Mthsc 106 Course Information and Policies – Fall 2011

Description

This course introduces the theory and practice of the calculus of one variable to model phenomena in engineering and science. Course topics include a review of precalculus, limits, continuity, derivatives, antiderivatives, and indefinite integrals.

Prerequisites

1. Credit for MthSc 103, 104, 105, or 106, obtained either at Clemson University, through transfer, or AP or IB credit **OR**
2. Score of 5 or 6 on the CMPT **OR**
3. Score of 4 on the CMPT, and a score of 590 or better on the SAT math portion **OR**
4. Score of 4 on the CMPT, and a score or 24 or better on the ACT math portion **OR**
5. Students who do not otherwise meet the prerequisites for MthSc 106 may qualify with a sufficient score on the Precalculus Basic Skills Test (BST) given the second day of class.
   - a CMPT score of 3 requires a BST score of 17 out of 25 or better
   - a CMPT score of 4 requires a BST score of 13 out of 25 or better
   - a passing score on the AET requires a BST score of 17 out of 25 or better
   - credit for any MthSc course other than those listed in item (1) requires a BST score of 17 out of 25 or better

Students who score a 3 or 4 on the CMPT and who do not meet prerequisites for MthSc 106 should drop MthSc 106 and add MthSc 104.

Students who do not take the BST will have a score of zero recorded for the BST. This may affect course placement due to not meeting prerequisites for MthSc 106.

Text

Calculus by Briggs, Cochran. 1st Edition. Boston, Massachusetts: Pearson Addison-Wesley, 2011 -- required

Just-In-Time Algebra & Trigonometry for Calculus by Mueller and Brent. 3rd Edition. Boston, Massachusetts: Pearson Addison-Wesley, 2005 -- recommended, bundled with text

Technology

Software -- MyMathLab -- required, bundled with text

Calculator -- A scientific calculator is strongly recommended (one including trig and log functions). Students will be expected to use either laptop computers or a calculator such as a TI-89 for homework and classroom exercises. **Students will not be permitted to use laptop computers or calculators on any unit test or the Final Exam.**

Cellphones or other technology -- Students will not be permitted to use cellphones or other technology on any unit tests or the Final Exam.   Cellphones should be turned off and stored away during class.

Websites

https://mthsc.clemson.edu/ug/MthSc106/ -- General MthSc 106 site which includes this syllabus, a daily schedule including instructional objectives, announcements, and other useful information.

http://www.registrar.clemson.edu/publicat/catalog/2010/AcadReg.pdf -- Detailed information about Clemson University undergraduate class regulations including academic integrity, attendance policy, mid-term grades, final examinations, and posting of grades.

http://bb.clemson.edu -- Follow links to your section of MthSc 106 in Blackboard. You are responsible for checking this website and your university e-mail account (userid@clemson.edu) on a regular basis for announcements and class materials. Gmail accounts will not be used for official university correspondence.

Academic Dishonesty

Students are expected to adhere to the following official Clemson academic integrity statement. You may get and give help with your homework, but do not submit another student's work.

"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."

Structure

This course will be taught in SCALE-UP mode. (See http://scaleup.ncsu.edu/.) Class business and mini-lectures will occupy about 20-25 minutes of each class period. During the remaining time, you will work individually and in teams on

various learning activities. The instructor and two assistants will serve as coaches during the learning activities. Student questions will often be answered for the benefit of the entire class.

Prior to each class meeting, you should ...

- Complete the homework assignment for the previous class meeting.
- Read the assigned material in the text.
- Begin the next homework assignment.

It is your responsibility to master the objectives of the course. Resources available to you include the instructor, the class assistants, your fellow students, the course Blackboard site, the library, on-line course resources, and Supplemental Instruction (SI).

Grading

The final course grade will be determine by the scores on

- 3 Common Tests (Dates: 9/21, 10/26, 11/30) weighted 15% each (45% total)
- Learning Activities (average of group Learning Activities, additional HW, quizzes, etc as determined by individual instructors) weighted 15%
- Department Homework (MML problems) weighted 15%
- Common Final Exam (Date: 12/12) weighted 25%

The Final Exam is mandatory (no exemptions) and comprehensive. No rescheduling of the final exam will be permitted.

In order to earn a passing grade for the course, a student must have either:
(a) a final exam score of 60% or higher, or
(b) a weighted average test and final exam score of 60% or higher where the weighted average is computed as
$(15*(T1 + T2 + T3 + FE - min(T1,T2,T3,FE)) + 25*FE) / (3*15 + 25)$
In the formula; T1, T2, and T3 are the percentage scores on tests 1, 2, and 3 respectively; FE is the percentage score on the final exam.

