

**ST. JOSEPH'S UNIVERSITY**  
**MAT 161 – D01: CALCULUS I**  
**COURSE SYLLABUS**  
**FALL 2011**

**Instructor Information**

**Instructor:** Dr. Elaine A. Terry

**Office:** 239 Barbelin\Lonergan Hall

**Office Hours:** Monday: 11 – 12 & 1 – 3; Tuesday: 1:30 – 3; Thursday: 1:30 – 3  
and by appointment

**Office Phone:** (610) 660 – 3243; **E-mail:** terry@sju.edu

**Course Website on University Blackboard:** MySJU

**Required Materials**

**Textbook:** *Calculus: Early Transcendentals, Seventh Edition* by James Stewart; Brooks/Cole Publishing Company, 2008.

**Calculator:** A scientific or graphing calculator is allowed when working homework, quizzes, tests and the final exam. Symbolic manipulators, such as the TI-89, are not allowed.

**Course Description**

Calculus is the crowning achievement of seventeenth century mathematics. It is the branch of mathematics used to describe motion and has many applications to the physical, social and biological sciences. MAT 161 - Calculus I is a four-credit course that explores the fundamental concepts of limits, continuity, differentiation, and the Riemann sum. Applications of the derivative are studied in detail including maxima and minima problems, curve sketching, and optimization. The course concludes with topics on integration including the Riemann sum, the definite integral and the Fundamental Theorem of Calculus.

**Learning Objectives: Upon successful completion of the course a student should be able to do the following:**

- Determine the limit of functions in three ways: numerically, graphically and analytically.
- Determine the continuity of a function at a point and on an interval as well as be able to describe the type of discontinuity that exists.
- Recognize and determine infinite limits.
- Understand the geometric interpretation of the derivative as the slope of a tangent line to a function at a specified point.
- Understand the physical interpretation of the derivative as a rate of change.
- Determine the derivative of a function by using the definition and rules.
- Recognize and be able to apply theorems including Intermediate Value, Rolle's, and Mean Value.
- Make use of the derivative to help in analyzing the graph of a function.
- Solve applied optimization problems.
- To find the antiderivative of a given function.
- Understand the relationship between the Riemann sum and the definite integral.
- Understand and be able to apply the Fundamental Theorem of Calculus.

**Grading will be based on the following:**

3 In-Class Tests	270	45%
Homework	120	20%
Quizzes	90	15%
Final Exam	120	20%
<b>TOTAL</b>	<b>600 pts.</b>	<b>100%</b>

**Letter Grade Distribution**

A	96 – 100	A-	92 – 95	B-	80 – 83
B+	88 – 91	B	84 – 87	C-	68 – 71
C+	76 – 79	C	72 – 75	F	59 and below
D+	64 – 67	D	60 – 63		

**Tentative Test Dates:** Thursday, September 29; Thursday, October 27; Thursday, December 1; Final Exam: TBA.

**Important Dates**

- **Last day of Add/Drop: Tuesday, September 6**
- **Fall Break: October 17 – 18 (No classes)**
- **Last Day to withdraw without penalty: Friday, November 4**
- **Thanksgiving Break, November 23 - 27 (No classes)**
- **Last Day of Class: Thursday, December 8**

**Attendance Policy:** You are expected to attend all class meetings and to stay until the class is officially over. I will pass around an attendance sign-in sheet at the beginning of each class meeting in order to keep a record of attendance. It is important that you sign the roll sheet each day that you attend class. **More than four unexcused absences may affect borderline grades.**

**Withdrawal:** If you need to withdraw from the course, please note the following: **You may drop the course without penalty before the last official withdrawal date: Friday, November 4.** If you drop before this date then a W will appear on your transcript. Withdrawal after this date requires extraordinary circumstances including approval from the appropriate Dean. If you stop attending class then you will receive a grade of FA which is the equivalent to a grade of F. If you find that you need to withdraw from the course then talk with me or your advisor immediately. **Do not just stop coming to class!**

**Academic Honesty:** I will adhere to the Academic Honesty Policy as stated in the University Catalogue. In particular, anyone found cheating; copying, offering and/or receiving unauthorized assistance on quizzes, tests or exams would be violating the University Academic Honesty Policy. All tests, quizzes and/or assignments found to be in violation of this policy would receive a grade of zero. I strongly suggest that you read your University catalogue and become familiar with the policy and procedures that govern academic honesty.

## HELP!!

**Math Tutoring:** Help with written assignments is available at the Learning Resource Center (LRC) located in Science Center 302. Tutoring is available Monday – Thursday during the day and evening hours. There are specific times available for math tutoring. The website is: [http://www.sju.edu/STUDENT\\_LIFE/learning](http://www.sju.edu/STUDENT_LIFE/learning).

### **Services for Students with Disabilities**

For those who have or think that you may have a disability (learning, physical or psychological), you are encouraged to contact Services for Students with Disabilities, Room 113, Science Center, 610-660-1774 or 610-660-1620 as early as possible in the semester. Reasonable accommodations can only be offered to students with current (within 3 years) documentation of the disability and to the extent that such accommodation does not interfere with the essential requirements of a particular course or program.

Once it is determined by the Director of Services for Students with Disabilities (“Director”) that a student qualifies for consideration for a reasonable accommodation, the Director will be in touch with the student’s professors in whose courses such accommodation is being requested to discuss the instructional essential requirements of the particular course and the type of accommodation being sought by the student in connection with the course. With this specific information related to the course and the documentation of the student’s disability, the Director will determine what accommodation, if any, can be offered to the student.

In the event that a student does not initiate this process at the start of the semester or at the start of his/her enrollment at Saint Joseph’s, but at some point during the academic year wishes to request extended time to take examinations and/or an examination in a distraction free environment, such requests must be discussed with the Director a minimum of two (2) weeks prior to the scheduled date of the exam. In addition, all students requesting extended time to take examinations in a distraction-free environment must complete the Extended-Time Request Form, present it to the professor a minimum of one (1) week prior to the scheduled date for signature and return the completed Form to the Office of Services for Students with Disabilities three (3) days prior to the date of the examination. Failure to follow these procedures could result in a denial of the request as untimely. All other mid-semester requests for reasonable accommodation should be discussed with the Director as soon as possible.

The Office of Services for Students with Disabilities will seek to provide a reasonable accommodation to qualified students with disabilities. However, there may be times when a disagreement as to what is a reasonable accommodation or as to the nature of the reasonable accommodation being provided will occur between the student and the University. The student has a right to file a grievance for complaints regarding a requested or offered reasonable accommodation on the basis of a disability under Section 504 and the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) and University policies. **If you have any questions contact Jim Scott, Director, Services for Students with Disabilities – Science Center – Room 113 610-660-1774 or [jscott@sju.edu](mailto:jscott@sju.edu).**