## Mathematics 120, Spring Semester 1995-96

## Are you in the right course?

Math 119-120 is intended for students planning to enter pre-professional or biology programs. It is not intended for students who intend to major in engineering, physics, mathematics, or most of the chemistry programs. Those majors require Math 125-126. Math 120 is the continuation of Math 119; you must have 119 or its equivalent in order to be in this course.

| Instructor: | Professor Juan Migliore |
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|  | 364 CCMB (On Juniper, just south of the library) |
| Office Hours: | Phone: 631-7345 |
|  | Monday 1:15-2:15 |
|  | Tuesday 11:10-11:40 |
|  | Tuesday 1:15-2:15 |
| Tutorial Instructors: | Or by appointment. |
|  | Michael Joachim |
|  | Laurentiu Lazarovici |
|  | Sophia Vassiliadou |
|  | Paul Weiner |

(Each Tutorial instructor will also have office hours; these will be announced soon.)
Text: Single Variable Calculus (second edition), by James Stewart
You should also purchase the Math 120 supplement from the Copy
Shop in Lafortune.

## Classes, Tutorials and Help Sessions

Class meets at 10:10 AM MWF in Cushing 117. Students are required to attend these classes.

Each student is also assigned to a Thursday tutorial section. It is your responsibility to know the time, place and section number of your tutorial section. You are not allowed to switch sections without offical permission from the registrar. At the tutorial, the previous week's homework will be returned. Students will then be encouraged to ask questions about that homework or about the current homework. The purpose the tutorial is to help students master the material currently being covered. It is up to you to decide whether you need this help, or whether you prefer to just pick up your old homework (or exam) and turn in your new homework.

In addition to the tutorials, the professor and the TAs will have office hours each week at which you can get assistance in understanding the course work and doing the homework problems. Times and rooms for the TAs' office hours will be announced soon.

In previous years, prepared overhead transparencies were used for this course. Copies of these, just as they appeared on the screen during the lectures, will be available in the reserve room of the Hesburgh library and in the Freshman Learning Resource Center. This course will roughly follow these notes, so they are a useful study guide.

## Examinations, homework and grades

There will be three one-hour examinations and one final examination (whose dates and times are listed below). Each one-hour exam will be worth 100 points. The final exam is a two-hour exam and will be worth 150 points. The final exam will cover all the material of the course. Homework grades will be scaled at the end of the semester so that there will be a total of 50 possible points for homework. So the total number of possible points for the semester is 500. Exams will be returned at the following tutorial session.

Homework will be due at the Thursday tutorial and returned the following week. Two or three assignments will be due each Thursday; specific assignments due each week will be announced in that week's lectures.

The main purpose of collecting and returning homework is to let you know if you have done the work correctly and, if not, how to do it. The homework grade ( 50 points out of a total of 500 ) is designed to reward effort. Each problem is graded either 0 (if missing or complete nonsense) or 1 (for any honest attempt). So the total number of points on any assignment is simply the number of problems honestly attempted.

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

A student who misses an examination will receive zero points for that exam unless he or she has written permission from the Vice president for student affairs. (An excuse is almost certainly not going to be accepted if it is presented after the exam takes place.) Keep the dates of the exams, including the final, in mind when you make your travel plans!!!

## Exams

|  | Date | Time |
| :--- | :--- | :--- |
| Exam 1 | Tuesday, February 13, 1996 | 8:00-9:00 AM |
| Exam 2 | Tuesday, March 19, 1996 | 8:00-9:00 AM |
| Exam 3 | Tuesday, April 16, 1996 | 8:00-9:00 AM |
| Final | Wednesday, May 8, 1996 | 1:45-3:45 PM |

(Location of exams will be announced later.) Notice that the second exam is two days after the end of Spring Break!!

| Mathematics 120, Spring Semester 1995-96 HOMEWORK ASSIGNMENTS |  |
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| Number | Assignment |
| 1 | p. 291 \# 5, 6, 9, 10-13, 17, 18, 23, 32, 46, 51, 52 |
| 2 | p. 291 \# 63-66, 69-72, 74, 79 |
| 3 | p. $300 \quad \# 2-4,8,9,14,17,18,21,24-27,30,45,49$ |
| 4 | p. 324 \# 1-4, 7, 9, 21-24, 31, 32, 34, 35, 48, 49 |
| 5 | p. 334 \# 1, 2, 4, 6, 7, 9, 10-17, 25, 26 |
| 6 | p. 337 \# 1, 2, 4, 5, 6, 13, 14, 17, 18 |
| 7 | $\begin{aligned} & \text { Supplementary Set 1, \# 1-4 } \\ & \text { p. } 358 \quad \# 13,14,17-20 \\ & \hline \end{aligned}$ |
| 8 | p. 358 \# 5, 27, 31, 35, 39-41, 43, 44, 46 |
| 9 | p. 359 \# 57, 59, 60, 67-69, 72-74, 79 |
| 10 | Supplementary Set 1, \# 5-8 <br> p. 365 \# 5-10, 13, 14 |
| 11 | $\text { p. } 365 \# 35,42-45,47,51,55-57,61,62,81,82,85$ $\text { (use calculator for } 55-57 \text { and } 61,62 \text {; others without) }$ |
| 12 | p. $374 \#$, $4,5,7,8,13,15,16,18,23,45,46,49$ |
| 13 | p. 375 \# 27, 29, 31, 50, 67-71, 73-75, 77, 85, 87, 88, 92 |
| 14 | Supplementary Set 1, \# 9-15 |
| 15 | p. $402 \# 3,4,8-10,13,20$ |
| 16 | p. $427 \quad \#$ 1, 5-7, 19, 20, 25, 39, 40, 47, 55, 56 |
| 17 | p. 441 \# 1-5, 11-14, 17, 18 (Section 7.1; ignore example 5) |
| 18 | $\begin{array}{ll} \hline \text { p. } 441 \quad \# 24,27,29,31,33,37 \\ \text { p. } 448 \quad \# 1,2,4 \\ \hline \end{array}$ |
| 19 | p. 463 \# 1-5, 7, 8, 26, 29, 30, 62, 63 (Section 7.4 thru Example 4) |
| 20 | Supplementary Set 2, \# 1-14 |
| 21 | $\begin{array}{\|ll\|} \hline \text { p. } 454 \quad 1,2,17,18 \\ \text { Supplementary Set } 2, \# 15-18 \\ \hline \end{array}$ |
| 22 | p. 519 \# 1, 3, 5, 17-20 (Section 8.2 thru Example 3a) |
| 23 | p. 531 \# 2-6, 8-12 |
| 24 | p. 511 \# 1, 2, 4-7, 10, 11, 15, 16, 18 (Section 8.1) |
| 25 | $\begin{array}{\|l\|} \hline \text { p. } 511 \quad \# 33-36 \\ \text { Supplementary Set 3.1, all } \end{array}$ |
| 26 | Supplementary Set 3.2, \# 1-11 |
| 27 | Supplementary Set 3.2, \# 12-15 |
| 28 | Supplementary Set 4.1, \# 1-10 |
| 29 | Supplementary Set 4.1, \# 11-16 |
| 30 | Supplementary Set 4.2, \# 1-7 |
| 31 | Supplementary Set 4.2, \# 8-15 |
| 32 | Supplementary Set 4.3, all |
| 33 | Supplementary Set 4.4, \# 1-10 |
| 34 | Supplementary Set 4.4, \# 11-14 |
| 35 | Supplementary Set 4.5, \# 1, 3, 4, 5 |
| 36 | Supplementary Set 4.5, \# 2, 6, 7, 8 |

