

_____SOUTH SEATTLE COMMUNITY COLLEGE_____

Technical Education Division

COURSE OUTLINE

Revision: Loc Nguyen – March, 2009

DEPARTMENT: Engineering & Engineering Technology

CURRICULUM: Engineering Technology

COURSE TITLE: Design Project Management

COURSE NUMBER: TDR 236

TYPE OF COURSE: Vocational Preparatory/

COURSE LENGTH: 1 quarter

CREDIT HOURS: 1

LECTURE HOURS: 11

LAB HOURS: 11

CLASS SIZE: 24

PREREQUISITES: MET 102 (Technical Problem Solving),
TDR 231 (Advanced CAD 3-D), and
TDR 233(Field Specialty Drafting - Civil) or
TDR 235 (Field Specialty Drafting - Mechanical)

COURSE DESCRIPTION:

Integration of the basic elements of a design project, the design process, teamwork, project planning, time management, and project presentation.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Computation - Use basic mathematical operations as required to define geometry and manufacture parameters.
2. Technology - Select and use appropriate technological tools to create technical graphics.
3. Communication - Read and translate technical data relative to geometry, fabrication and assembly/installation requirements into a graphical form easily understood by others with similar technical understanding.

STUDENT LEARNING OUTCOMES ADDRESSED (cont.):

4. Critical Thinking and Problem Solving - Organize and evaluate technical data. Select and apply appropriate spatial relationship principles to determine problem solution.
5. Personal Responsibility - Value and take pride in one's own technical, management, communication, and team enhancement skills.
6. Information Literacy - Access, evaluate, and apply information from a variety of technical resources.
7. Human Relations - Use human social interactive skills to promote and enhance a positive and productive teamwork environment.

PROGRAM OUTCOMES ADDRESSED

- 1 Ability to apply knowledge of mathematics and scientific principles to technical engineering/drafting problems.
- 2 Ability to analyze and interpret data.
- 3 Ability to think critically in evaluating information, solving problems, and making decisions.
- 4 Ability to function on diverse, multi-disciplinary teams.
- 5 Ability to access and evaluate information from a variety of sources, including the Internet.
- 6 Understand professional and ethical responsibility.
- 7 Ability to communicate effectively with written, oral, and visual means.
- 8 Recognize the need for and ability to engage in life-long learning.
- 9 Ability to use modern technical engineering techniques, skills, and technology, including computing tools necessary for technical engineering/drafting practice.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Define and demonstrate the design process as a step-by-step procedure that is applied in the development of a solution to an engineering problem.
2. Identify numerous factors that can influence a design effort.
3. Demonstrate effective teamwork behavior.
4. Explain the basic requirements for project planning and management.
5. Describe and demonstrate the basic elements of a project presentation.

TOPICAL OUTLINE:

APPROX. HOURS

I. Introduction	1
II. The design process	6
III. Teamwork	4
IV. Project Planning Management	6
V. Project Performing Management	<u>5</u>

Total 22

REVISED BY: Loc Nguyen
DATE: March 31, 2009