# Math 205 Introductory Calculus I, Fall 2011

#### **Basic Info:**

Meeting Times/Locations:

- Section 3, MWF Roop 129, 9:05–9:55am
- Section 8, MWF Roop 129, 12:20–1:10pm

Instructor: Joshua Ducey Email: duceyje@jmu.edu

Website: educ.jmu.edu/~duceyje

Office Location: Roop 116

Office Hours:

- Monday, Friday 10:30–11:30am
- Wednesday 1:30–2:30pm
- Thursday 8:00–10:00am
- By appointment.

Book: Introductory Calculus by Tan, Cengage 2011, 8th Ed.

## Course Content and Goals:

The student should develop an understanding of both the theory and applications of the Calculus topics covered. We will cover topics from Chapters 2 through 6 of the text.

Nature of the Course Content:

MATH 205. Introductory Calculus I.

3 credits. Offered fall and spring.

Topics from differential calculus with applications to the social, behavioral or life sciences and business or management. Prerequisite: MATH 155, MATH 156 or sufficient score on the Mathematics Placement Exam. Not open to mathematics or physics majors or to students who have already earned credit in MATH 235. Not recommended for chemistry majors.

Goals of the Course:

- (1) To develop an understanding of the logical structure and style of mathematics by:
  - Using reason in an orderly, cogent fashion.
  - Writing clear, well organized solutions to problems.

Structure refers to the foundations of mathematics and to the techniques used to build on those foundations. Style refers to the clarity, elegance, efficiency, and precision desirable in mathematical expression.

- (2) To develop ability to use mathematical tools to solve problems and to transfer this knowledge to analogous situations by:
  - Using differentiation to solve problems involving optimization and rates of change.
  - Using polynomial, algebraic, exponential, and logarithmic functions in mathematical computations and in modeling applications.
  - Using and understanding antiderivatives, the Fundamental Theorem of Calculus, and area under a curve.

## Homework:

Will be assigned *daily*. We will be using the online homework resource WeBWorK. Go to **webwork.cit.jmu.edu**, scroll down to MATH 205, and click the link next to Joshua Ducey to access your assignments.

## Quizzes:

There will be random quizzes given in class. No make-up quizzes will be given.

#### Success:

Come to class. Read your book. Do your homework.

## Getting Help:

You are encouraged to work on homework with your classmates. My office hours are fixed times when I will be in my office to help you, but you can also make an appointment to see me at a different time (just

email me).

The Science and Math Learning Center offers free tutoring. No appointment is necessary, just walk right in. It is located in Roop 200, and operates Monday through Thursday 10am-8pm, Friday 10am-2pm, Sunday 5pm-8pm. I strongly encourage you to take advantage of this service. There is also an East Campus Library location, see their website for details www.jmu.edu/smrc.

## **Evaluation:**

Webwork: 15% Quizzes: 5%

Three Exams: 60%

Cumulative Final Exam: 20%

## Grade Scale:

[90 - 100] A- to A [80 - 90) B- to B+ [70 - 80) C- to C+ [60 - 70) D- to D+ [0 - 60) F

## Final Exam Times:

Section 3, Friday 12/16/2011, 8:00-10:00am Section 8, Monday 12/12/2011, 10:30-12:30pm

General University Policy: www.jmu.edu/syllabus