Math 113–003 (Analytic Geometry and Calculus I) Spring 2007

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Course web page: Go to http://math.gmu.edu, click on Course Information, then Course Home Pages, then Math 113-003 Walnut.

Office hours: TR 1:30–2:30pm and by appointment.

Text: Thomas' Calculus – Early Trancendentals (eleventh edition)

Topics: The course will cover portions of Chapters 1–5 in the text. Exact sections covered are indicated in the Homework Exercises.

General Comments:

The prerequisite for this course is a grade of C or better in Math 105 or passing the Math Placement Test. If (according to the registrar) you have not met the prerequisites for the course, I will let you know. If this is the case, then you cannot stay in the course without either meeting the prerequisites or getting my explicit permission. Information on the Math Placement Test is available by going to math.gmu.edu and clicking on Math Placement Test.

You are expected to be familiar with the material in Sections 1.1–1.3 in the text and it will be helpful if you have seen the material in Sections 1.5 and 1.6. If this material seems especially difficult or unfamiliar to you, you should consider taking Math 105 (Precalculus) before taking Math 113, even if you have passed the Placement Test.

The last day to drop this course without receiving an F is Friday, February 23. You will receive your grade on the first exam 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.

A considerable amount of help is available to you. I particularly recommend the Mathematics Tutoring Center. Information on this and other sources of help can be found on the Mathematics Department Webpage http://math.gmu.edu.

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 *before* that section is covered in class. Homework will not be graded, however, it is **vitally important** that you do the homework exercises in a timely fashion in order to perform well on the exams and quizzes. The assigned problems are representative of the test questions.

MAPLE assignments. A total of five MAPLE assignments will be given during the semester. 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 four MAPLE assignments will be counted toward your final grade. Your total grade on these assignments will count as 10% of your final grade. **No late MAPLE assignments will be accepted under any circumstances.**

Quizzes. A short quiz (15–20 minutes) will be given each Monday in your recitation section. The best 10 of your quiz scores will be counted. Your total quiz grade will count as 15% of your final grade. No make-up quizzes will be given under any circumstances.

Exams. Exams will be given on Thursday, February 15, Thursday, March 22 and Thursday, April 19. Each exam will take approximately 50 minutes, and in the remaining class time we will cover new material. Each exam will count for 15% of your final grade. Makeup exams will not be given except in cases of extreme hardship and then only when the student has contacted me **in advance.** If I am not notified in advance, no makeup exam will be given.

Final Exam. There will be a cumulative final exam given on Thursday, May 10, 2007, 10:30pm–1:15pm in the same room where we have class. The final exam will count for 30% of your final grade. *Grading Scale:*

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

There will be no curve.

Exercises

Section

Homework Exercises

Dection	Exercises
1.1	1-15 odd, 19-27 odd, 29a, 37, 39a, b, c
1.2	1-13 odd, 19, 21, 23, 27
1.3	1-9 odd, 15, 17, 19, 23, 29, 31, 33, 35, 41, 43, 61, 65, 69
1.5	1-35 odd
1.6	1, 3, 5, 7, 9, 11, 13, 21-41 odd, 45, 59
2.1	1, 3, 5, 9, 29
2.2	1-35 odd, 43-49 odd, 55, 57a
2.4	1-13 odd, 17, 21, 23, 25, 37-57 odd, 59
2.5	1-9 odd, 13, 17, 19, 21, 39, 41
2.6	1-9 odd, 13-19 odd
2.7	5-17 odd
3.1	1, 3, 5, 7, 9, 13, 15, 23, 25, 35, 39, 41, 43
3.2	1-29 odd, 39
3.3	1-9 odd, 13, 17
3.4	1-29 odd
3.5	1-65 odd, 81-97 odd, 101, 103
3.6	1-31 odd, 37-45 odd, 47a, 49a, 51a, 53a, 59
3.7	11-29 odd, 33, 39-47 odd, 51-71 odd, 89, 91, 93
3.8	1, 3, 7, 13, 15, 17, 19, 21, 27, 29, 33, 49, 51, 53, 57, 61, 69
3.9	1, 3, 7, 9, 11, 13, 15, 19, 21
3.10	1-13 odd, 19-43 odd, 45, 47, 51, 53
4.1	1, 3, 5, 7, 9, 15-59 odd, 65, 67, 71
4.2	5, 7, 9, 15, 17, 23, 25, 27, 29, 33, 37, 39, 41
4.3	1-31 odd, 41a, 43a, 45, 47, 49, 53
4.4	9-29 odd, 43-49 odd, 67, 69
4.5	1, 5, 7, 9, 11
4.6	1-25 odd, 33, 35, 47-55 odd, 61
4.7	1, 3, 5, 11, 15, 19, 21, 23
4.8	1-19 odd, 25-69 odd, 75, 79, 89, 91, 93, 97, 111
5.1	1-13 odd
5.2	1-9 odd, 19, 21, 25, 37
5.3	1, 3, 9, 11, 15, 17, 51, 53, 55, 59
5.4	1-31 odd, 35, 37, 41, 43, 51-59 odd
5.5	1-39 odd, 59, 63, 65
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5.6 1-19 odd, 47, 49, 63-69 odd