

Syllabus for MTH 132, Section 017
Calculus I
Spring 2011
M W F 1:50-2:40pm
C211 Wells Hall

Instructor: Márcio Mourão **E-mail:** mdam@msu.edu

Office: A321 Wells Hall

Office Hours: M W 4:00-5:00pm or by appointment.

Text: *Thomas' Calculus, 12th Edition* Thomas, Weir, Hass, Addison-Wesley, 2009.

Course Syllabus: <http://math.msu.edu/~mdam/Syllabus.pdf>

Course Schedule: <http://math.msu.edu/~mdam/Schedule.pdf>

Objectives: I think of Mathematics as the science of quantitative, spatial, and structural reasoning. Calculus is the Mathematics of change. Significant topics in this course include limits, continuity, derivatives, and integrals. To complete this course successfully, a student needs to acquire a solid understanding of these ideas in the single variable case. This includes learning the technical details (formulas, definitions, theorems) involving each concept, acquiring a solid abstract understanding of each concept, and developing the problem solving skills required to apply these concepts outside of the classroom. A successful calculus student will find the critical thinking and problem solving skills developed in this class extremely useful beyond the mathematical realm (that is, in real life).

Evaluation: Your total point score in this class will come from the following tests:

- Ten quizzes, worth 15 points each. The quizzes will be given at the end of the lecture, 15 minutes. There are no make-ups and the lowest two scores will be dropped for any reason. See class schedule for detailed dates.
- Four in-class exams, worth 70 points each, 50 minutes. There are no make-up exams. Only extreme circumstances brought to my attention prior to the exam with valid documentation will result in an excused exam. A missed exam will receive a score of 0.
- One uniform final exam on Tuesday, May 3th, 2011 from 10:00am to 12:00pm, location to be announced. Worth 200 points.
- Two Gateway exams, worth 20 bonus points each, with a penalty of 10 points each for not taking or failure.

Thus the total regular points are $15 * 8 + 70 * 4 + 200 = 600$. Your final grade for the course is the total points you earned, plus the bonus (or minus the penalty) and divided by 600. The GPA scale is the following:

90 – 100%	4.0	63 – 70%	2.0
85 – 89%	3.5	55 – 62%	1.5
79 – 84%	3.0	50 – 54%	1.0
71 – 78%	2.5	0 – 49%	0.0

Homework: You should work out the exercises at the end of each section. Your solutions for these exercises will not be collected. On the other hand, you are strongly encouraged to do these exercises. Being able to demonstrate your understanding in clearly written solutions is very important for this course, as this will be required on all quizzes and exams.

Gateway Exams: The Gateway Exams are multiple choice tests. The first covers algebraic manipulation and trigonometry, and the second covers basic differentiation. Since you can attempt the gateway once a day from the time it begins to the time it ends, I expect most students to receive full credit on these assignments. For more information, including location and passing scores, see www.math.msu.edu/CurrentStudents/Gateway.

Grade Change Policy: If you have any questions regarding the grading of any of your examinations, you should return the examination to me before leaving the classroom, and plan to speak with me about your concerns during my office hours. Otherwise, once your examination has left the classroom, no grading changes will be made.

Technology: A graphing calculator will be useful for learning the material in this course and can be used during class lectures to help with graphing or computations. However, **calculators are not permitted on exams.** You are only allowed to have a pencil/pen for exams. Cell phones, laptop computers, and other electronic communication/storage devices are not allowed to be used during class, except for time keeping, unless you can demonstrate to me that you are using them for note taking purposes. Naturally, given the above test restrictions, all such devices must be turned off during exams (if we don't have a clock in our classroom, please remind me to bring a digital one for us to use during exams). If you observe a fellow student using an electronic device for any non-mathematical purpose, kindly ask them to shut it off and alert me if they ignore your request.

Miscellaneous: Students are expected to adhere to the MSU policy concerning academic honesty as it is laid out in the *Spartan Life booklet*. For more information, please consult the *Spartan Life: Student Handbook and Resource Guide* at splife.studentlife.msu.edu.

Student Code of Conduct:

Class time is often wasted in dealing with the behavior of those not aware of the simple ground rules of academia. For the benefit of all students, the following lays out these rules explicitly.

- The following is disruptive class behavior:
 - Coming late to class
 - Reading newspapers during class hour
 - Private conversations during class
 - Leaving class early
- Students enrolled in the course are expected to attend each class meeting. Because of class sizes and university policies, students may not attend classes in which they are not enrolled. There are no make-up exams.
- After absences it is the students responsibility to obtain missed material from classmates. Only extreme circumstances brought to my attention prior to the exam with valid documentation will result in an excused exam. Advance travel schedules (business or personal) are NOT excuses. Please look at the course schedule and plan ahead. In case of illness or other emergency, please contact me as soon as possible (preferably before the exam) and plan to bring a doctor's note or other documentation to the next class period.
- Students must produce carefully written documents. All writing must be in complete sentences, employing standard English and mathematical symbols. Writing must be legible and neat.
- Office hours are not private lectures. Go to office hours with prepared questions and/or examples of your attempts at the material.
- All discourse is to be civil and mutually respectful.
- Study groups are encouraged. However all work not designated as group work must be substantially the students own work. It is a fundamental rule in academia that another's work must be acknowledged.
- The text for the course is the primary resource. Read each assigned section carefully. Not all points from a section may be mentioned during lecture.
- Students are responsible for prerequisites. Likewise, material given in a course is not to be immediately discarded at course end, as you will be responsible for this material later in your courses and career.
- The University's policy concerning academic integrity is covered in the Spartan Life booklet, General Student Regulations. According to the handbook: "no student shall claim or submit the work of another as ones own."