

# MthSc 102 Introduction to Mathematical Analysis

## Course Syllabus Spring 2011

### (see Instructor for Section Syllabus)

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**Course Coordinator:** Ms. Randy Davidson, Martin O-316, [rdavids@clemsun.edu](mailto:rdavids@clemsun.edu), 656-5211

#### Course Objectives:

- To develop a conceptual understanding of basic calculus concepts through the study of rates of change and the interpretation of rates of change in non-technical settings using a data-driven approach
- To model discrete data as continuous functions and understand mathematical connections

**Prerequisites:** A student must have credit for MthSc 199 or transfer credit for a college math course, a current score of 2 or better on the CMPT, or must pass the AET in order to enroll in MthSc 102. Additional credit will not be given for MthSc 102 if a student has previous credit for MthSc 106.

#### Required Materials:

- *Calculus Concepts: An Informal Approach to the Mathematics of Change, Fourth Edition* (Chapters 1-10) by LaTorre, Kenelly, Fetta, Carpenter, and Biggers.  
(Chapters 1-4 will be covered in MthSc 102; Chapters 5, 6, 9-10 covered in MthSc 207)
- TI-83+ or TI-84+ calculator. The calculator will be used extensively in this course, and you will be expected to use it in class and on assignments, quizzes, and exams. (TI-89, TI-92 and similar calculators with symbolic algebra systems are **not** permitted.)
- A see-through ruler

#### Recommended Text:

- *Lecture and Note-taking Guide to Accompany Calculus Concepts*, Sixth Edition, by Biggers and LaVare

**Mthsc 102 Course Website:** <http://mthsc.clemson.edu/ug/MthSc102/>

The course website contains resources such as previous semester tests with solution keys, a copy of the Course Syllabus and Course Calendar, calculator help, and information related to testing.

**Blackboard:** <http://bb.clemson.edu/>

You are responsible for any materials or messages posted on Blackboard by your instructor. Your instructor's Blackboard page may include assignments, worksheets, answer keys, skill objectives, and other resources.

#### Course Regulations:

Please read the information concerning Undergraduate Course Regulations, Academic Integrity, Class Attendance, Midterm Grades, Final Exams, and Posting of Grades which may be accessed online at <http://www.registrar.clemson.edu/publicat/catalog/2009/acadReg.pdf>

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning.' Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating or stealing in any form."

Also note that work from other past or current courses may not be used to meet the requirements for this course.

#### ePortfolio:

Mthsc 102 satisfies the General Education requirement for **Mathematical, Scientific, and Technological Literacy**. In this course, you will begin to develop competency in the area of Math, Science and Technological Literacy for your ePortfolio, as you model and analyze data and interpret what you found.

**Attendance:** Attendance will be recorded.

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- If you are absent due to a University sanctioned activity (athletic travel, field trip, etc.), you should provide documentation to your instructor. Students with excessive absences (more than 3 classes) may be dropped from the course at any time.
- If your instructor does not show up for class, quietly wait 15 minutes before leaving. Please call 656-5224 to report this should it happen.

**Daily Grade:** The daily grade reflects your performance on in-class assignments, homework assignments, and quizzes. It will count for 15% of your course grade.

Late work is not accepted for credit unless specific arrangements have been made with your instructor. No make-ups will be given on quizzes or in-class assignments. Instead, at the end of the semester, the lowest scores on 10% of these grades will be dropped before the final grade is computed.

**Homework:** Problem solving is an essential part of this course. Your instructor will assign homework. You may get and give help with your homework, but do not submit another student's work. For additional practice, see the Skills and Objectives document for a list of Suggested Exercises (posted on course website).

**Tests:** There will be three ninety-minute tests given on select evenings during the semester. The dates are listed on the Course Calendar. Each test will be closed-book and closed-notes, but will require a TI-83+ or TI-84+ calculator and possibly a ruler. Cell phones and other technology are not permitted in any testing environment. Use of unapproved technology will lead to a charge of academic dishonesty. An absence from a test will result in a grade of zero and your final exam grade will replace a zero on a single missed test.

**Disputing a Test Grade/Submitting a Test for Re-grading:** If your test has a clerical error or if you wish to have your test re-graded, you must submit it to your instructor *within one week* from the time it is returned to your class.

**Testing Accommodations:** If you have a University letter stating specific testing accommodations to which you are entitled, and you would like such accommodations, please give the letter from the University to your instructor at least one week before the test. Please inform your instructor of your intentions before each test.

**Final Exam:** The MthSc 102 final exam must be taken at the time scheduled by the university. No rescheduling of the final exam will be permitted to accommodate travel arrangements. There will be no exemptions for the final exam.

#### Course Grade:

- In order to earn a passing grade (D or higher) for the course, a student must **first** have *either*:  
 (1) a Final Exam score of 60% or higher, OR  
 (2) a combined weighted exam average of 60% or higher, which can be calculated using the formula:

$$\text{Weighted Exam Score} = \frac{0.20(T_1 + T_2 + T_3) + 0.25(\text{Final})}{0.85}$$

**If neither of the conditions (1) and (2) above are met, the final course grade is F and the following computation of the final course average is irrelevant to the grade assigned in the course.**

- If a student meets one of the initial criteria for passing the course, the grade will be assigned based on a 10-point scale (90% = A, 80% = B, etc.) according to the more favorable of the two methods shown below:

Instrument	Method I	Method II
Daily Grade: Homework, Quizzes, etc.	15%	15%
3 Exams @ 20% each	60%	
The 2 Best of the 3 Exams @ 20% each		40%
Final Exam	25%	45%
<b>Total</b>	<b>100%</b>	<b>100%</b>