COURSE OUTLINE
Revision: Loc Nguyen - Date: February 2009

DEPARTMENT: Drafting Technology
CURRICULUM: Drafting
COURSE TITLE: Drafting Technology II
COURSE NUMBER: TDR 123
TYPE OF COURSE: Vocational Preparatory/
COURSE LENGTH: 1 quarter
CREDIT HOURS: 4
LECTURE HOURS: 22
LAB HOURS: 44
CLASS SIZE: 24

PREREQUISITES:
TDR 121 (Drafting Technology I) or instructor’s permission

COURSE DESCRIPTION:

Basic principles and practices involved in the creation of production drawings including: dimensions and tolerancing; sections; and auxiliary views. Emphasis on standard practices and variations permitted when required for clarity.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication - Read and translate technical data relative to geometric spatial relationships into a graphical form easily understood by others with similar technical understanding.
2. Computation - Use basic mathematical operations as required to define geometrical spatial relationships.
STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

3. Human Relations - Use social interactive skills to enhance learning through informal tutoring activities.
4. Critical Thinking and Problem Solving - Organize and evaluate technical data, as well as select and apply appropriate spatial relationship principles to determine problem solution.
5. Technology - Select and use appropriate technological tools to create technical graphics.
6. Personal Responsibility - Value and take pride in one’s own skill and work, and manage time to meet required schedules.
7. Information Literacy - Access, evaluate and apply information from technical texts.

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 COURSES OBJECTIVES:

At the end of the course the student will:

Module I Dimension and Tolerancing
1. Apply accepted principles and practices to the dimension and tolerancing of moderately complex single and multi-view mechanical drawings.

Module II - Section Views
1. Apply accepted principles and practices to drawing section views of moderately complex mechanical parts and assemblies.
GENERAL COURSE OBJECTIVES (cont.):

Module III - Auxiliary Views
1. Apply accepted principles and practices to drawing auxiliary views of moderately complex mechanical parts and assemblies.

Module IV - Fasteners
1. Apply accepted practices for identifying and representing fasteners on technical drawings.

TOPICAL OUTLINE:

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<th>APPROX. HOURS</th>
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<td>I. Dimensioning and Tolerancing</td>
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<tr>
<td>II. Section Views</td>
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<td>III. Auxiliary Views</td>
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REVISED BY: Loc Nguyen
DATE: February 2009