CALCULUS I

MATH 1210, CRN 11785, Summer 2010

http://faculty.weber.edu/aghoreishi/Math1210_su10/Math1210_su10.asp/

Prerequisite: Math 1050 & 1060 or Math 1080, with a grade of C or better, or placement test.

Corequisite: The ability to use a computer algebra system.

Text: **Required:** Calculus by James Stewart, 6th Edition, Brooks/Cole
Optional: Study Guide by Richard St. Andre, ISBN 0-495-01233-5.
Student Solution Manual by Daniel Anderson, Jeffrey A. Cole, Daniel Drucker, ISBN 0-495-01234-3.
A copy of optional books is available in Mathematics Students' Room, B4, Rm. 507.

Class Meetings: MTWRF 8:30-10:00, May 3 - June 18, B4 Rm. 518.

Instructor Information: Dr. Afshin Ghoreishi, B4 Rm. 505A, http://faculty.weber.edu/aghoreishi/, M 10:00-10:25, 12:20-12:50, WF 10:00-10:25, TR 10:00-10:50. At other times, you can see me whenever I am in my office and not busy. You can also see me by making an appointment.

General Instructions

Learning Mathematics: One learns mathematics by doing it. Struggling is a part of learning. There is no substitute for working on and solving problems on your own.

Reading a Mathematics Book: Read mathematics books with a scratch paper and a pencil close by. Use them to work through the parts left for the reader to figure out and/or redoing the parts that are not clear. Do not expect to fully master every topic in the first reading.

Writing Mathematics: Mathematics, like English, requires proper use of grammar. The process of learning a topic and accurately communicating that knowledge are intimately related. The objective is not just to find the answer to problems but also to communicate the work involved through writing.

Getting Ready for a Test: In addition to studying homework problems, class notes, and sample tests, you should develop a set of short notes and sample problems on each topic. Develop these notes after learning each topic. Use your notes as a reference and review them before a test. This technique will solve the problem of forgetting or confusing things on the tests and will enable you to attain that higher grade which you deserve.

Specific Instructions

Procedures: I will try to answer a few questions at the beginning of each class, but this time will be limited. Be prepared for each class by working on prior homework and reading the book ahead of time. You are encouraged and expected to read the book on your own. Utilize office hours and other sources of tutoring.

We will have semi-weekly homework, two 90-Min exams and a comprehensive 2-hour final exam. **Do not enter the class late & do not come to class if you have to leave early. Turn off pagers, cell phones and other such disruptive devices. Do not text message.** Failure to follow these basic courtesies may result in a failing grade.

Homework: A problem list composed of two parts is attached. To be successful in this class you should be able to solve all of them. I will collect all problems listed under the heading "To be Turned In" on Tuesdays and Fridays. I will announce on Tuesday, the sections which will be due on Friday. I will announce on Friday, the sections which will be due on Tuesday. **Homework will be due 12:00 noon**, in the gray plastic holder on my office door. *The time period between the start of the class and the due time is your grace period!*

Do not solve two problems side-by-side, write only on one side of each page and staple your homework. Write your name on the top center position of the front page and number your pages as, for example; 1/7, 2/7, ... , 7/7 (if there are a total of 7 pages), on the top right hand corner of each page. **No** late homework will be accepted.

Students who have not passed or taking Math 1200 must submit two additional labs, Basic Mathematica Commands and Calculus I with Mathematica, which are available on my course website. Their due dates are one week before the last day of class and the last day of class, respectively. Failure to submit complete and correct labs will result in a grade of **zero** for the homework.

Fun Problems: Fun Problems is a collection of interesting problems available on the course website. You can use these problems to earn up to 16 extra points in the course. You may submit **up to 4 problems** and earn an extra 4 points for each correct and complete solution. **No** partial credit will be given. All solutions are due the last day of class.

Exams: Exams I and II will be in class. Final exam will be administered at the Student Services Testing Center and can be taken anytime during the day listed below. **No** make-up exam will be given. Sample exams will be available from my website: http://faculty.weber.edu/aghoreishi/.

1st Exam	Thur,	May	20 (tentatively sections 2.1-3.7)
2nd Exam	Fri,	June	11 (tentatively sections 3.8-5.3)
Final Exam	Fri-Sat,	June	18-19

The Testing Center is located in the Student Services Center, Rm. 262, and will be open 7:30 am - 6:30 pm M-TH, 7:30 am - 4:30 pm F, 9:00 am - 12:00 pm Sat. You must complete an exam by one hour after their closing time. You must also take along a picture I.D. Exams will not require graphics or programmable calculators and these calculators are not allowed. However, you will need a scientific calculator.

Grading: Exams will be curved as needed, but a minimum standard will be retained regardless of the class performance. A typical exam scale is [0, 55) E, [55, 66) D range, [66, 78) C range, [78, 89) B range, [89, 100] A range. Homework will have the standard scale and you will be given the opportunity to replace your lowest homework grade with your grade on a special assignment at the end of the semester. **Excessive absence will result in a grade of UW.**

90-Min Exams; 100 points each	200 points	(25 percent each)
Homework	80 points	(20 percent)
Final Exam	120 points	(30 percent)
Fun Problems (optional)	*16* possible extra points	

Total	400 points	

Extra Help: **Supplemental Instruction:** Your SI instructor is Michael Peterson. The SI times are **TF 10:00-11:00** in the Solution Space, B4, Room 519.
Tutoring: Michael Peterson, Timothy Shupe and Brandon Welker are tutors for this class. Their tutoring times are M-F 8:30-3:30 and MW 3:30-6:30 also in the Solution Space.
Self/Group Study: Mathematics Students' Room, B4 Rm. 507, is a perfect place to study. You will find a copy of the Study Guide and the Student Solution Manual in that room. (Do **not** remove them from that room!)

