COURSE OUTLINE
Revision: Mike Steffancin, February 2008

DEPARTMENT: Academic Programs
CURRICULUM: Engineering & Engineering Technology
COURSE TITLE: Engineering Orientation
COURSE NUMBER: ENGR 110
TYPE OF COURSE: Academic Transfer
COURSE LENGTH: 1 quarter
CREDIT HOURS: 1
LECTURE HOURS: 11
LAB HOURS: 0
CLASS SIZE: 24
PREREQUISITES: None

COURSE DESCRIPTION:

Covers fields of engineering, career options, and general information. This course is designed to provide information and orientation to members of the freshman class. Presentations by various engineering faculty and staff members, recent graduated students, practicing engineers, engineering technologist, and professionals from engineering. Offered on a satisfactory (S) grade basis only.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication – Read and listen actively to learn and communicate in engineering environment.
2. Personal Responsibility – Identify personal values, set goals and implement strategies to achieve them.
3. Information Literacy – Identify and use appropriate sources of information relating to SSCC engineering.
ENGR 110 Engineering Orientation
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STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

4. Technology – Use word-processing software for writing a report. Use the Internet, and other software including CAD and spreadsheet programs.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will be able to:

1. Understand the engineering profession’s role and organization in modern industry.
2. Develop basic study skills in engineering courses.
3. Develop some basic skills in technical communication and problem solving.
4. Make a self-assessment and plan for entering a professional career.

TOPICAL OUTLINE: 

I. Introduction Engineering Program 1 at SSCC
II. Definition of Engineering/ The Technical Team 1
III. Engineering as a Profession 1
IV. Branches and Functions of Engineering 1
V. Academic Planning 1
VI. Learning Skills 1
VII. The Engineering Method of Problem Solution 1
VIII. The Design Process 1
IX. Other Engineering & Related Sciences Resources 3

Total hours 11

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DATE: February 2008
Course Prefix and Number: ENGR 110  
Course Title: Engineering Orientation

<table>
<thead>
<tr>
<th>SLO #</th>
<th>Included in Course Objective Number</th>
<th>SSCC Student Learning Outcomes</th>
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</thead>
<tbody>
<tr>
<td>SLO 1.1</td>
<td>1-4</td>
<td>Communication - Read and listen actively</td>
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<tr>
<td>SLO 1.2</td>
<td>4</td>
<td>Communication - Speak and write effectively</td>
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<tr>
<td>SLO 2.1</td>
<td>3</td>
<td>Computation - Use mathematical operations</td>
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<tr>
<td>SLO 2.2</td>
<td>3</td>
<td>Computation - Apply quantitative skills</td>
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<tr>
<td>SLO 2.3</td>
<td></td>
<td>Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills</td>
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<tr>
<td>SLO 3.1</td>
<td></td>
<td>Human Relations - Use social interactive skills to work in groups effectively</td>
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<tr>
<td>SLO 3.2</td>
<td>1</td>
<td>Human Relations - Recognize the diversity of cultural influences and values</td>
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<td>SLO 4.1</td>
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<td>Critical Thinking and Problem Solving -</td>
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<tr>
<td>SLO 5.1</td>
<td>1-4</td>
<td>Technology - Select and use appropriate technological tools</td>
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<td>SLO 6.1</td>
<td>4</td>
<td>Personal Responsibility - Be motivated and able to continue learning and adapt to change</td>
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<tr>
<td>SLO 6.2</td>
<td>4</td>
<td>Personal Responsibility - Value one's own skills, abilities, ideas and art</td>
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<tr>
<td>SLO 6.3</td>
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<td>Personal Responsibility - Take pride in one's work</td>
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<tr>
<td>SLO 6.4</td>
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<td>Personal Responsibility - Manage personal health and safety</td>
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<td>SLO 6.5</td>
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<td>Personal Responsibility - Be aware of civic and environmental issues</td>
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<tr>
<td>SLO 7.1</td>
<td>1-4</td>
<td>Information Literacy - Access and evaluate information</td>
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<tr>
<td>SLO 7.2</td>
<td>1-4</td>
<td>Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society</td>
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</tbody>
</table>

PREPARED BY: Mike Steffancin  
DATE: May 2008