Mathematics 108, Calculus II for Business

Spring Semester 2000

General Information for Section 07

Textbook: "Calculus for business and social sciences", by Alex Himonas and Alan Howard. Available in the bookstore (many of you will have copies from 105).

Instructor: Professor Matthew Dyer

Office Hours - Mon. 10:30-11:30 pm or by appointment.

Office - CCMB 201

Phone - 631-6082

Email - dyer.1@nd.edu

Time and Place: Section 07 MWF 12:50-1:40 pm in DeBartolo 136

Objectives: The main objective of Math 108 is to learn mathematical concepts, techniques, and ideas that are useful in solving and understanding real life problems which arise in economics and business. Therefore most mathematical concepts are introduced through interesting business problems. Furthermore by using available computer technology, real life problems which may lead to non-trivial computations and graphics are considered. Familiarization of the students with current computer technology is another objective of Math 108.

Electronic Course Information: Information for this course - exam dates, homework assignments, computer assignments, etc. may be found through the web at

http://www.nd.edu/∼dyer/math_108/general.html

Assessment and Exam Dates/Locations:

- 100 points - Exam 1: Thursday, February 10: FITZ 356
- 100 points - Exam 2: Tuesday, March 7: DBRT 129
- 100 points - Exam 3: Thursday, April 13: DBRT 129
- 150 points - Final Exam: Friday, May 12, 1:45 - 3:45 pm: Location to be announced
- 50 points - weekly homework assignments, 4 computer assignments, class activities.

TOTAL = 500 possible points

Cutoffs for major grades (A, B, C, D, F) will be assigned for each exam and announced in class so students have some indication of their level of performance. Your final grade will be assigned on the basis of your final score out of 500.

Missed exams Note that here will be three Midterm Exams and a Final Exam. A student who misses an examination will receive *zero points* for that exam unless he or she has written permission from the Dean of the First Year of Studies. Please be aware that travel plans, sleeping in, defective alarm clocks etc are *not* considered to be a valid excuse by the Dean of the First year of Studies! If you have a valid excuse (illness, excused athletic absence etc) for missing an exam, please see me asap (preferably before the exam) and a makeup exam will be scheduled.

Exam conflicts Students with *more than 2* finals in one day, or *more than 3* finals in a 24 hour period, may negotiate to change the time of one of these finals. If you intend to request to have the time of your Math 108 final changed, you must talk to your instructor by April 17.

Honor Code Both examinations and homework are conducted under the honor code. While collaboration in small groups in doing homework is permitted (and strongly encouraged) in this course, copying is not. Exams are closed book and are to be done completely by yourself with no help from others.

Homework: Homework problems from the text will be assigned each class meeting and collected on the following Wednesday. You are encouraged to work on homework problems in groups, but the assignments must be turned in individually. And remember that you will not learn anything by simply copying another student's work. The main purpose of the homework is to help you learn the material. Experience shows that students who take their homework seriously do very well in the quizzes and exams because they have a better understanding of the material.

Computer Homework: In addition to "regular" homework problems, there will be four computer assignments using the program Mathematica due on the following dates:

- Computer Homework 1 Due on Wednesday, February 9
- Computer Homework 2 Due on Wednesday, March 1
- Computer Homework 3 Due on Wednesday, March 29
- Computer Homework 4 Due on Wednesday, April 19

These assignments may be done (and turned in) as a group of 2 or 3 if you wish. However, if done in a group, you are under the Honor Code that you actually participated.

Homework collection policy: Homework assignments are due on the scheduled date either in class or in my office/mail box in the math building by 2:00pm that day. Because of the dropping of the three lowest homework scores, absolutely no late homework will be accepted, except in the case of extended illness.

Class Attendance A first-year student who accumulates more than 3 unexcused absences may be given an F.

Classroom Policies: On a typical class day, I will spend the beginning of class answering questions, with the remainder of the class being the day's "lecture". I will sometimes set aside some class time for you to work on Activity Sheets alone or in small groups under my supervision, and these will sometimes be collected for grading.

If you have numerous questions on some topic, you should come to see me before the next class as there will likely not be sufficient time to answer all of your questions. During "lectures" you are encouraged to actively participate by answering and asking questions. I hope you will find the classes interesting and worthwhile.

Please do your best to show up on time and quietly enter the room when this is not possible. Please remember to respect your colleagues who are here to learn. Indeed, class disruptions will *not* be tolerated and the offending parties will be asked to leave.

Study Suggestions: After each lecture, it is often useful to go back over it. Ask yourself what is the main problem of the day and then its solution. Rewrite your notes in your own words if that helps. Read the corresponding section(s) of the Lecture Notes and see if the examples there make sense. Then begin the homework problems. If you have questions, try to get help before the next class. It will also be very helpful to you to

look over the portion of the text to be covered next class and come to class prepared with questions about any part of the material that is unclear to you.

Getting Help

• See me in office hours or make an appointment. You are welcome to drop in, but please understand that I may not be there or have other scheduled meetings if you have not made an appointment.

• There will be twice-weekly help sessions organized by the math department Tuesdays and Thursdays in Nieuwland 127 (location to be confirmed)

• You may also obtain valuable assistance from the Learning Resources Center (LRC) in the First Year of Studies: **Math 108 Tutoring Program**, **Mathematics 108 Workshops** (Sunday 6:30-8:30 PM in the LRC) and **Collaborative Learning Program** Wednesday 3:30-5:30 PM in the main room of the LRC. You must sign up for the Collaborative Learning Program or Tutoring Program with Ms Nahid Erfan, Director of LRC, if you wish to participate and regular attendance is then required. Sign-up and regular attendance are *not* required for the Math 108 Workshops. All LRC programs will begin January 26, 2000.

• There will be someone available 4 hours a week in the DeBartolo computer lab to help with the computer assignments (times to be announced).

Calculators: Calculators may be used on all homework assignments and exams.