amsppt   **Subject:** Information about **Math 106**

From: Prof. Cecil Mast

Prepared by: A. Alexandrou Himonas

For: The Undergraduate Committee

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1. Syllabus:

Review Many students were weak in background and some had never encountered exponential or logarithmic functions.

a. For the period Aug 28-Sept 16 (Test 1 Sept 18), I covered material in the following section:
    Chap. 1, Sec. 1.5, 1.6, 1.7, 1.8
    Chap. 2. Sec. 2.1, 2.2, 2.3
    Chap. 3 Sec 3.1, 3.2, 3.3
    Chap. 4 All (Also handout on Newton's law of cooling)
    Chap. 5 Sec. 5.1

b. For the period Sept 20 - Oct. 14 (Test 2 Oct. 16). I covered material in the following section
    Chap. 5 Sec. 5.2, 5.4
    Chap 6. Sec. 6.1, 6.2 (using approximation by upper and lower step functions.) 6.3, 6.4, 6.5
    Chap. 8 All
    Chap. 9 Sec. 9.1, 9.3

c. For the period Oct. 18 - Nov. 20 (Test 3 Nov. 22) I covered the material in the following sections
    Chap. 9 Sec. 9.5, 9.6
    Chap. 10 Sec 10.1, 10.2, 10.4, 10.5
    Handouts on linear first order differential equations and predator prey problem.
    Chap. 11 Sec. 11.1.

d. Starting Nov. 25 to end of term. I plan to cover remaining sections of Chapter 11. Handouts on elementary notions of probability and statistics will be covered. (Text has almost nothing on probability theory, or sampling and display techniques. If time permits, I will briefly discuss some of the material in Chapter 7.
2. Comments about course content:

There are only 2 business students (both seniors). The remaining students are A&L or architecture. In view of this, I oriented the course toward the needs of the majority and

did not go into great depth in the technique of integration and solution of differential equations but, rather, stressed the ideas involved in these notions and applications.

3. Name of Textbook and comments about its quality:

Calculus and it's Applications, 7th Ed. Goldstein, Schneider, and Lay

The text used was adequate for M-106 as it used to be taught. However, if the course is to be slanted to A&L and architecture students then it should be replaced. In particular, the chapter on probability and calculus is very sketchy.

4. Are computers used in the teaching, homework, and in which way? Should computers be incorporated in this course?

I didn't use a computer in teaching or homework other than hand calculators. Calculators were not allowed in the last two tests and will not be allowed in the final.

5. What is the pace of teaching in this course? Fast? Slow? About right?

Pace was slow at times, especially in coverage of exponential and logarithmic functions and applications, due to the fact that many students did not have Math 105. Also more than average time was spent on qualitative theory of differential equations and applications. Students seemed rather weak on curves and their properties.

6. How are the Teaching Assistants doing in this course? Any suggestion for a better use of the TA's?

No T.A.'s were involved in this course.

7. How is the testing and grading done in this course? Any suggestions for improvements?

Three tests spaced about a month apart and a final exam totalled 300 points for tests and 150 points for final. 30 points for homework and 20 points for class participation.

8. What are the failing rates in this course?

Three students out of 52 got a failing grade at midterm. Scores seemed to be skewed toward high and low grades.

9. Specific suggestions you may have for the next teacher of this course:

Depends on future of M-106.