COURSE OUTLINE
Revision: Frank Post and Heidi Lyman, December 2008

DEPARTMENT: Vocational/Technical Programs
CURRICULUM: Mathematics
COURSE TITLE: Applied Math for Technicians
COURSE NUMBER: MATH 110
TYPE OF COURSE: Occupational Preparatory
Special Requirement Met: None
AREA(S) OF KNOWLEDGE: Applied Academics
COURSE LENGTH: 1 quarter
CREDIT HOURS: 3
LECTURE HOURS: 33
LAB HOURS: 0
CLASS SIZE: 35 (25 online)
PREREQUISITES: Appropriate placement score.

COURSE DESCRIPTION:
A course to better meet the mathematical needs of students in vocational and technical programs. Emphasis is on the practical applications of mathematics with problems and exercises which apply to one or more of the vocational and technical programs.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Computation – Use arithmetic and other basic mathematical operations as required by program of study. Apply quantitative skills for personal, academic and career purposes.
2. Communication – Read and listen actively to learn and communicate.
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STUDENT LEARNING OUTCOMES CONTINUED:

3. Technology – Select and use appropriate technological tools for personal, academic and career tasks.
4. Personal Responsibility – Be motivated and able to continue learning and adapt to change. Value one’s own skills, abilities, ideas and art. Take pride in one’s work. Be aware of civic and environmental issues

GENERAL COURSE OBJECTIVES:
The student will do most or all of the following:

1. Demonstrate success on evaluations over the topics studied.
2. Be able to work with the basic arithmetic and basic mathematical skills.
3. Work to build a foundation of math skills for their program of study classes.
4. See very basic algebra skills in proportion and percent problems.
5. Develop skills in basic measurement and geometry.
6. Develop skills in solving applications.
7. Basic math applications in vocational and technical programs and areas.
8. Develop regular attendance and time management/organization skills.

TOPICAL OUTLINE:

I. Fractions
II. Decimals
III. Percents
IV. English to metric measurements
V. Ratios and proportions
VI. Appropriate applications

APPROX. HOURS 33

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<table>
<thead>
<tr>
<th>SLO #</th>
<th>Included in Course Objective Number</th>
<th>SSCC Student Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO 1.1</td>
<td>1 – 7</td>
<td>Communication - Read and listen actively</td>
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<tr>
<td>SLO 1.2</td>
<td></td>
<td>Communication - Speak and write effectively</td>
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<tr>
<td>SLO 2.1</td>
<td>1 – 7</td>
<td>Computation - Use mathematical operations</td>
</tr>
<tr>
<td>SLO 2.2</td>
<td>1 – 7</td>
<td>Computation - Apply quantitative skills</td>
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<tr>
<td>SLO 2.3</td>
<td>1 – 7</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></td>
<td>Human Relations - Recognize the diversity of cultural influences and values</td>
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<tr>
<td>SLO 4.1</td>
<td>1 - 7</td>
<td>Critical Thinking and Problem Solving -</td>
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<tr>
<td>SLO 5.1</td>
<td>1 – 7</td>
<td>Technology - Select and use appropriate technological tools</td>
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<tr>
<td>SLO 6.1</td>
<td>8</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>8</td>
<td>Personal Responsibility - Value one's own skills, abilities, ideas and art</td>
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<tr>
<td>SLO 6.3</td>
<td>8</td>
<td>Personal Responsibility - Take pride in one's work</td>
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<td>SLO 6.4</td>
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<td>Personal Responsibility - Manage personal health and safety</td>
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<tr>
<td>SLO 6.5</td>
<td>1 – 8</td>
<td>Personal Responsibility - Be aware of civic and environmental issues</td>
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<tr>
<td>SLO 7.1</td>
<td>1 – 7</td>
<td>Information Literacy - Access and evaluate information</td>
</tr>
<tr>
<td>SLO 7.2</td>
<td>1 – 7</td>
<td>Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society</td>
</tr>
</tbody>
</table>

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