MATH 140, Sections 02xx<br>CALCULUS I, Fall 2008

Instructor: Professor D. Kueker
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Office: Math Building 2105
Office Hours: MW 2-2:50

Lectures: MWF 11-11:50 p.m.
Lecture Location: ARM 0135
Teaching Assistants: Sean Kelly, Enver Ozdemir, Christian Pazdersky, James Tanis, Joel Witten

Course Description: Introduction to calculus, including functions, limits, continuity, derivatives and applications of the derivative, sketching of graphs of functions, introduction to definite and indefinite integrals, and calculation of area.

Required Text: Math 140 comprises Chapters 2-5 of Calculus, 6th Edition, by Robert Ellis and Denny Gulick (Thomson Custom Publishing, 2003). The ISBN listed on Testudo is 978-0-7-5931379-8. Chapter 2 concerns limits; Chapters 3 and 4 focus on the derivative and applications of the derivative; Chapter 5 introduces the integral. The text is written to be read by you.

Format: Math 140 meets 5 times a week: MWF in large lecture, and TTh in 25 -student sections for 80 minutes. Your attendance is expected each day. Normally the first $15-20$-minute portion of each TTh session is for questions about homework problems; the remainder of the session is devoted to a worksheet prepared especially for that session. You will work in a group of about $4-5$ students; the group's task is not only to produce solutions to the worksheet problems but also to make certain that each group member participates and in the end understands how to solve the problems. Don't be discouraged when you find problems whose solutions do not pop out instantly. Remember that learning takes effort; calculus cannot effectively be learned by just listening to others.

Homework: Graded homework uses the online WebAssign system, with deadlines at 11:00am on Tuesdays and Thursdays. The WebAssign exercises are normally close relatives of corresponding problems in the text. In order to log into WebAssign, go to

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http://www.webassign.net/umd/login.html.
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At that point you will need to key in your username, institution (written umd), and password. The username and password are exactly what you use to get into the UMD system (as for email, etc.) For generic directions on using WebAssign, go to
http://www.math.umd.edu/ ~ jow/misc/wadir.pdf.
Required Graphing Calculator: Graphing calculators are an integral part of the course. The preferred types are Texas Instruments (especially the TI-83 plus or the TI-84). We will furnish information about the use of these calculators. NOTE: Neither calculators nor computers are allowed during tests.

Exams: There will be a diagnostic precalculus test given on Thursday 4 September, and four 50-minute exams: after Section 3.1, and after each of Chapters 3, 4, and 5. The final examination is cumulative, including all material of the course. There may occasionally be quizzes during TTh classes.

## Grading:

| ASSIGNMENT | MAXIMUM POINTS |
| :--- | :---: |
| Precalculus test | 50 |
| Top three 50-minute exam scores | 300 |
| $1 / 2 \times$ (lowest 50-minute exam score) | 50 |
| Online homework and TTh classwork (e.g., worksheets, etc.) | 120 |
| Final examination score | 200 |
| Total possible number of points | 720 |

Course grades are expected to be approximately: A: $90 \%-100 \%$; B: $80 \%-89 \%$; etc.
Makeup Exams: In accordance with University Policy, makeups (of hour exams only) will be given only for illness, religious observance, official participation in university activities, or compelling circumstances beyond your control. Adequate documentation is required and, except for emergencies, requests for makeups must be made (to Dr Kueker, not your TA) before the date of the exam.

Academic Integrity: UMCP has a nationally recognized Code of Academic Integrity administered by the Student Honor Council. You are responsible for understanding the code and abiding by its standards.

Resources: Students who have a documented learning disability and need special accommodations must turn in the Disability Support Service (DSS) forms to their instructor early in the semester. For further information see http: //www. counseling. umd. edu/DSs The math department offers free walk-in tutoring; the schedule will be at:
http://www.math.umd.edu/undergraduate/resources/tutoring.shtml.
Also see http://db.math.umd.edu/testbank for old exams to practice.

