

Virginia Western Community College

MTH 116

Technical Mathematics II

Prerequisites

MTE 1, MTE 2, MTE 3, MTE 4, MTE 5 and MTE 6 or a placement recommendation for MTH 115 or MTH 116 or equivalent.

Course Description

Presents algebra through exponential and logarithmic functions, trigonometry, vectors, analytic geometry, and complex numbers.

Semester Credits: 3

Lecture Hours: 3

Required Materials

Textbook:

Technical Mathematics (Chs 1-22). Calter. 6th edition. Wiley & Sons. ISBN 9780470534922

Other Required Materials:

Graphing calculator (Students are strongly encouraged to purchase a TI-89 graphing calculator in order to be able to carry out computations.

Course Outcomes

At the completion of this course, the student should be able to:

- Solve problems involving complex numbers.
- Solve Arc length and circular motion problems.
- Use properties of logarithms to solve equations.
- Graph and analyze trigonometric and parametric functions.
- Solve applied problems associated with engineering technology.

Topical Description

<u>Chapter</u>	<u>Topic</u>
14	Radian Measure, Arc Length and Rotation
15	Trigonometric, Parametric and Polar Graphs
17	Ratio Proportion and Variation
18	Exponential and Logarithmic Functions
19	Complex Numbers
21	Statistics (optional)

Notes to Instructors

None.