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 and SOFTWARE:
2. 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 [https://my.olemiss.edu/ir/portal?NavigationTarget=navurl://437be7228f011319fc592867c0866c2f&role=Student&workset=Technology](https://my.olemiss.edu/ir/portal?NavigationTarget=navurl://437be7228f011319fc592867c0866c2f&role=Student&workset=Technology)

ASSIGNMENTS: 1. Online homework, Mathematica worksheets, and quizzes will be given throughout the semester. These will total as a 100-point grade. Use Course ID: zhang96228 to enroll in my grade book. (See last page of syllabus.)
2. Online 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.
3. Online homework must be submitted by 11:59 pm on the due date to get full credit. Any late online homework assignments may be submitted by 11:59 pm on Sunday, December 6 for half-credit.
4. When working an assignment after the due date, only work problems that you have previously gotten wrong OR not attempted. Working a problem you got correct prior to the due date will actually lower your score.

TESTS: 1. 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.
2. The lowest test grade will be replaced by the final exam percentage (if it is higher). Please note that the homework/quiz grade cannot be replaced.
3. 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.
4. 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 to be given. NO OTHER rescheduling will be allowed.
5. Students must show all work for each test question and arrive at a correct answer.
6. The final examination is comprehensive and will count 200 points.
7. Any student having three or more final examinations scheduled for the same day will arrange with the instructor to take the Noon or the 7:30 p.m. examination on some other mutually satisfactory date.
8. Every student must take the final exam at the time scheduled. The only exceptions are those students affected by # 3 or # 6 above. The final exam for this class is at Noon on Friday, December 11.

FINAL GRADE: The cumulative point total for the course is 700 points – tests: 400, homework/quiz: 100, final exam: 200. The following point scale will be used to determine your final grade:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Necessary for Grade</th>
<th>Grade</th>
<th>Points Necessary for Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>648-700 = 93 – 100%</td>
<td>C’</td>
<td>535-555 = 77 – 79%</td>
</tr>
<tr>
<td>A’</td>
<td>626-647 = 90 – 92%</td>
<td>C</td>
<td>486-534 = 70 – 76%</td>
</tr>
<tr>
<td>B+</td>
<td>605-625 = 87 – 89%</td>
<td>D</td>
<td>416-485 = 60 – 69%</td>
</tr>
<tr>
<td>B</td>
<td>577-604 = 83 – 86%</td>
<td>F</td>
<td>below 416</td>
</tr>
<tr>
<td>B’</td>
<td>556-576 = 80 – 82%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: An "I" grade will not be given without the permission of the Department of Mathematics.

ATTENDANCE POLICY For classes that meet three days a week, students are allowed five (5) absences. For classes that meet two days a week, students are allowed three (3) absences. Ten points are deducted from the final point total for each absence above the limit. It is the student’s responsibility to make sure his/her attendance record is correct.
SPECIAL NOTE: A grade of C or better in Math 261 is required in order to take Math 262.

**CALCULATORS AND ELECTRONIC DEVICES**

- Your brain is a sufficient calculator in Math 261.
- Electronic calculators, cell phones, and ipods are prohibited on tests. Use of such equipment will be considered cheating.
- All electronic equipment should be turned off during class unless given permission by the instructor. This includes ipods, laptops, ipads, etc. Cell phones should be silenced and put away. The instructor may dismiss you from class if you are observed using any such electronics.

**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 electronic device (including cell phones) 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 (without possibility of academic forgiveness) and, subject to the approval of the Chancellor, dismissal or suspension from the University.

**WITHDRAWAL DEADLINE FOR FALL 2015 SEMESTER:** Monday, October 5

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.

**TUTORING:** The Math Department offers free tutoring Monday, Tuesday, and Wednesday from 2:30 – 6:30 pm in Hume 326.

### TENTATIVE TEST DATES AND SUGGESTED PRACTICE PROBLEMS FOR MATH 261

**TEST 1 (Friday, Sept 11)**

- 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

**TEST 2 (Friday, Oct 2)**

- Section 3.1: 9-36, 49-52, 57-60
- 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

**TEST 3 (Friday, Oct 23)**

- 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

**TEST 4 (Friday, Nov 20)**

- 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 4.9: 11-15, 23-26, 37-41, 47-49, 67-73

**FINAL EXAM (12:00 Friday, Dec 11)** Comprehensive
PEARSON CUSTOMER SUPPORT: Problems involving the MyMathLab software should be directed to their technical support department.

- The Pearson Customer Support Office is open Monday – Friday from 11 am until 7 pm (central time)
- Students may call 1-800-677-6337 to receive assistance with the software.
- Help can be found 24 hours a day online at [http://247pearsoned.custhelp.com/](http://247pearsoned.custhelp.com/).
- It is highly recommended that you do not use Safari as your internet browser for this software.

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PEARSON

MyLab / Mastering Course Registration Instructions

Dear Student,

Your instructor chose MyLab / Mastering to help you succeed in this course. With rich media, your eText, and much more, your course provides you with the resources you need to master even the most difficult concepts. Your course is designed to help you get a better grade!

What You Need to Enroll in your Instructor’s Online Course

✓ A Course ID: zhang96228
✓ A valid email address that you check regularly
  This address will be used to confirm your registration and for other communication about the course. Your instructor will also use this email address to communicate with you.

To Register and Sign in to Your Instructor’s Course the First Time

- Go to [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com)
- Click Student under Register.
- Enter your Course ID and click Continue.
- Verify the course information.
- You have a Pearson account if you have used other Pearson online products.
  Enter your username and password, and click Sign In.
- If you don’t have a Pearson account, click Create an account.
- Complete your account set up by entering your name, email address, a username and password, and any other required information.
- Click Create Account. You now have a Pearson account.
- Course access – You have three choices
  - If you have already purchased an access code, click access code, enter the code and click Finish.
  - If using a credit card or PayPal, click the button for the access you want to purchase, provide payment account information and verify your order.
  - Click on Get temporary access and then confirm your choice by clicking Yes. This will give you temporary access to the course for 14 days. At that time, you will have to purchase an access code.
- Print the Confirmation & Summary

You now have access to your instructor’s online course.

Click Go To Your Course, and then in the left panel, click the course name to start your work.

To Sign in to Your Course Again Later

- Return to [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com)
- Click Sign In.
- Enter your Pearson account username and password and click Sign In.
- In the left panel, click the course name to continue your work.