

22M: 025 Calculus – I
Spring Semester 2008 - Syllabus

Class: MWF 09:30 – 10:20 AM (BBB), 214 MLH
MFW 10:30 – 11:20 AM (CCC), 214 MLH

Instructor: Dr. Diego Moreira

Office Hours: MWF 11:30 – 12:20 PM

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Goals and objectives of the course: This course will cover the very basic theory of Differential and Integral Calculus. The essential of the course can be summarized as an introduction to the fundamental concepts of limits, continuity, derivatives and integrals. Interrelations of these concepts with practical problems will also be presented. The expectation is that by the end of the semester, students should be comfortable with the concepts, their mathematical manipulation and its basic applications.

Prerequisites:

- 22M:002 – Basic Algebra II
- 22M:005 – Trigonometry
- 22M:009 – Elementary Functions

Textbook: *Single Variable – Calculus– 6th Edition, James Stewart.*

Other Course Materials: Occasional handouts to complement theory in the book.

Course Webpage: Assignments and other information about the course will be given at <http://www.math.uiowa.edu/~dmoreira>. Look in the teaching section. Students are responsible for checking regularly the course webpage to see assignments and announcements. It is student's responsibility, to understand and to comply with the assignments posted there. In the case of doubt and if any clarification with respect to the assignments is needed, students should contact the instructor in advance before the assignment is due.

Course Outline: We expect to cover the following chapters from the book

- a. Chapter 1 – Functions and Models
- b. Chapter 2 – Limits and Derivatives
- c. Chapter 3 – Differentiation Rules
- d. Chapter 4 – Applications of Differentiation

- e. Chapter 5 – Integrals
- f. Chapter 6 – Applications of Integral.

This plan course may be modified during the semester. Such modifications will be announced in advance during class periods and in the course webpage. **It is the student responsibility to keep track of such changes.**

Class Procedures: It is strongly advised to read the material to be discussed before coming to class. Therefore, if there is a difficult point, you will know beforehand where it arises. This way, you can benefit from the lecture more effectively.

Grading Policy: For a solution to a problem in a test or in the homework/Quiz to be considered perfect it is not only required the answer to be correct, but also that an outline of the reasoning or calculation leading to it be given as well, and that it be correct. In many cases a correct answer alone will give you a failing grade.

Exams: There will be two in-class midterm exams. There will also be a comprehensive final exam. The schedule is the following:

- Midterm #1 --- 02/29/2008 (Friday)
- Midterm #2 --- 04/11/2008 (Wednesday)
- Final Exam --- 05/13/2008 (Tuesday), 2:15 pm (BBB)
05/12/2008 (Monday), 2:15pm (CCC)

The Midterm exams will have duration of 50 minutes and they will take place during the regular class period. The final exam is scheduled by the university (as above) and will have 2 hours duration. Only under exceptional circumstances will a student be permitted to change time of the examinations. **No calculator will be allowed during the tests.**

Missed exams policy: Make-up exams will be given based on an official documented medical, or religious excuse. It could be given also based on a very compelling reason. In this case, a justification in writing needs to be presented to base the decision if the make-up will be granted. Waking up late, missing the bus, and excuses of this sort in general do not account for compelling reasons.

Quizzes: Quizzes will be given every week and they will take place at the T.A's session. They will cover the material of that particular week. They will be applied in the last 15 minutes of the last T.A's discussion session of the week. Make-up quizzes will follow the same rules applied to make-up exams.

Homework: The HW will be assigned weekly on Wednesdays and they are due in class the following Wednesday. Late assignments will not be accepted **unless** by a documented medical or religious excuse. The two lowest homework grades will be dropped. Presentation of your results is very important. Scratch paper will be not accepted. In order to facilitate and make the grading process more effective, please turn in your HW in a clean and organized way. Students are responsible for keeping track of their HW Grades. HW will be returned in class.

Grading Procedures: The final grade will be based on two midterms tests, homework/quizzes and final exam as follows:

- a. Each Midterm exam will account for 20% of the course grade;
- b. Homework assignments will account for 20% of the course grade;
- c. Quizzes will account for 15% of the course grade;
- d. The final exam will account for 25% of the course grade;

The table below will be used for grades. It provides the minimum percentages for the grades

50	53	57	60	65	70	75	80	85	90	≥ 97
D	D+	C-	C	C+	B-	B	B+	A-	A	A+

Eventually, if necessary, an average grading (curving) will be used for the grades.

Attendance: Regular attendance will be required. Poor attendance may (and it probably will) result in lowering your final grade. Also, please try not to leave the class during the class period, as this proves to be disruptive. If you miss a class, you are still responsible for the material discussed in class and for all the announcements that were made. You will be required to sign an attendance sheet for each of the exams.

Notes to Student: If any topics and/or complain arises, I strongly suggest to bring it to my knowledge and we discuss it fully together. If a solution cannot be reached to your satisfaction, you might want to discuss it with the chair of Department of Mathematics. The Department of Mathematics has offices in 14 MLH. To make an appointment to speak with the chair of the department, call 335-0714 or contact the Departmental Secretary in 14 MLH.

Academic Fraud: Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences.

www.clas.uiowa.edu/students/academic_handbook/ix.shtml

Making a Suggestion or a Complaint: Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate and next with the departmental DEO. All complaints must be made within six months of the incident. www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

Accommodations for Disabilities: A student seeking academic accommodations first must register with Student Disability Services and then meet with a SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations. See www.uiowa.edu/~sds/

Understanding Sexual Harassment: Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit www.sexualharassment.uiowa.edu/ for definitions, assistance, and the full policy.

Reacting Safely to Severe Weather: If severe weather is indicated by the UI outdoor warning system, class members will seek shelter in the innermost part of the building, if possible at the lowest level, staying clear of windows and of free-standing expanses which might prove unstable. The class will resume after the severe weather has ended. See the Operations Manual section **16.14. i**

Administrative Home of the Course: The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add / drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various CLAS requirements. Please keep in mind that different colleges might have different policies. If you have questions about these or other CLAS policies, visit your academic advisor or 120 Schaeffer Hall and speak with the staff. The CLAS Academic Handbook is another useful source of information on CLAS academic policy: www.clas.uiowa.edu/students/academic_handbook/index.shtml