NOTE: The previous formula has the effect of replacing the lowest test score with the final exam score if this improves the weighted average.

If neither of the conditions (a) and (b) above are met, the final course grade is F and the following computation of course average is irrelevant.

If either of the conditions (a) and (b) above are met, the final course average is computed as
$(15*LA + 15*HW + 15*(T1 + T2 + T3 + FE - min(T1,T2,T3,FE)) + 25*FE) / 100$

where LA is the percentage score on the learning activities etc, HW is the percentage score on the department homework, and the other variables are as previously defined. Again, the final exam score is substituted for a single lower test score if possible.

If either of the conditions (a) and (b) above are met, the final letter grade is determined from the course average according to a 10-point grading scale: 90% — A, 80% — B, 70% — C, 60% — D, below 60% — F.

Unit Tests

There will be 3 common unit tests during the semester. All of the unit tests will take place in the evening at 6:45 PM on designated Wednesdays. Ninety minutes will be allotted for each unit test (9/21, 10/26, 11/30). The Final Exam (12/12) is comprehensive and will be allotted 2.5 hours. You have 1 week after exams are distributed in class to submit a unit test for re-grading or to dispute your score.

Students will not be permitted to use laptop computers, calculators, cellphones, or other technology on any unit test or Final Exam. The use of a textbook and/or notes is prohibited on all MthSc 106 unit tests and Final Exam.

An absence from a unit test or Final Exam will result in a grade of zero. If you miss a unit test or the Final Exam due to an emergency that would qualify as an excused absence, **you must inform your instructor within 24 hours of the scheduled test or exam.**

Attendance

You are expected to be regular and punctual in your class attendance. You are responsible for all notes, assignments, and announcements made in class. Students who have more than 8 absences may be dropped from the course. You must provide your instructor with proper documentation for university sanctioned absences. If the instructor does not arrive in the classroom within 15 minutes after the scheduled start time, class is dismissed for the day.

MyMathLab

Each student will work homework online through the web portal, MyMathLab. MyMathLab installation help is available at the website: http://www.mymathlab.com/contactus_stu.html. You will receive an installation packet with your textbook bundle. **Keep this packet!** It contains your registration code. You will be given a course ID by your instructor for you to use when registering. Wait until the Monday after classes begin to register for MyMathLab. If you have difficulties using your laptop and MyMathLab, you may use a computer in a campus lab to complete your homework.

MyMathLab contains a calendar which will show you when each homework assignment is due. You should check this calendar often for updates. Your instructor may decide to have you complete reading quizzes before class. These will be listed on the calendar, as well.

MyMathLab contains your entire text, instructional videos, study plan help, as well as practice tests for each chapter. Take the time to learn to use the system, paying attention to the amount of study material which is available for you.

When working homework, be sure to follow instructions exactly for entering the answer. It is recommended that you print your homework so that you have a copy for studying later. Each problem in a homework set is worth one point. 10% of the homework problems will be dropped at the end of the semester.

It should be noted that due to the nature of the assignments your department homework average and learning activity average may not be predictors for your test grades, but are a very important parts of your learning process.

Students are expected to adhere to the MyMathLab User Agreement. You may not sell or give your MyMathLab code to another student. The following is an excerpt from that agreement. "**3.3. College/University Student/Individual Subscriptions** The license granted herein is for **single user access** to resources developed for students to use in conjunction with course assignments and for self-study and self-assessment purposes. One Login Name and Password with student authority is issued for each individual subscriber's use; **this Login Name/Password may not be shared with other students or otherwise disclosed to unauthorized third parties.**"

Learning Activities

Learning Activities may include in-class activities, traditional individual quizzes, additional homework problems, projects, reading quizzes, or worksheets. The in-class activities will be graded.

Portfolio

This course meets the Mathematical, Scientific, and Technological Literacy general education requirements. So, you should put copies of your activities and exams for this course in your general education portfolio. Please put the following documents in the indicated sections of your portfolio.

Critical Thinking

Section 1--Acquire, analyze, and evaluate information to determine its quality and utility.

Unit Tests 2 and 3 and any activities involving Related Rates and/or Optimization

Mathematical, Scientific, and Technological Literacy

Section 1--Demonstrate mathematical literacy through solving problems, communicating concepts, reasoning mathematically, and applying mathematical or statistical methods using multiple representations.

Unit Test 1 and any activities you choose (You may want to choose a particularly challenging or complex activity.)

Accommodations

If you have a letter stating specific testing accommodations to which you are entitled, please turn in a copy to your instructor at least one week prior to the test.

Final Exam

Monday, December 12th, 11:30 AM - 2:00 PM