Math 142- Spring 2005: Calculus II

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January 12, 2005

1   General Information

- Section 57269 MWF 10:10-11:00, Ayres 205, (Tu: 11:15-12:05, Ayres 125)

- Office Hours: MWF 9:10-10:10, Ayres 207A- or by appointment (e-mail)

- Text: Stewart (2nd. ed.), Chapters 5,6,8

- Prerequisite: M141 (Calculus I)-working knowledge assumed.

2   Class policies

(i) Attendance: I will take attendance at every MWF class meeting; students missing more than 1/3 of them (total of 42)who do not withdraw from the course will get an F in the course.

(ii) Tuesday class: in general, no new material will be introduced on Tuesdays. Instead, we'll have either a problem session, a 30-min quiz or a 50-min exam. Exception: 1/19.

(iii) Calculator policy: you may use a graphing calculator during quizzes or exams, but only a TI-83 or equivalent. Students wishing to use other calculators must check with me first- calculators with symbolic algebra capabilities will not be approved.

(iv) Reading of materials unrelated to the course (newspapers, texts for other classes) during lecture is not permitted.

(v) Important dates: drop w/o W: 1/21; drop w/ W: 2/22; drop w/ WP-WF: April 5; last class: April 27; final exam: May 6, 10:15.

(vi) I won't be using Blackboard, but you should check the 'course log' link in the freire/M142 page often- I will post announcements (inc. homework problems and test dates) there.

(vii) To withdraw with a WP/WF, you will need to bring me a form to sign. I will ask each student wishing to withdraw with a WP to give me a short written statement explaining why he/she has decided to withdraw. Students who miss the WP deadline and stop attending will receive an F in the course.

(viii) On rare occasions, I may include in lecture a small amount of material not found in the text, or given in the text with a slightly different approach or emphasis. The lectures take precedence- students may be tested on any material covered in class.

3   Grading, Homework and Exams

QUIZZES: suggested homework problems for each section will be posted on my web page shortly after class. Homework will not be collected, but the quizzes will consist of homework problems. There will be one quiz for each course unit, consisting of 3-4 problems (30 min). Grading will be on a 0-4 scale (per problem.)

EXAMS: The first exam will cover unit IA, the second units IA and IB, the third unit IIA, the fourth IIA and IIB, the fifth III A and the final IIIA and IIIB. The grade in the second exam will replace that of the first, if higher; otherwise both will count. Likewise for the other exam pairs. The exams will consist of 7-8 problems (50 min), at a higher level than the quizzes. Grading will be on a 0-4 scale (per problem.)

DATES: Quizzes and exams (and the sections included) will be announced (on the web page) the week before the test, possibly as late as the Friday preceding a Tuesday test.

POLICIES:

(i) There will be no makeups of exams or quizzes. Students missing an exam will get a zero on it, unless a valid justification (illness, university activity) is given in advance, with appropriate documentation (in which case the other grade in the same exam pair will count twice.) Students missing more than two exams will get an F.

(ii) I do not 'grade on a curve': your grades will be independent of how the rest of the class performs. I will not compute statistics of quiz or exam grades. Graded exams may be inspected in class or during office hours, but will be kept in my office until the end of the course.

(iii) Other than the exams and quizzes, there will be no assignments for 'extra credit'.

(iv) Grading scale: below 50-F; 55-69: C or C+; 70-84: B or B+; 85 or above: A. All exams (including the final) will have the same weight, and all quizzes will have the same weight.

4   Course Outline

The approximate number of MWF lectures planned for each unit is given in brackets. Sections designated as 'reading assignments' will not be covered in lecture- students are expected to read them independently at the appropriate time, as the material will be needed to understand the other sections (and to solve quiz/exam problems.)

4.9: reading assignment (before the end of IA)

Unit IA: Definition of the integral, approximate integration (5.1 to 5.4, 5.9) [6]

Exam 1 (IA)

Unit IB: techniques of integration (5.5 to 5.7, appendix G)[7]

Exam 2 (IA, IB)

Appendix H1: reading assignment (before the end of IIA)

Unit IIA: area, volume, arc length (6.1 to 6.4, appendix H2) [6]

Exam 3 (IIA)

Unit IIB: Applications to physics/engineering/probability (sections 6.5 to 6.7) [6]

Exam 4 (IIA, IIB)

Appendix F: reading assignment (before the start of IIIA)

Unit IIIA: Improper integrals and infinite series (5.10, 8.1 to 8.4) [8]

Exam 5 (IIIA)

Unit IIIB: Taylor series and applications (8.5 to 8.9) [9]

Final exam: (IIIA, IIIB)