Math 261 – Unified Calculus and Analytic Geometry I
Syllabus – Spring 2014

INSTRUCTOR: Brian Zimmerman
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OFFICE: 322 Hume Hall
OFFICE HOURS: MW 8:00-9:50 am, 1:00-1:50 pm;
F 8:00-9:50 am; or by appointment

Course contents and goals: 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 goals are 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.

TEXT: Calculus: Early Transcendentals w/ binder + MyMathLab by William Briggs & Lyle Cochran; ISBN: 9781256652533

HOMEWORK:

- Homework will be assigned for each section of material covered, and will count for a total of 80 points.
- Homework assignments will be done on the computer using the MyMathLab software.
- Homework assignments may be done as many times as needed before the due date, with only the best score counting toward the student's grade.
- Homework must be submitted by 11:59 p.m. on the due date.
- Homework assignments may be completed after the due date for half credit.
- Homework assignments will not be accessible after the grace period.
- Any non-submitted homework assignment will be given a grade of zero (0).
- The lowest homework two (2) assignment grades will be dropped at the end of the semester.

MATHEMATICA:

- There will be four (4) Mathematica Worksheets assigned throughout the semester, and they will count a total of 20 points.
- Students can download and install Mathematica for free by following the instructions on the following website: http://www.mcsr.olemiss.edu/appssubpage.php?pagename=mathematica.inc
- If you do not wish to install Mathematica on your computer, you can use the computers in the Weir Hall Computer Lab, as well as the computers in the Jackson Center Math Computer Lab, to complete your assignments.

TESTS:

- There will be four (4) major tests during the semester.
- Students must show all work for each test question in order to receive credit.
- Each test will count 100 points toward the student's final grade.
- If a test is missed for ANY reason, a grade of zero (0) will be given
- **THERE ARE NO MAKE-UP TESTS GIVEN FOR ANY REASON.**
- The lowest of the four major test grades will be replaced with the final exam percentage at the end of the semester, provided the final exam percentage is higher than the lowest test grade.
- Any student who must miss a scheduled test because of an official University function must reschedule and take the test at a time BEFORE the exam is scheduled to be given. NO OTHER rescheduling will be allowed.

FINAL EXAM:

- The final exam is comprehensive and will count 200 points.
- Students will be given a maximum of three (3) hours to complete the final exam.
- Any student who must miss the final exam because of an official University function must reschedule the exam on some other mutually satisfactory date.
- Any student having three or more final exams scheduled for the same day will arrange with the instructor to take either the 12:00 p.m. OR the 7:30 p.m. exam on some other mutually satisfactory date.
- Every student must take the final exam at the time scheduled. The only exceptions are the students affected by the two situations above.
- An "I" grade will not be given without the permission of the Department of Mathematics.

FINAL GRADE: The cumulative point total for the course is 700 points – 400 Tests, 100 HW/Mathematica, 200 Final Exam. The following point scale will be used to determine your final grade:

Grade	Points Necessary for Grade
A	647 – 700 = 93% - 100%
A-	626 – 647 = 90% - 92%
B+	605 – 626 = 87% - 89%
B	577 – 605 = 83% - 86%
B-	556 – 577 = 80% - 82%
C+	535 – 556 = 77% - 79%
C	486 – 535 = 70% - 76%
D	416 – 486 = 60% - 69%
F	below 416

ATTENDANCE POLICY: There is an attendance policy for this class.

- **Students in a MWF section of MATH 261 are allowed five (5) absences without penalty.**
- **Students in a TTh section of MATH 261 are allowed three (3) absences without penalty.**
- Students who accumulate more absences than are allowed for their specific section will have ten (10) points deducted from their final point total **FOR EACH** absence above the limit for their respective section.
- Students must take the responsibility of telling the instructor in advance if they must leave early, and must discuss with the instructor immediately after class if they entered the classroom after class has begun. It is the student's responsibility to make sure that their attendance record is correct.

SPECIAL NOTE: A grade of C or better in Math 261 is required in order to take Math 262.

CALCULATORS: Your brain is a sufficient calculator in Math 261. Electronic calculators, cell phones, and tablets are prohibited on tests.

ELECTRONIC DEVICES: All cellular phones, pagers, and other electronic equipment should be turned off during the class period, during movies, in churches, bookstores, restaurants, elevators, grocery stores, and especially while operating a motor vehicle.

CHEATING: 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.

WITHDRAWAL DEADLINE FOR SPRING 2014: Tuesday, March 4
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.

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.

SPECIAL DATES:

Classes begin	Wednesday, January 22
Withdrawal Deadline:	Tuesday, March 4
Spring Break:	Monday-Friday, March 10-14
Good Friday:	Friday, April 18
Classes end:	Friday, May 2
Final Exam:	**Wednesday, December 11 @ 12:00 pm**

TENTATIVE TEST DATES AND SUGGESTED PRACTICE EXERCISES FOR MATH 261

TEST 1 (Mon., Feb. 10)

Section 2.2: 7-10; 17-20
Section 2.3: 9-34; 37-48; 64, 65; 73-75
Section 2.4: 8-12; 17-30
Section 2.5: 9-26; 38, 39, 43
Section 2.6: 9-28; 35-44; 61-66, 74

TEST 2 (Mon., Mar. 3)

Section 3.1: 11-32; 35-38; 49-52; 65-68
Section 3.2: 7-24; 29, 30, 35, 36; 39-41; 48
Section 3.3: 8, 11, 12; 17-21; 23, 24; 27-41; 62, 63
Section 3.4: 7-19; 21; 26-30; 50, 51, 54, 55 (Section 1.4: 15-22; 29-46; 49-56)
Section 3.5: 9-19; 28, 29, 37
Section 3.6: 7-36; 56-61; 75-78

TEST 3 (Mon., Mar. 31)

Section 3.7: 5-14; 21-26; 33-36; 41-43; 48-53
Section 3.8: 9-16; 26-36; 59, 60, 63, 64 (Section 1.3: 17-22; 25-30; 37-40)
Section 3.9: 1-14; 20, 22, 24, 26, 28; 29-42
Section 3.10: 5-12; 14
Section 4.7: 13-21; 26

TEST 4 (Fri., Apr. 25)

Section 4.1: 11-18; 23-36; 43, 48, 50, 52, 53, 54, 68
Section 4.2: 17-27; 30-38; 47-53; 57-59
Section 4.3: 7-20
Section 4.4: 7-10; 18, 19, 24
Section 4.6: 7-9; 11, 12; 15-22
Section 4.8: 11-15; 39-48

FINAL EXAM (Fri, May 9 @ 8:00 am) Comprehensive