## MTH 132: Calculus I

## Section 27

Time: MWF $1.50 \mathrm{pm}-2.40 \mathrm{pm}$
Location: C206 Wells Hall
Instructor: Andrew A. Cooper, coope106msu.edu
Office: A531 Wells Hall, MW $10 \mathrm{am}-11 \mathrm{am}$ and by appointment
Website: http://www.math.msu.edu/~ coope106/132
Text: Thomas' Calculus, $12^{\text {th }}$ Edition, chapters 2-5. Electronic version is also acceptable.
Calculator: No calculators allowed on graded material.

Prerequisites. This course will rely heavily upon algebraic manipulations and trigonometric identities. If you have trouble with these subjects, please review them now. I will not be able to spend class time reviewing this material, but I will gladly help you outside of class.

Expectations. Take credit for only your own work. Study groups and discussions of take-home assignments are encouraged, but any work turned in with your name on it must be solely yours. In-class assignments are to be completely individually; anyone caught attempting to work collaboratively will receive a 0 for that assignment.
I expect your full attention in class. If you intend to use an internet device, an SMS device, a newspaper, a book, etc., you ought to do so in a more comfortable and hospitable environment than my class. I recommend the MSU Library, which has some extremely comfortable chairs and sofas.

Evaluation. Your course grade is based solely on your performance on the following graded materials:

- Two Gateway Exams, each worth up to 50 points
- Nine (9) in-class quizzes, each worth 20 points. In-class quizzes will be every Friday, except Fridays immediately following an exam.
- Three (3) take-home quizzes, each worth 20 points. Take-home quizzes will be given the Friday following each exam, and are due on Monday.
- Four (4) in-class exams, each worth 100 points. Exam dates are: 22 September, 20 October, 10 November, 6 December.
- One (1) final exam, worth 300 points. The final exam will be Monday, 13 December at 10 am .

I will take the top ten of your twelve quiz scores. There are therefore 1000 possible course points. Points determine your course grade as follows:

| to get a | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 | 1.5 | 1.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| you need | 900 | 840 | 770 | 700 | 630 | 550 | 500 |

If you have less than 500 points at the end of the semester, you will receive a failing grade of 0.0.

Gateway Exams. There are two Gateway Exams for this course. Gateway Exams are administered by the Department of Mathematics in A100 Wells Hall. A schedule of exam times is available at http://www.math.msu.edu/CurrentStudents/Gateway/. Attempting each Gateway Exam is worth 10 course points; passing each Gateway Exam is worth 50 course points. Passing the Gateway Exam requires an almost-perfect score, but you may take each Gateway Exam as often as you need to in order to pass, and you will receive feedback each time you take the Gateway Exam.
You must attempt Gateway I on or before Monday, 20 September. You must pass Gateway I on or before Sunday, 26 September
You must attempt Gateway II on or before Monday, 15 November. You must pass Gateway II on or before Sunday, 21 November.

Homework and Attendance. As you will have noticed from the above discussion of evaluation, neither figures explicitly into your grade. However, if you do not come to class or you do not do the practice problems, you will fail this course. If you miss a class, it is your responsibility to catch up on the material covered. You may wish to rely on the good graces of your classmates to give you a copy of their notes. I will not use my office hours as a catch-up period.

Excuses. Quizzes will not be excused under any circumstance. Exams may be excused under documented extreme circumstances; your chances of having an exam excused are much better if you contact me in advance via email. There will be no make-up exams or quizzes.

Practice Exercises. The following exercises are particularly recommended to help with the material. This list is not exhaustive. I encourage you to do all the exercises provided at the end of each section of the textbook. There are also practice exercises at the end of each chapter of the book; I recommend these as preparation for exams. The dates below are tentative.

