

MTH 104 Syllabus

Division: Arts and Sciences / Business & EIT

Revised: 2013

Curricula in Which Course is Taught: Machine Technology, Industrial Maintenance

Course Number and Title: MTH 104, Applied Technical Mathematics II

CREDIT HOURS: 3 **HOURS/WK.** **LEC:** 3 **HOURS/WK.** **LAB:** 0 **LEC/LAB COMB:** 3

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I. **Catalog Description:** Presents a review of arithmetic, elements of algebra, geometry, and trigonometry. Directs applications to specialty areas. Prerequisites: Completion of MTH 103 or equivalent. Lecture 3 hours per week..

II. **Relationship of the course to curricula objectives in which it is taught:**

Math 104 equips the students with the mathematic skills necessary to solve practical problems in the industrial trade areas. Practical applications are drawn from real world problems and employment experiences in the mechanical field.

III. **Required background:**

Completion of MTH 103 or equivalent.

IV. **Course Content:**

1. Practical Algebra
2. Rectangles and Triangles
3. Regular Polygons and Circles
4. Right Triangles
5. Trigonometric Functions
6. Work and Power

V. **THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE :**

<u> X </u> Communications	<u> X </u> Computational and Computer Skills
<u> X </u> Learning Skills	<u> </u> Understanding Culture and Society
<u> X </u> Critical Thinking	<u> X </u> Understanding Science and Technology
<u> X </u> Interpersonal Skills and Human Relations	<u> </u> Wellness

VI. LEARNER OUTCOMES**VII. EVALUATION METHOD**

Understand the definitions, properties, and basic operations of algebra.	Daily assignments and written tests
Understand basic concepts of geometry: <ul style="list-style-type: none">• Perimeters and areas of polygons and circles• Volumes of solids• Angles	Daily assignments and written tests
Understand the definitions, properties, and basic operations of trigonometry.	Daily assignments and written tests
Find the values of trigonometric functions; Find the angles when given trigonometric functions.	Daily assignments and written tests
Understand the basic concepts of work and power.	Daily assignments and written tests

VIII. Over 90% of students will successfully complete this class.