Other Important Dates:

Memorial Day Holiday	May 31
Last day to cancel a class	May 21
Last day to drop with a grade of W	Jun 14

If you decide to drop this class, please inform me of your decision.

Course Coverage and Problem List© for Calculus I		
Section	**Problems**	**Problems To Be Turned In**
2.1	1-8	3, 4, 5, 8
2.2	1-5, 7-9, 12, 15, 17, 22, 26, 27, 29-31	4, 8, 15, 22, 26, 29
2.3	1-4, 6-27(multiples of 3), 10, 23, 35, 37, 39-41, 48, 49, 61	2, 4, 10, 12, 20, 23, 35, 40
2.4	1-4, 15-18, 22-25, 27, 31, 36	2, 16, 17, 22, 24, 36
2.5	1-6, 9-27(odd), 16, 22, 31, 32, 37, 38, 43, 45-48	4, 11, 16, 22, 32, 43(b), 45
3.1	1, 3(a, b), 4(a, b), 5-8, 9(a, b), 10(a, b), 11-15, 18-22, 25-27, 31, 32, 37, 38	4(a, b), 8, 10(a, b), 13, 17, 18(b), 19, 22, 27, 32, 37
3.2	1, 2, 3-5, 17-27(odd), 20, 35, 36, 39, 40	1, 3, 5, 20, 25, 36, 39
3.3	3-39(multiples of 3), 40, 49, 50, 51(a), 57-60, 63-67, 71, 76	22, 24, 32, 39, 40, 49, 59, 63, 71
3.4	1-5, 6-18(multiples of 3), 10, 21-24, 33, 34, 39-44	4, 9, 10, 18, 20, 24, 40, 43
3.5	1-6, 9-45(multiples of 3), 51-53, 59-63, 65	9, 18, 24, 30, 42, 51,59, 61, 63
3.6	1-4, 5-21(odd), 6, 10, 14, 23-27, 51, 52	1, 6, 10, 14, 15, 21, 27, 52
3.7	1-4(a-f), 5-13	1(a-f), 4(a-f), 7(a), 8
3.8	1, 2, 7, 10, 12-14, 16, 20-23, 27, 30, 38, 39	2, 13, 16, 20, 23, 27, 30, 38
3.9	1-4, 11-18, 23, 27, 28	1, 2, 11, 12, 15, 23, 27
4.1	1-6, 7-13(odd), 15-54(multiples of 3), 46, 52, 55, 69	6, 9, 11, 21, 36, 39, 46, 52, 55
4.2	1-6, 11-19, 24, 25, 27, 29, 32, 33	2, 13, 14, 15, 17, 27, 29
4.3	1-8, 9-27(odd), 12, 14, 16, 29-40, 56, 57, 59, 67	3, 6, 7, 9, 12, 14, 16, 21, 36, 56
4.4	1-4, 7-27(odd), 14, 18, 20, 34-36, 41-49(odd), 50	4, 9, 11, 14, 15, 18, 20, 50
4.5	3-36(multiples of 3), 22, 38, 43, 44, 47, 48	12, 18, 22, 24, 27, 38, 44, 47
4.7	3-6, 9-13, 17, 18, 26-31, 33, 34, 36, 50, 59	4, 5, 13, 18, 28, 31, 34, 50

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Section	**Problems**	**Problems To Be Turned In**
4.8	2, 4-7, 11-21(odd), 14, 22, 29, 31, 35	5, 11, 14, 17, 21, 29
4.9	3-39(multiples of 3), 10, 25, 37, 40, 44, 51, 54, 55, 70	3, 10, 25, 37, 40, 44, 54
5.1	1, 3-5, 11, 15, 17, 18, 20, 21, 26	4, 11, 17, 18, 20, 21
5.2	1-3, 5, 9, 11, 17-19, 21, 22, 27, 28, 33-37, 41, 42, 47-49, 55-57, 65	2, 18, 21, 22, 34, 36, 48, 56
5.3	3-6, 9-36(multiples of 3), 32, 49-52, 66	3, 12, 15, 21, 32, 36, 51, 66
5.4	1-15(odd), 21-42(multiples of 3), 10, 20, 23, 32, 35, 41, 45, 48, 55-58	3, 10, 20, 23, 32, 35, 41, 57
5.5	1-29(odd), 6, 12, 16, 26, 30, 36, 37, 43, 45, 48, 58	6, 12, 16, 26, 30, 36, 48, 58
6.1	1-4, 5-27(odd), 20, 31, 48, 49, 53	2, 3, 7, 20, 21, 25, 31, 48
6.2	1-17(odd), 2, 10, 18-24, 32-34, 41, 42, 47	2, 10, 11, 18, 20, 24, 34, 41
6.3	1, 2, 3-25(odd), 6, 10, 12, 18, 29, 30, 37-39, 43	2, 5, 10, 12, 17, 21, 29, 38
6.4	1-3, 7-9, 11, 13, 14, 16, 19, 21, 22, 24	2, 3, 8, 13, 16, 19, 21, 24
6.5	1, 2, 5-10, 13, 14, 17, 19, 24	2, 7, 8, 10, 13, 14, 24