COURSE OUTLINE

SOET 361 - PROJECT MANAGEMENT

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

CANINO SCHOOL OF ENGINEERING TECHNOLOGY
May 2015
A. TITLE: Project Management

B. COURSE NUMBER: SOET 361
   SHORT TITLE: N/A

C. CREDIT HOURS: 3

D. WRITING INTENSIVE COURSE (OPTIONAL): No

E. COURSE LENGTH: 15 Weeks

F. SEMESTER(S) OFFERED: Fall

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

H. CATALOGUE DESCRIPTION: 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. PRE-REQUISITES/CO-COURSES: Junior standing or permission from instructor.

J. GOALS (STUDENT LEARNING OUTCOMES):

   By the end of this course, the student will:

<table>
<thead>
<tr>
<th>Course Objective</th>
<th>Institutional SLO</th>
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<tbody>
<tr>
<td>a. Assess project scope and identify key activity</td>
<td>2. Crit. Thinking</td>
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<td>milestones</td>
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<td>b. Develop organizational structure and work</td>
<td>2. Crit. Thinking</td>
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<tr>
<td>breakdown structure</td>
<td>3. Prof. Competence</td>
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<td>c. Develop a project plan and schedule</td>
<td>3. Prof. Competence</td>
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<td>d. Develop a project budget</td>
<td>3. Prof. Competence</td>
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<td>e. Assemble a resource management structure</td>
<td>2. Crit. Thinking</td>
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<td>3. Prof. Competence</td>
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<td>f. Develop project control structure</td>
<td>2. Crit. Thinking</td>
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<td></td>
<td>3. Prof. Competence</td>
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<td>g. Utilize computerized tools to assist with project</td>
<td>3. Prof. Competence</td>
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<tr>
<td>management</td>
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<tr>
<td>h. Effectively communicate project scope and progress</td>
<td>2. Communication</td>
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<td>status</td>
<td>4. Inter/Intrapersonal Sk.</td>
</tr>
</tbody>
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K. TEXTS: Harold Kerzner, PROJECT MANAGEMENT: A systems Approach to Planning
   Scheduling, and Controlling, 11th Ed, John Wiley & Sons, 2014

L. REFERENCES: None
M. **EQUIPMENT**: None

N. **GRADING METHOD**: (P/F, A-F, etc.) A-F

O. **MEASUREMENT CRITERIA/METHODS**: Homework – 10%, Hourly Exam – 20%, Team Projects – 40%, Final Exam – 30%.

P. **DETAILED TOPICAL OUTLINE**:

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
   3.3. 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 Implementation (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