### Math 205 Introductory Calculus I, Fall 2016

# **Basic Info:**

Meeting Times/Locations

• Section 0003, MWF Roop Hall room 129, 2:30–3:20pm

Instructor: Dr. Joshua Ducey Email: duceyje@jmu.edu Website: http://educ.jmu.edu/~duceyje Office Location: Roop 339 Office Hours:

- Monday 11:00–12:05
- Wednesday 10:10–11:00
- Thursday 12:30–1:45
- By appointment

Book: Applied Calculus: For the Managerial, Life, and Social Sciences by Tan, Cengage, 10th Ed.

### **Course Goals and Content:**

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 or management. *Prequisite: 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 http://webwork.cit.jmu.edu, scroll down to MATH205, 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:

Your 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).

**Evaluation:** WeBWorK: 15% Quizzes: 5% Three Exams: 60% Cumulative Final Exam: 20%

## Grade Scale:

# Final Exam Time:

Wednesday 12/14/2015, 1:00-3:00pm

General University Policy: www.jmu.edu/syllabus