Math 261. Unified Calculus and Analytic Geometry, I.
SYLLABUS FOR SECTION 11, FALL 2015

Instructor: Dr. Erwin Miña-Díaz
Office: Hume Hall 317
Time/Place: Tue-Thu, 9:30-10:45 AM, Hume Hall 201
Email: minadiaz@olemiss.edu
Office hours: MW 10:00 AM - 12:00 PM, or by appointment.
Telephone: (662) 915-1204

Text

- Mathematica (do not purchase) available on the computers in Hume & Weir Hall or install on your computer using the university site license.

Course description/learning objectives

This course covers differentiation and its applications. We will cover Chapters 2, 3, and 4. The content includes, but is not limited to, limits and rates of change, continuity, derivatives, derivative rules, higher derivatives, implicit differentiation, and applications of differentiation. Our goal is to enable students to understand the concepts and rules of differentiation, learn different techniques for finding derivatives, and develop problem solving skills. We expect students to apply concepts and theories learned in class to solve application problems that include optimization and curve sketching. Math 261 will prepare students for higher level calculus/other courses and enhance critical thinking and analytical reasoning abilities.

Attendance and behavior policy

Any student that is more than 5 minutes late will not be allowed to enter the classroom. If you need to leave the classroom for any reason, please raise your hand and ask for permission.
Honors courses are small classes, usually taught in seminar style with no more than fifteen students. They are reading, writing and discussion intensive. Student participation is therefore essential. In addition, the university commits extensive resources, especially in terms of faculty time, to these small classes. For these reasons, the Honors College has an attendance policy for all honors courses, both required and departmental. Students are entitled to two absences in Tuesday/Thursday classes and to three absences in Monday/Wednesday/Friday classes. Consequences of additional absences will be determined by the individual faculty member, but additional absences will lower your grade.

Homework, Mathematica worksheets, quizzes, tests and final exam

The homework problems for each section are listed at the end of the syllabus. Two (2) Mathematica worksheets will be given during the semester, each worth 15 points. There will be a total of nine (9) quizzes (each worth 10 pts) and four tests (each worth 100 pts) on the dates specified in the tentative schedule below. The quiz and test questions will be similar in format to the examples in class and the homework problems. Your lowest test score will be replaced with your final exam percentage, if the latter is higher. This means that if you miss one test, you still have the chance to make it up with the final. Absolutely no make up tests will be given for any reason except for an official University function to be communicated to the instructor with enough time in advance.
The final exam is on Thursday, December 12, at 8:00 AM. It is worth 200 points.

Grading

The cumulative point total for the course is 720 points: tests 400, Mathematica worksheets 30, Quizzes 90, final exam 200. The following point scale will be used to determine your final grade. Your grade will be determined according to the following scale:

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<tr>
<th>Grade</th>
<th>Percentage Necessary</th>
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<td>A</td>
<td>93%</td>
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<td>B+</td>
<td>87%</td>
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<td>B-</td>
<td>80%</td>
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<td>C</td>
<td>70%</td>
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<td>F</td>
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<tr>
<th>Grade</th>
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<tr>
<td>A-</td>
<td>90%</td>
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<tr>
<td>B</td>
<td>83%</td>
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<td>C+</td>
<td>77%</td>
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<tr>
<td>D</td>
<td>60%</td>
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Calculators

Your brain is a sufficient calculator in Math 261. Electronic calculators, cell phones, and ipods are generally prohibited on tests. In case a calculator is needed to solve a question in a test, the instructor will let the class know with time in advance.

Cheating

Academic integrity is essential to all the values upon which the university is founded. Honors students must therefore embody academic honesty in all aspects of their work. A student with a documented case of plagiarism or academic cheating in an honors course will face the possibility of receiving the grade of F for the course and being dismissed from the Honors College. Specific consequences of such behavior will be determined by the administration and individual faculty member.

The following statement is the policy of the Department of Mathematics in Math 261 regarding cheating. Offenses: cheating on any exam or quiz, theft or attempted theft of exam questions, possession of exam questions prior to the time for examination, or the use of an illegal calculator on tests or quizzes shall all be offenses subject to appropriate penalties. Penalties: the penalty for commission of any offense set out above is failure in the course and, subject to the approval of the Chancellor, dismissal or suspension from the University.

Academic needs

It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (915-7128). Contact will then be made by that office through the student to the instructor of this class. The instructor will then work with the student so that a reasonable accommodation of any disability can be made.

Withdrawal deadline

Withdrawal deadline for the 2013 Fall Semester is Monday, October 7. After the Course withdrawal deadline, courses dropped will be recorded on University records and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise the grade recorded will be F. After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergency as determined by the academic dean; dropping a course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student is changing his/her major.

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<td>Aug 27 Sec 2.2</td>
<td>Aug 29 Sec 2.3 Quiz 1</td>
<td>Oct 22 Sec 3.10</td>
<td>Oct 24 Quiz 7</td>
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<td>Sep 3 Sec 2.4</td>
<td>Sep 5 Sec 2.5 Quiz 2</td>
<td>Oct 29 Test 3</td>
<td>Oct 31 Sec 4.7</td>
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<td>Sep 10 Sec 2.6</td>
<td>Sep 12 Test 1</td>
<td>Nov 5 Sec 4.1</td>
<td>Nov 7 Sec 4.2 Quiz 8</td>
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<td>Sep 17 Sec 3.1</td>
<td>Sep 19 Sec 3.2 Quiz 3</td>
<td>Nov 12 Sec 4.3</td>
<td>Nov 14 Sec 4.4 Quiz 9</td>
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<td>Sep 24 Sec 3.3</td>
<td>Sep 26 Sec 3.4 Quiz 4</td>
<td>Nov 19</td>
<td>Nov 21 Test 4</td>
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<td>Oct 1 Sec 3.5</td>
<td>Oct 3 Test 2</td>
<td>Nov 26 Thanksgiving Break</td>
<td>Nov 28 Thanksgiving Break</td>
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<td>Oct 8 Sec 3.6</td>
<td>Oct 10 Sec 3.7 Quiz 5</td>
<td>Dec 3 Sec 4.6</td>
<td>Dec 5 Sec 4.8</td>
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<td>Oct 15 Sec 3.8</td>
<td>Oct 17 Sec 3.9 Quiz 6</td>
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<td>Dec 12 Final Exam, at 8:00 AM</td>
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