MATH 261 - Calculus I

COURSE SYLLABUS

INSTRUCTOR: Jon-Michael Wimberly   **OFFICE**:   Hume 205
E-MAIL ADDRESS: jwimberl@olemiss.edu   **OFFICE HOURS**: MW 3:00-4:30
                                                                                TTh 10:00-12:00

SOFTWARE/TEXT:

- Calculus Early Transcendentals w/ binder + MyMathLab by William Briggs & Lyle Cochran; 2nd ed; ISBN: 9781323110935
- **Mathematica (do not purchase) –** available on the computers in Hume &Weir Hall or install on your computer using the university site license; installation instructions at: Mathematica Download

DESCRIPTION AND LEARNING OUTCOMES:

- 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, to learn different techniques for finding derivatives, and to 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 along with other courses and enhance critical thinking and analytical reasoning abilities.

TESTS, QUIZZES, HOMEWORK

- There will be four major tests during the semester. Each test will count 100 points. The test questions will be similar in format to the examples in class and the homework problems. These exams will test your ability to solve problems similar to those discussed in class. The tests will **not** be multiple choice.

- The lowest test grade will be replaced by the final exam percentage, if it is higher.

- Online homework (MyMathLab), Mathematica worksheets, and quizzes will be given throughout the semester. These will be a total of 100 points. Homework can be repeated until 100% completion. No homework assignments will be dropped.

- Online homework must be submitted by 11:59 pm on the due date to get full credit. Any late MyMathLab assignments may be submitted by 11:59 pm on **Friday, May 5th, 2017** for half-credit.

- The final examination is comprehensive and will count 200 points.

- If a test is missed for ANY reason, a grade of 0 will be given. There will be absolutely NO make up tests given for ANY reason.

- The lowest of the four major test grades will be replaced by the exam percentage, if the percentage is higher than the lowest test grade. **THE HOMEWORK GRADE CANNOT BE REPLACED.**

- Any student who will miss one of the four tests because of an official University function must reschedule and take this test at a time BEFORE the test is scheduled. NO OTHER rescheduling will be allowed.

- An Incomplete grade (grade of I) will not be given without the permission of the Department of Mathematics.

- Students must show ALL work for each test question and arrive at a correct answer.

- Every student must take the final exam at the time scheduled. The only exceptions are those students affected by an official University function.

FINAL GRADE:

- The cumulative total for the course is 700 points. The following point scale will be used to determine your final grade:

Grade	Points Necessary for Grade
A	630 to 700
A-	616 to less than 630
B+	602 to less than 616
B	560 to less than 602
B-	546 to less than 560
C+	532 to less than 546
C	490 to less than 532
C-	476 to less than 490
D	420 to less than 476
F	below 420

ATTENDANCE POLICY:

- Students are allowed five (5) absences in a MWF section without penalty.

- Students are allowed three (3) absences in a TTh section 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.

- Attendance fraud is a form of academic dishonesty. Students engaging in fraud will fail the class and be reported to the university for further disciplinary action. If a student must leave class after signing in, it is the responsibility of the student to communicate with the instructor before class begins.

- If an emergency arises and a student must leave class after scanning in, then the student must notify the instructor within 24 hours of the end of class.

- Random attendance checks will be made in the form of role call at some point in class. If a student has been scanned into class using his or her student identification card but is not present for random role call, then that student will be found to have fraudulently attended class.

- Cellphone use will not be allowed during class. Any student using a cellphone for any purpose in class will be counted absent – no questions asked.

CALCULATORS:

- There will be no calculators used during any test, exam, or in class assignment under ANY circumstances. Any student caught using a calculator or cell phone during a test, exam, or in class assignment will be considered cheating.

CHEATING:

- The following statement is the policy of the Department of Mathematics regarding cheating:

   Offenses: Cheating on any exam or quiz, theft or attempted theft of exam questions, possession of exam questions prior to an examination, or the use of an illegal calculator on tests 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: Friday, March 3rd

- After the Course Withdrawal Deadline, courses dropped will be recorded on University records and the grade of W will be recorded if the student is not failing the course at the time of withdrawal; otherwise, the grade of F will be recorded. 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 the Office of Student Disability Services 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.

PRACTICE PROBLEMS:

I.   Test 1
   Section 2.2: 7-10, 21-24
   Section 2.3: 9-36, 39-42, 45-47, 68, 69, 77-79
   Section 2.4: 8-12, 17-38
   Section 2.5: 9, 10, 12, 15-34, 52, 53, 57
   Section 2.6: 9-26, 41-46
   Section 3.1: 9-36, 49-52, 57-60

II. Test 2
   Section 3.3: 7-24, 35, 36, 39-46, 50, 52
   Section 3.4: 8, 9, 13, 14, 19, 21, 26, 27, 33-36, 43-45
   Section 3.5: 17-22, 62, 63, 66, 67 (Section 1.4 for trig review)
   Section 3.6: 11-17
   Section 3.7: 7-25, 27-29, 31-33, 35, 36, 41-44, 48, 50, 79, 80

III. Test 3
   Section 3.8: 5-30, 37-39
   Section 3.9: 9-30, 77-82 (Section 1.3 for exp & log review)
   Section 3.10: 7-13, 15, 16, 18, 22, 25, 26, 31, 32
   Section 3.11: 5-13
   Section 4.7: 13-21, 26, 35, 36

IV. Test 4
   Section 4.1: 23-34, 37-42, 56, 61
   Section 4.2: 17-24, 31, 34, 39, 40,57-59
   Section 4.3: 9-20 (also slant asymptotes from Section 2.5: 35-40)
   Section 4.4: 12, 13, 24, 25, 30a
   Section 4.6: 7-13, 17-24
   Section 4.9: 11-15, 39-48

V.   Final Exam
   All Previous Sections   All Previous Problems