



# ENGR 400 Engineering Mathematics

Spring 2006 • Tuesdays (January 31 and February 7, 2006), 7:20pm - 10:20pm

## Syllabus

### Instructor

---

<b>Instructor</b>	Rafal Kicinger, Research Assistant Professor
<b>Office</b>	Science and Technology II Building, Room 14
<b>E-mail</b>	rkicinge@gmu.edu
<b>Phone</b>	703-993-1658
<b>Office hours</b>	Tuesdays and Thursdays, 4:15-5:45pm

### Course Overview

---

This course is a refresher for the mathematics part of the Fundamentals of Engineering exam. It covers the following sections: fundamentals of analytic geometry and trigonometry, algebra and linear algebra, probability and statistics, calculus, differential equations, transforms, and numerical analysis.

### Course Objectives

---

To refresh fundamental concepts in mathematics, statistics, and probability; To develop problem solving strategies and skills for the mathematics part of the Fundamentals of Engineering Exam.

### Reference Textbook

---

<b>Author</b>	Michael R. Lindeburg
<b>Title</b>	Fundamentals of Engineering Review Manual
<b>Publisher</b>	Professional Publications, Inc.
<b>ISBN</b>	1-888577-53-3
<b>Link</b>	<a href="http://ppi2pass.com/ppi/PPIShop?pr=FERM&amp;ct=FEEXAM">http://ppi2pass.com/ppi/PPIShop?pr=FERM&amp;ct=FEEXAM</a>

### Course Schedule

---

<i>Lecture</i>	<i>Date</i>	<i>Topic</i>
L1	January 31, 2006	Analytic geometry and trigonometry, systems of linear equations, quadratic and cubic equations, logarithms, complex numbers, vectors, matrices, progressions and series
L2	February 7, 2006	Probability and statistics, derivatives, limits, integrals, differential equations, Fourier series, Laplace transforms, difference equations, z transforms