPTIONAL): No
- E. <u>COURSE LENGTH</u>: 15 Weeks
- F. <u>SEMESTER(S) OFFERED</u>: Fall

G. <u>HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY</u>: 3 Hours of lecture/week.

- **H.** <u>CATALOGUE DESCRIPTION</u>: This course is an introduction to projects and project management as it pertains to Industry. Students will be introduced to principles of project selection, project planning & scheduling, duties of a project manager, project organization, implementation and termination.
- I.I. **PRE-REQUISITES/CO-COURSES:** Junior standing or permission from instructor.

J. <u>GOALS (STUDENT LEARNING OUTCOMES)</u>:

By the end of this eodise, the student will.	
<u>Course Objective</u>	Institutional SLO
a. Assess project scope and identify key activity	
milestones	2. Crit. Thinking
b. Develop organizational structure and work	2. Crit. Thinking
breakdown structure	3. Prof. Competence
c. Develop a project plan and schedule	3. Prof. Competence
d. Develop a project budget	3. Prof. Competence
	et i i on competence
	2. Crit. Thinking
e. Assemble a resource management structure	3. Prof. Competence
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	2. Crit. Thinking
f. Develop project control structure	3. Prof. Competence
g Utilize computerized tools to assist with project	
g. Utilize computerized tools to assist with project	
management	3. Prof. Competence
h. Effectively communicate project scope and	2. Communication
progress status	4. Inter/Intrapersonal Sk.
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By the end of this course, the student will:

- **K.** <u>**TEXTS:**</u> Harold Kerzner, PROJECT MANAGEMENT: A systems Approach to Planning Scheduling, and Controlling, 11th Ed, John Wiley & Sons, 2014
- L. <u>**REFERENCES**</u>: None

M. <u>EQUIPMENT</u>: None

- N. <u>GRADING METHOD</u>: (P/F, A-F, etc.) A-F
- **O.** <u>MEASUREMENT CRITERIA/METHODS</u>: Homework 10%, Hourly Exam 20%, Team Projects 40%, Final Exam 30%.

P. <u>DETAILED TOPICAL OUTLINE</u>:

- 1. Project Management Overview (2 weeks)
 - 1.1. Nature of Projects: start, finish, budget, deliverables, resources, constraints
 - 1.2. Project Phases: conception, planning, proposal, implementation, close out.
 - 1.3. Role of Planning & Scheduling: Organization, scoping, marketing, tracking, substantiating/defending.
- 2. Planning & Scheduling (4 weeks)
 - 2.1. Project Scheduling (PERT/CPM): start, finish, project milestones, schedule logic, subnets, critical path, slack/float.
 - 2.2. Progress Tracking: Impact on critical path and milestone completion dates.
 - 2.3. Comparison: Actual vs Schedule
 - 2.4. Planning for schedule uncertainty
- 3. Resource Management (2 weeks)
 - 3.1. Resources & Funding
 - 3.2. Task-related Scheduling of Materials, Equipment, Labor and Cash Flow.
 - 3.3. Resource planning and utilization requirements.
 - 3.4. The one-resource project, multi-resource project, and project cash flow.
 - 3.5. Financial implications of early/late start on material and funding requirements.
 - 3.6. Resource leveling.
 - 3.7. Schedule Compression Strategies and Costs.
- 4. Organization Requirement (2 weeks)
 - 4.1. PM Organizational Structures
 - 4.2. Functional Responsibilities
 - 4.3. Organizing for each Project Phase
 - 4.4. Project Characteristics and Project Priorities (e.g. New Product Development, House Construction, Software Development)
- 5. Project Communications (3 weeks)
 - 5.1. Purposes of Communications for each Project Phase
 - 5.2. Planning Documentation
 - 5.3. Scheduling Documentation
 - 5.4. Project Implantation (tracking) Documentation
 - 5.5. Resource Documentation
 - 5.6. Funding Documentation
 - 5.7. Client-related documentation
 - 5.8. Delays, Problems, Scope Changes
- 6. Project Activities (interspersed throughout semester 2 weeks)

Q. LABORATORY OUTLINE: N/A