METROPOLITAN STATE COLLEGE OF DENVER
Office of Academic Affairs

REGULAR COURSE SYLLABUS

School of Professional Studies

Department: Engineering Technology Studies

Semester(s) Offered: Fall

Prefix & Course Number: MET 4000

Crosslisted With*: ______

Course Title: Project Engineering

Credit Hours: 3 (3+0)

Contact Hours: Lecture 45 Lab 0 Internship ______ Practicum ______

Schedule Type(s): L Grading Mode(s): L

Repeat* (Variable topics): ______

*(Pertinent only if the course can be repeated; enter maximum number of hours that can be earned by taking this course.)

Restrictions (Variable Topics Course): NONE

Prerequisite(s): Senior standing

Corequisite(s): NONE

Prerequisite(s) or Corequisite(s): NONE

Banner Enforced:

Prerequisite(s): Senior standing

Corequisite(s): None

Prerequisite(s) or Corequisite(s): ______

Catalog Course Description:

The student is introduced to the project or team effort. The need for planning, control, and communication is stressed. Critical path methods are used to develop schedules. Figure-of-merit methods are used to select preferred approaches/designs. Technical writing is stressed with an introduction to competitive proposal writing.

Required Reading and Other Materials will be equivalent to (Title, Author, Publisher, Copyright Date):


APPROVED:

Department Chair/Institute Director: ________ Date: 8/10/05

Dean: ________ Date: 9/23/05

Associate VP, Academic Affairs: ________ Date: ________

*If crosslisted, attach completed Course Crosslisting Agreement Form
Prefix and Course Number: MET 4000

SPECIFIC (MEASURABLE) STUDENT BEHAVIORAL LEARNING OBJECTIVES:
Upon completion of this course the student should be able to:
1. Apply project organization theory putting it into actual practice.
2. Understand and apply to case studies job enrichment theory and job motivational needs of people.
3. Coordinate the facets of the organizational structure as it relates to the project development.
4. Relate effective communication needs to stress producing manager/subordinate relationships.
5. Take a project through the planning, scheduling, and budgeting phases of project development.
6. Use the critical path technique to develop schedules.
7. Select preferred approaches/designs by using the figure-of-merit method.

OUTLINE OF COURSE CONTENT (Major Topics and Subtopics):
I. Introduction
   A. The project organization
II. Managing Engineering Projects
   A. Management Methods
      1. Theory X
      2. Theory Y
III. Project Cost Estimating
    A. Budgets/Accounting Methods
    B. Short and Long Range Planning
IV. Project Planning Control
    A. Scheduling
       1. Critical Path
       2. Bar Charts
       3. PERT
V. Writing a Competitive Proposal
   A. Selecting Preferred Plan
   B. Technical Report Writing

EVALUATION OF STUDENT PERFORMANCE:
20% Quizzes
30% Midterm Examination
30% Final Examination
15% Laboratory Project/Homework
5% Attendance