| date | section | exercises |
| :---: | :---: | :---: |
| 9/1 | 2.1 | $1,2,4,5,8,12,15,21$ |
| 9/3 | 2.2 | $1,3,4,5,6,11,12,15,21,22,23,25,28,33,35,36,51$ |
| 9/8 | 2.2, 2.3 | 2.2: $57,59,60,63,64,65 ; 2.3: 15,19,26,37,39$ |
| 9/10 | 2.4 | $1,3,9,11,15,17,18,21,23,25,26,29,33,34,35,36,39$ |
| 9/13 | 2.5 | $1,3,4,5,6,13,15,16,20,23,24,25,26,27,31,32,37,38$ |
| 9/15 | 2.5, 2.6 | 2.5: $51,52,54 ; 2.6: 3,5,8,9,12,13,15$, <br> $17,19,20,27,28,29,31,32,37,39,40,42,43,47,48,49,50$ |
| 9/17 | 2.6 | $67,71,72,99,101,102$ |
| 9/24 | 3.1 | 5, 11, 17, 21, 23, 27, 33,35 |
| 9/27 | 3.2 | $1,2,3,4,7,9,10,13,15,16,17,19,21,22,23,25-32$ all |
| 9/29 | 3.3 | $5,7,9,17,19,20,21,22,25,27,28,35,37,38,41$ |
| 10/1 | 3.4 | $3,5,6,7,9,11,12,13,15,16,18,19$ |
| 10/4 | 3.5 | $1,6,9,11,13,14,15,16,19,21,22,23,25,26,33,35,37,53,59$ |
| 10/6 | 3.6 | $19,21,23,25,26,28,29,31,32$ |
| 10/8 | 3.6 | $35,37,38,39,43,49,50,51,52,54,59,62,67$ |
| 10/11 | 3.7 | $1,3,5,6,21,24,27,29,35$ |
| 10/13 | 3.8 | $1,13,14,17,21,23,24,27,29,33,34,38$ |
| 10/15 | 3.9 | $2,3,4,7,8,37,39,43$ |
| 10/22 | 4.1 | $1-4,7,9,11,13,21,23,27,30,31,32,35,36,37,38,40$ |
| 10/25 | 4.2 | $3,18,19,20,27,31,32,33,35,37,38,40,49,55,59,64,72$ |
| 10/27 | 4.3 | $1,3,4,11,12,19,22,25,28,33,34,37,38,39,41,46,63,65,66$ |
| 10/29 | 4.4 | $\begin{aligned} & 1,3,4,7,11,15,18,19,23,30,33,34,35,36,38 \text {, } \\ & 41,49,51,52,56,57,58,94,96,102 \end{aligned}$ |
| 11/1 | 4.5 | $1,3,4,5,6,7,8,10,11,13,14,15,17,22,23,27,39,51$ |
| 11/3 | 4.6 | 1, 3, 4, 5 |
| 11/5 | 4.7 | $\begin{aligned} & 5,7,10,11,13,16,17,19,25,27,28,31,33,35,37,38, \\ & 40,42,43,57,64,69,71,74,78,81 \end{aligned}$ |
| 11/12 | 5.1 | 1, 3, 9, 12, 13 |
| 11/15 | 5.2 | $1,3,7,8,19,21,23,25,26$ |
| 11/17 | 5.3 | $1,3,4,6,9,10,17,19,20,55,57,58,83$ |
| 11/19 | 5.4 | 29b, 31b, 32b, 33b, 35b |
| 11/22 | 5.4 | $1,4,5,7,9,12,13,19,20,23,27,28,29 a, 31 \mathrm{a}, 32 \mathrm{a}, 33 \mathrm{a}, 35 \mathrm{a}, 41,44$ |
| 11/24 | 5.5 | $11,14,18,19,20,22,24,25,28,29,31$ |
| 11/29 | 5.5 | $31,35,36,37,55,58,63$ |
| 12/1 | 5.6 | $1,3,7,10,12,13,18,19,20,23,24,32,35,38,39$ |
| 12/3 | 5.6 | $43,47,48,53,58,59,61,66,71,73,77$ |

Help. I encourage you to use the Math Learning Center in the A-wing of Wells Hall. Hours and other information are available at http://www.math.msu.edu/ ${ }^{\text {mlc }}$ /.
I also encourage you to use my office hours if you have any questions.

Your First (and Last) Extra Credit Opportunity. Please make sure you understand this syllabus. If you have any questions regarding course policies or this syllabus, please put them in a note, sign and date it, and bring it to class on Friday, 3 September. If you have no questions, please write a statement to that effect, sign and date it, and bring it to class on Friday, 3 September. For this you will receive 10 course points of extra credit.

