

Course Syllabus  
MAT 201–Calculus I  
Sections A & B  
Fall 2012  
John Peter

**Course Description:** MAT 201 covers basic differential calculus and some of its standard applications. We will cover Chapters 1 through 4 of the textbook, including a review of precalculus, limits, differentiation, and a variety of applications. This is the first part of Utica College’s four-part calculus sequence. The course will be predominantly example-driven, but we will touch on some important theoretical aspects as well.

**Course Objectives:**

- Master algebraic manipulations (algebra is the most difficult part of calculus!)
- *Limits:* Understand what a “limit” is, both intuitively and via a rigorous definition; Use graphical and numerical evidence to estimate limits; Identify when limits fail to exist; Use rules to calculate limits; Use limits to determine where a function is continuous.
- *Derivatives:* Develop both an intuitive and rigorous understanding of what a derivative is; Use the definition of derivative (in terms of limits) to compute derivatives; Master the basic rules of differentiation including (but not limited to) the power rule, the product rule, the quotient rule, and the chain rule; Calculate derivatives of functions defined implicitly; Compute derivatives of inverse functions.
- *Applications:* Use derivatives to compute tangent lines to curves; Interpret derivatives as rates of change; Solve word problems involving rates of change; Use derivatives to find critical points, maxima and minima, and to sketch graphs of functions; Use Newton’s Method to estimate values of functions; Use differential calculus to solve optimization problems.

**Secrets to success in this course:**

- Do lots of problems . . . homework and more!
- Come to class
- Read the book
- ASK QUESTIONS!

**Class Meetings:**

- **Section A:** Monday, Wednesday, & Friday from 9:30am to 10:20am in 218 Hubbard Hall
- **Section B:** Monday, Wednesday, & Friday from 10:30am to 11:20am in 205 Hubbard Hall

**Required Text:** *Calculus: Early Transcendental Functions*, Fifth Edition, by Ron Larson and Bruce H. Edwards. ISBN: 978-0-538-73550-6

**Contacting me:** EMAIL: jwpeter@utica.edu (the best way to contact me)  
OFFICE PHONE: 315-792-3730 (Please don't leave voicemails)

**Office/Hours:** Room 104 DePerno Hall  
Monday/Wednesday from 12:00PM to 1:30PM  
Tuesday from 11:30AM to 12:30PM  
By Appointment (made either in person or by email)

**Calculators:** You may find a graphing calculator useful for a number of topics that we cover. However, everything that we will cover can be done without one! Calculators will NOT be allowed on quizzes and exams. If you have questions about appropriate calculators, please ask right away!

**Coursework:** The course will be worth a total of 550 points:

- Daily Assignments from Text - Not Collected/Not Graded (But fair game for quizzes/exams.)
- Quizzes - 100 points (11 quizzes, 10 points each, drop lowest)
- Two Midterm Exams - 300 points (150 points each)
- Cumulative Final Exam - 150 points

**NO MAKE-UP WORK WILL BE GIVEN.**

**Grading:** The grading scale will be *no worse* than:

- 495 - 550 points = A/A-
- 440 - 495 points = B+/B/B-
- 385 - 440 points = C+/C/C-
- 330 - 385 points = D+/D/D-
- Below 330 points = F

**For specific information on material to be covered and important dates, see the *Tentative Course Schedule* here:**

[http://dl.dropbox.com/u/26584575/Tentative%20Course%20Schedule%20\(MAT%20201%20Fall%202012\).docx](http://dl.dropbox.com/u/26584575/Tentative%20Course%20Schedule%20(MAT%20201%20Fall%202012).docx)

**Attendance:** It is mandatory that I keep track of your attendance. An attendance sheet will be available for you to sign at the beginning of each class. Your attendance will not formally count for any part of your grade. However, it may be used, at the instructor's discretion, to determine borderline grades at the end of the semester. **YOU ARE EXPECTED TO ATTEND EVERY CLASS PERIOD.** In the event that you miss class (or are mentally absent from class!) it is your responsibility to keep up with all announcements, syllabus adjustments, and/or policy changes made during scheduled class time and/or sent to you via your Utica College email. Please make sure that your Utica College email is functioning properly, and make every effort to contact me using your Utica College email address (as opposed to gmail, yahoo, etc.) to avoid confusion. If class must be canceled for some reason, you will be notified as early as possible via your Utica College email.

**Classroom Etiquette:** Always keep in mind that you are in a college classroom. You and all of the people around you have paid to be here. By simply showing up for class, you are demonstrating that you take very seriously the opportunity to pursue the best learning experience possible. You are expected to treat all people in the classroom with respect, and to come to class prepared to learn. Disruptive behavior, including (but not limited to) talking, whispering, texting, eating loudly, etc. will negatively impact EVERYONE'S experience and will not be tolerated.

**Intellectual Honesty:** Academic honesty is necessary for the free exchange of ideas and Utica College expects academic honesty from all students. Academic dishonesty includes both *cheating* and *plagiarism*. Plagiarism is the intentional or unintentional use of other people's ideas, words, and/or factual information without crediting the source. Cheating refers to both the giving and the receiving of unauthorized assistance in the taking of examinations or in the creation of assigned and/or graded class work. Utica College faculty are authorized to assign a wide range of academic penalties for incidents of academic dishonesty. Depending on the nature of the offense, the penalty may include a reduced grade for the particular assignment or course, a grade of "F" for the course, or the grade of "F for cheating" for the course. Incidents of academic dishonesty will be reported to the Vice President for Academic Affairs, who will refer any repeat offense, or any particularly egregious first offense, to the Academic Standards Committee, which may recommend a more severe penalty than that imposed by the faculty member.

**Disability Disclosure:** Any student who has need of special accommodations in this class due to a documented disability should speak with me as soon as possible, preferably within the first two weeks of class. You should also contact Kateri Henkel, Director of Learning Services in the Academic Support Services Center (315-792-3032 or [khenkel@utica.edu](mailto:khenkel@utica.edu)) in order to determine eligibility for services and to receive an

accommodation letter. We will work with you to help you in your efforts to master the course content in an effective and appropriate way.

**Writing Proficiency:** Students are expected to possess and use adequate writing skills. All written assignments should be well-written and free of grammar, punctuation, and spelling errors. Help is available in the Writing Center located in the library.

**Math and Science Center:** Peer tutors are available in the Math and Science Center located in the library.

**An electronic copy of this syllabus can be found here:**

<http://dl.dropbox.com/u/26584575/MAT201ABF12.pdf>

*The author of this syllabus reserves the right to change it at any time during the semester.*