

Math 114–C01 (Analytic Geometry and Calculus II)
Summer 2007

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Course web page: Access from the page <http://math.gmu.edu/coursehomepages.htm>.

Office hours: MW 2:00–3:00pm and by appointment.

Text: *Thomas Calculus: Early Transcendentals, Eleventh Edition*, Wier, Haas, Giordano.

Topics: The course will cover portions of Chapters 6, 7, 8, 10 and 11 in the text. Exact sections covered are indicated in the Homework Exercises.

General Comments:

This is a summer course in which we must cover an entire semester's worth of material in about four weeks. Therefore, the pace of this course is **extremely fast**. If you fall behind at any point in the course, you will very quickly find yourself in serious trouble. Therefore, do your best to stay caught up with the material. You should expect to work **at least 12 hours per week** outside of class in order to master the material in this course.

You are expected to be familiar with some basic concepts of integration theory, specifically the Fundamental Theorem of Calculus, interpretation of a definite integral as an area, and simple substitution. I will briefly review this material at the beginning of the semester. Some review exercises from Chapter 5 are given in the Homework Exercises.

The last day to drop this course without receiving an F is Friday, July 13. You will receive your grade on the first exam and the first MAPLE assignment before that date. This grade should be a strong indicator of how well you will do in the course. Use it to decide whether to stay or drop. If you are undecided about what to do you should talk with me about it before deciding.

In this course we will make use of the computer algebra system MAPLE, in particular its graphing and symbolic calculation capabilities. You can run MAPLE from one of the on-campus computer labs in the Johnson Center and Innovation Hall. Go to <http://classtech.gmu.edu/lablocations.cfm> for locations and hours of operation. Be sure to bring a floppy disk or flash drive when you visit these labs in order to save your work.

The course web page contains announcements and useful information for students in this course. Solutions to quizzes, exams, MAPLE assignments, all handouts, and this syllabus will be made available in downloadable form. **You are responsible for checking the web page periodically so that you will not miss important information.**

Grading:

Homework. Included with this syllabus is a list of homework exercises for the course. It is strongly suggested that you attempt the homework in a given section **immediately after** that section is covered in class. Homework will not be graded, however, it is **vitaly important** that you do the homework exercises in a timely fashion in order to perform adequately on the exams. The assigned problems are representative of the test questions.

MAPLE assignments. A total of three MAPLE assignments will be given during the semester. They will be due on Thursday July 12, 19, and 26. Specific instructions will be given at the time the assignments are handed out. You may work in groups of no more than **three** persons. Your best two MAPLE assignments will be counted toward your final grade. Your total grade on these assignments will count as 1/8 of your final grade. **No late MAPLE assignments will be accepted under any circumstances.**

Exams: Hour exams will be given on Monday, July 9, Friday, July 13, 20 and 27 at the beginning of class. Your best three exams will be counted toward your final grade. Each exam will take approximately one hour, and in the remaining class time we will cover new material. Your exam average will count for 1/2 of your final grade. **Because one exam is dropped, makeup exams will not be given under any circumstances whatsoever.**

Final Exam: There will be a **cumulative final exam** given on Tuesday, July 31, 9:30am–1:20pm in the same room where we have class. Note that this is the official last day of class. The final exam will count for 3/8 of your final grade.

The grading scale is as follows. There will be no curve.

A+: 99 +; **A:** 92 - 98; **A-:** 90 - 91;
B+: 88 - 89; **B:** 82 - 87; **B-:** 80 - 81;
C+: 78 - 79; **C:** 72 - 77; **C-:** 70 - 71;
D: 60 - 69;
F: 0 - 59.

Homework Exercises

Section	Exercises (odd only)
5 (Review)	9–23, 43–49, 55, 57, 77–83
6.1	1–9, 15–23, 31–35, 45–49, 55–59
6.2	1–9, 15–19, 23–29
6.3	1–13, 27–31
6.4	7–15, 23–29
6.5	9–17
7.2	1–7, 13
7.4	5–11, 13, 17, 41, 43, 77
8.1	1–11, 17–27, 37–43, 49–55, 65, 67
8.2	1–7, 11, 13, 23–29, 39, 41
8.3	1–25, 29, 31, 35, 37, 45
8.4	1–9, 15, 17, 25, 29, 35, 37
8.5	1–35
8.6	1–9, 31–37, 39, 43, 49
8.7	1–7
8.8	1–17, 21–25, 41–53
10.5	5–13, 23, 25, 29, 43, 45, 49, 55
10.6	1–11, 17, 19, 31–37
10.7	1–11, 19–25
11.1	1, 7, 13–19, 23–41, 59, 73, 81, 97–103
11.2	1–11, 15–19, 27–33, 41–47, 51–57, 71
11.3	1–17, 31
11.4	1–21, 25–29
11.5	5–29, 39, 41
11.6	3–23, 33–39, 45–47
11.7	1–15, 33–37
11.8	1–13, 21–25
11.9	1–11, 49
11.10	1–9