

MA 125 Calculus I

Syllabus*

Course Description

The course provides an introduction to calculus with emphasis on differential calculus. Topics include limits of functions, derivatives of elementary functions, application of differentiation to curve sketching and optimization problems, and examples in the natural sciences and economics. The course concludes with an introduction to definite integrals and the fundamental theorem of calculus. *Credit for both MA 120 and MA 125 is not allowed.*

Prerequisites

MA 113 or MA 115 or placement test score of 85 or more.

Textbook

Jon Rogawski, *Calculus: Early Transcendentals*, W. H. Freeman, New York, 1st edition (2008). ISBN-13: 978-1-4292-1073-7

Topics & Time Distribution

By assuming the total of 13 weeks, the instructor is given an extra week and a half to use for tests, emphasis on certain topics, etc.

Chapter 1:	Precalculus Review	1 week
Chapter 2:	Limits	3 wks
Chapter 3:	Differentiation	4 wks
Chapter 4:	Applications of the Derivative	3 wks
Chapter 5:	The Integral	1.5 wks

Detailed Schedule

Below are the essential sections which should be covered by all instructors.

Chapter 1:	1.4, 1.5, 1.6.
Chapter 2:	2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8.
Chapter 3:	3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11.
Chapter 4:	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.9.
Chapter 5:	5.1, 5.2, 5.3, 5.4.

*Last updated November 18, 2008