TENTATIVE SCHEDULE: CLASSES \& HOMEWORK

| Day | Date | Section | Practice Homework from Textbook | WebAssign Hwk Due |
| :---: | :---: | :---: | :---: | :---: |
| T | 9-2 | Review |  | Thurs, 9-4 |
|  |  | WebAssign Intro |  | Sun, 9-7 |
| W | 9-3 | 2.1 | 2.1: $10,16,18,28\| \| 37,41,48$ | Sun, 9-7 |
| F | 9-5 | 2.2 | 2.2: $8,12,19,24\| \| 35,36$ | Tues, 9-9 |
| M | 9-8 | 2.3 | 2.3: $14,18,23,28,37,39,48\| \| 58,65 a$, b | Tues, 9-9 |
| W | 9-10 | 2.4 | 2.4: 4, 14, 20, 26, 30, 33, 36, 42, 50 \|| 60, 62, 69 | Thurs, 9-11 |
| F | 9-12 | 2.5 | 2.5: $3,11,14,21,28,34,46,52 \\| 66$ | Tues, 9-16 |
| M | 9-15 | 3.1 | 3.1: $7,19,23,28,33,41,55\| \| 63,68,78$ | Tues, 9-16 |
| W | 9-17 | Review |  | Thurs, 9-18 |
| F | 9-19 |  | EXAM 1 on Chapter 2 and 3.1 |  |
| M | 9-22 | 3.2 | 3.2: 9, 17, 20, 30, 33b \|| 37, 41a, 46 | Tues, 9-23 |
| W | 9-24 | 3.3 | 3.3: 9, 17, 22, 27, 32, 40, 48, 53 \|| 58, 61, 68 | Thurs, 9-25 |
| F | 9-26 | 3.4 | 3.4: $5,13,27,34,42,49,55,66\| \| 70,76$ | Tues, 9-30 |
| M | 9-29 | 3.4/3.5 | 3.5: 13, 23, 41, 50, 55, 65 \|| 69, 76 | Tues, 9-30 |
| W | 10-1 | 3.6 | 3.6: 4, 11, 20, 28, 31, 36, 39 \|| 50a | Thurs, 10-2 |
| F | 10-3 | 3.7 | 3.7: 4, 9, 13, 21, 25, 29 | Tues, 10-7 |
| M | 10-6 | 3.7/3.8 | 3.7: 7, 31, 35; 3.8: $25,39,49,59,64$ | Tues, 10-7 |
| W | 10-8 | 3.8, Review | 3.8: 5, 11, 36, 42, $45 \\| 50,52$ | Thurs, 10-9 |
| F | 10-10 |  | EXAM 2 on Chapter 3 |  |
| M | 10-13 | 4.1 | 4.1: 5, 15, 23, 30, 38, 39, 47 \|| 52 | Tues, 10-14 |
| W | 10-15 | 4.2 | 4.2: $5,12,14,17,19\| \| 21,27$ | Thurs, 10-16 |
| F | 10-17 | 4.3 | 4.3: $7,12,18,25,27,30,40,46\| \| 53,55,62,74$ | Tues, 10-21 |
| M | 10-20 | 4.4 | 4.4: 4, 6, 10, 16, 20 \|| 25 | Tues, 10-21 |
| W | 10-22 | 4.5 | 4.5: 3, 8, 17, 22, 27, 32, 39, 46, 51 \|| 56 | Thurs, 10-23 |
| F | 10-24 | 4.6 | 4.6: $3,7,10,14,19,25,26\| \| 33,35$ | Tues, 10-28 |
| M | 10-27 | 4.6 | 4.6: $13,17,30 ; 4 . \mathrm{R}: 21,27,45$ | Tues, 10-28 |
| W | 10-29 | 4.7 | 4.7: $8,15,18,25,36\| \| ~ 40 a, ~ 43, ~ 48 ~$ | Thurs, 10-30 |
| F | 10-31 | 4.8 | 4.8: $6,14,19,29,33,47\| \| 48,54$ | Tues, 11-4 |
| M | 11-3 | 4.9 | 4.9: 7, 10, 22, 31, 37 \|| 54 | Tues, 11-4 |
| W | 11-5 | Review |  | Thurs, 11-6 |
| F | 11-7 |  | EXAM 3 on Chapter 4 |  |
| M | 11-10 | 5.1 | 5.1: 6, 9, 15, 18, $25\|\mid 31,34$ | Tues, 11-11 |
| W | 11-12 | 5.2 | 5.2: 2, 8, 10, 12, 23, 26, $36 \\| 42$ | Thurs, 11-13 |
| F | 11-14 | 5.3 | 5.3: 2, 10, 15, 19, 24 \|| 25 | Tues, 11-18 |
| M | 11-17 | 5.4 | 5.4: 5, 10, 16, 28, 37, 46 \|| 57, 63, 66, 72 | Tues, 11-18 |
| W | 11-19 | 5.5 | 5.5: 6, 14, 20, 31, 32, 34, $46\|\mid 53$ | Thurs, 11-20 |
| F | 11-21 | 5.6 | 5.6: $3,9,16,23,30,38,44,49,56\| \| 66$ | Tues. 11-25 |
| M | 11-24 | 5.6/5.7 | 5.6: $3,9,16,23,30,38,44,49,56\| \| 66$ | Tues, 11-25 |
| W | 11-26 | 5.7 | 5.7: $3,9,17,25,32,33,38\| \| 51,54$ | Tues, 12-2 |
| F | 11-28 |  | Thanksgiving Break |  |
| M | 12-1 | 5.8 | 5.8: $4,6,9,16,20,27,33,39 \\| 40$ | Tues, 12-2 |
| W | 12-3 | Review |  | Thurs, 12-4 |
| F | 12-5 |  | EXAM 4 on Chapter 5 |  |
| M | 12-8 | 10.3 | 10.3: $4,9,19,22,35,40,50,56$ | Tues, 12-9 |
| W | 12-10 | 10.3, Review | 10.3: 11, 14, 23, 25, 29, 31, 46, 53, 61 | Thurs, 12-11 |
| F | 12-12 |  | Last day of class Course Review |  |
| Sat | 12-13 |  | Study day |  |
| M | 12-15 |  | FINAL EXAMINATION: 1:30-3:30pm (rooms to be determined) |  |

