

**Applied Calculus - MTH 140–201, CRN 2252, Spring 2014**  
**Smith Hall 511 – MWF, 8:00 AM – 8:50 AM**

I. General Information.

- Course Title/Number: Applied Calculus, MTH 140, SEC 201, CRN 2252
- Semester/Year: Spring 2014
- Meets: MWF, 8:00 AM – 8:50 AM, Smith Hall 511
- Instructor: Dr. Suman Sanyal
- Office: 103 Morrow Library
- Phone: 304-696-3049
- E-Mail: sanyal@marshall.edu
- Office Hours: MWF, 9:00 AM – 11:00 AM (or by appointment)
- Text: Applied Calculus for the Life and Social Sciences by Larson.
- Prerequisites: ACT Math 24 or SAT Math 560 or MTH 127 with “C” or higher or MTH 130 with “C” or higher or MTH 132 with “C” or higher.

II. Course Description and Objectives.

A. Description: Applied Calculus (3 hours).

A brief survey of calculus including both differentiation and integration with applications. Not to be substituted for MTH 229 or MTH 230.

B. Objectives: This course will cover the basics of Calculus; theory will be minimized and applications will be emphasized. Upon completion of this course you will be able to:

(a) Theory

- Identify and use functions appropriately.
- Describe the main ideas of Calculus: derivative, integral.
- Compute derivatives and integrals given a table, graph, or equation.
- Read the assigned material responsibly.

(b) Applications

- Mathematically model real world situations and interpret the results.
- Use derivatives to maximize and minimize functions, including applications.
- Explain how exponential and logarithmic functions are used in growth and decay models.
- Use integrals to find area, including applications and probabilities.
- Use a graphing calculator to solve mathematics problems.

III. Calculator Requirement: You will need a graphing calculator for this class. I recommend a TI-83 or TI-84, if you don't already have a calculator. You must also have an MU computer account for email.

IV. Attendance Policy.

Attendance records will not be used to compute grades. Attendance will be taken everyday and missing class can be expected to significantly reduce your chances of success.

## V. Testing and Grading.

### A. The following grades will be taken:

Quiz	100 points	
Exam 1	100 points	Friday, February 7, 8:00 AM – 8:50 AM
Exam 2	100 points	Friday, March 7, 8:00 AM – 8:50 AM
Exam 3	100 points	Friday, April 18, 8:00 AM – 8:50 AM
Final Exam	100 points	Monday, May 5, 8:00 AM – 10:00 AM
Total	500 points	

### B. The course grade will be based on the percentage of the total possible points. The following scale will be used:

90-100% – A	80-89% – B	70-79% – C	60-69% – D	0 - 59% – F
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Note: A student must complete 75% of work and exams before he or she can be considered for an incomplete.

### C. Missing Exams

- If you miss a quiz/exam due to an unexcused absence, you will receive a grade of 0 for that quiz/exam.
- If you miss a quiz/exam due to an excused absence, you must provide *appropriate verification* within one week of the quiz/exam. You will then be allowed to take the **make-up quiz/exam** on April 28 or April 30, during my office hours at my office. The make-up quiz/exam may be SIGNIFICANTLY MORE DIFFICULT than the original quiz/exam. Check [http://www.marshall.edu/wpmu/academic-affairs/?page\\_id=802/#ExcusedAbsences](http://www.marshall.edu/wpmu/academic-affairs/?page_id=802/#ExcusedAbsences) for detailed information on excused absences.
- If you cannot be at the final exam, let me know as soon as you know.

### D. Cheating

- In a case of suspicion, a student may be asked to re-take the test.
- Confirmed cheating will result in a grade of 0 on the test.

### E. Electronic Devices

Remember to turn off all electronic communication devices at the beginning of each class. No electronic devices other than a calculator will be allowed during exams. If this creates a problem for you, please let me know so that accommodations can be arranged.

## VI. Miscellaneous

A. Free tutors are on duty in Smith Music 115; a schedule will be posted shortly. Free tutors are also available through University College, in Laidley Hall (1st floor).

B. Academic Calendar: <http://www.marshall.edu/calendar/academic/spring2014.asp>

## VII. University Policies

By enrolling in this course, you agree to the following University Policies: **Academic Dishonesty/ Excused Absence Policy for Undergraduates / Computing Services Acceptable Use / Inclement Weather / Dead Week / Students with Disabilities / Academic Forgiveness / Academic Probation and Suspension/ Academic Rights and Responsibilities of Students / Affirmative Action / Sexual Harassment.** Please read the full text of each policy by going to <http://www.marshall.edu/academic-affairs> and clicking on Marshall University Policies. Or, you can access the policies directly by going to [http://www.marshall.edu/academic-affairs/?page\\_id=802](http://www.marshall.edu/academic-affairs/?page_id=802)