MATH 163 : CALCULUS II

TEXTBOOK : Stewart, *Calculus*, 5th ed
Graphing Calculator TI-83/84 Plus recommended.

CONTENTS : The logarithm, exponential and inverse functions, new integration techniques, sequences, series, complex variables, parametrized curves. Note: this is a continuation of Calculus I, we assume working knowledge of basic functions, limits, differentiation and integration.

GRADING : There will be three in-class exams, graded homework problems, weekly quizzes during recitation, and a final exam.

Exams :	100 pts each
Homework :	75 pts
Quizzes :	75 pts
Final Exam :	200 pts
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Total :	650 pts

Your grade will be based on your total number of points as a percentage of the maximum possible. We guarantee that 90% and above is an A or A-, 80% and above is a B,B- or B+, etc. (You need a C or better on the final to get a C or better in the class.) Note: After the 6th week of class, students who have missed three or more classes and/or three or more homework assignments will not be eligible for a WP.

HOMEWORK : We want you to succeed in this class. The lectures, recitations, review material, homework, office hours and grading are designed to help you be succesful. Besides attending lectures, your homework is your most important effort in this class; it is how you actually learn the material that will be on the quizzes and exams. This class requires a big time-commitment. You need to spend 2-3 hours on the homework for every hour of class meeting time (on average 6-9 hours per week). Remember, it is important to fully understand your work, and to work independently. It is better to do fewer problems carefully, with full understanding, than all problems in a rush. If you are at all uncertain or stuck, see your instructor, any calculus instructor at the calculus table, or your TA for help to better understand.

The homework problems are listed on the syllabus. You need to do all of the listed problems on a daily basis in order to succeed. Too many students fall behind at the beginning of the semester and when they realize it, it is too late. Give yourself a chance to make the most out of this class.

The problems marked by a star ($\star$) will be collected and graded once a week: every friday we will collect the starred problems assigned in the previous 3 lectures (previous wednesday, monday and friday). Only a subset of these problems will be graded. In order to be fair, no late homework will be accepted. However, the two lowest weekly homework scores will be dropped. The first homework set will be collected on the first friday of classes!

You are strongly encouraged to work together with other students, as long as the homework handed in is in your own words and writing.

QUIZZES: The remaining nonstarred problems are covered in a quiz held every week in your recitation class. The quiz will consist of 3-5 problems *identical or very similar to the homework problems* assigned in the previous week. The two lowest quiz scores will be dropped, and there will be no makeup quizzes. *The first quiz will be given in the second week of classes.* Your TA may choose to test you on your background algebra and graphing skills in the first week.

GRADING GUIDELINES: To get full credit on exams, homework and quizzes, *you need to show your work.* All steps need to be shown *neatly*, in *clear and correct* mathematical notation, and *annotated* by English sentences where appropriate, so that someone else can follow your work.

You will be graded based on the work shown, not on the answer. If you made a small mistake but your answer is otherwise consistent with your work, you will receive almost full credit. If your answer is correct but does not follow from your work, you will receive no credit.

GRAPHING CALCULATORS: A non-symbolic graphing calculator is recommended for this course. Some graphing ability (such as graphing calculator or MATLAB) is needed for some homework problems. Graphing calculators and other technology can be used effectively to illustrate many basic concepts and promote understanding. There are however many basic algebraic and graphing skills the student must master without a graphing or symbolic calculator. To promote these skills, your instructor may request that you not use any graphing calculator on some or all exams. If you are allowed to use one on an exam it must be one of the "acceptable calculators" listed below. *You will not be able to use a graphing calculator on the final exam.*

Acceptable calculators: TI-81, TI-82, TI-83, TI-83 Plus, TI-84, TI-85, TI-86
Unacceptable calculators: TI-89, TI-92, HP-48, HP-49, any symbolic calculator

EXAMS: The in-class exams and the final exam will cover problems similar to the assigned homework problems. The exam dates are given in the syllabus. No makeup exams will be given unless you contact your instructor ahead of time with a documented "university authorized absence" (illness, family emergency, active participation in scholarly or athletic events).

WEB : All the information about the course, including syllabus and homework, and review sheets and answers for each exam and for the final, is posted on web at

`http://www.math.unm.edu/~nitsche/math163.html`

RESOURCES : There are many resources to help you succeed in this course. You can also obtain help at:

- **CALCULUS TABLE:** During the hours posted on the web-site there will be a calculus instructor or TA at the Calculus Table, by the elevators on the 3rd floor in Dane Smith Hall.
- **CAPS:** You can obtain tutorial help from the Center for Academic Program Support on the third floor of Zimmerman library (277-4560).
- **MEP:** Minority Engineering Program at the School of Engineering, Engineering Annex, Room 210, Maurice Thompson, Director, Study Group Program (277-8795).
- **CATS:** If you have exam anxiety, you can get help at the Counseling and Therapy Services in the Student Health Center (277-4537).

ATTENDANCE : Attendance at UNM is mandatory, and if you have three or more unexcused absences, you may be dropped from the course. However, it is your responsibility to drop the course if you decide to stop attending classes. If you don't, you may receive an F.

We will pass out the classlist to check attendance in the first 2 weeks of classes and will drop you if you missed three or more lectures.

STUDENT BEHAVIOUR : Students are expected to behave in a courteous and respectful manner towards the class; this helps create a positive and supportive learning atmosphere in the classroom. Please be on time for your lectures, turn off your cell-phone and refrain from talking in class, leaving the classroom in the middle of a lecture or doing any other activity that could be disruptive to the class. Cheating will not be tolerated.

DISABILITY STATEMENT: We will accommodate students with documented disabilities in this class. During the first two weeks of the semester, those students must take the initiative to inform the instructor of their particular needs.