Mathematics 21 Calculus I Fall 1998

TEXT

Calculus, Early Transcendentals, Third edition, J. Stewart, Brooks/Cole.

PREREQUISITES

A score of 50% or better on the Mathematics 21 Readiness Exam or a score of 4 or 5 on the Calculus Advanced Placement Exam. If you received advanced placement credit for Mathematics 21, please see your instructor to discuss your options.

ASSIGNMENTS (See lecture and exam schedule on page 4)

1. Reading. The assigned section(s) should be read at least twice; once before and once after the corresponding lecture.

2. Homework. The problems from each lecture should be completed before the next lecture. Problems from the Wednesday, Friday, and Monday lectures will be handed in at the beginning of the lecture on the subsequent Friday. Three to five problems will be graded and the assignment will be checked for completeness. Some (not all) of the quiz and exam problems will be similar to the homework problems.

3. Written assignments. There will be 3 to 5 written homework assignments (not on this information sheet); most of which will require the use of the computer algebra system MAPLE. Some of the quiz and exam problems will be based on the mathematical content of the written assignments. The first recitation will be an introductory session on the use of MAPLE (see page 3 for the room assignments).

4. Late assignments. Problem sets will be due at the beginning of the lecture period. No late problem sets will be accepted. In extraordinary circumstances, there may be no penalty or the student may be excused from the problem set, but the circumstances must be verifiable, fully documented, and acceptable to the instructor.

5. Information. Assignments must be neat and well-organized and must include the student's NAME, RECITATION SECTION, and I.D. NUMBER, and the DATE.

6. Collaboration. Students are encouraged to discuss the course, homework problems, and written assignments with one another; but all work submitted in a student's name must be his or her own. Copying is forbidden. Students may, however, work in **pairs** on the written assignments (MAPLE). The two students must be in the **same**

recitation section and they must sign an **Intention to Collaborate Agreement**. The two should together submit **only one** copy of each of the completed assignments. A collaborating team may be dissolved with permission of the instructor.

QUIZZES AND EXAMS

1. Quizzes. There will be regular quizzes in lecture or recitation.
2. 4 O'CLOCK exams. Wednesday, September 23, at 4:10 p.m. and Thursday, October 29, at 4:10 p.m. The locations will be announce during the preceding week.
3. Final exam. The final exam will be **comprehensive**. Students should not make any commitments (e.g. travel plans) for the exam period until the date is announced.
4. Make-ups. There will be no make-up quizzes. In extraordinary circumstances, a student may be excused from a quiz, but the circumstances must be verifiable, fully documented, and acceptable to the instructor.
There will be make-up exams for those who miss an exam for a reason that is, again, verifiable, fully documented, and acceptable to the instructor. Requests for make-up exams must be discussed with the instructor at the earliest possible opportunity.

COMPUTERS AND CALCULATORS

1. Network. Students should check e-mail daily for announcements. Written assignments and other information will appear on the Mathematics 21 Web page.
2. Homework. For problems marked with an (m) (or labeled with a computer algebra system icon (CAS) or a graph icon in the text) students must use MAPLE (not a calculator). For problems marked with a (c) (or labeled with a calculator icon), students may use a calculator or a computer. Except for exercises so designated, students are **not** permitted to use computers or calculators to complete homework problems. Of course, students may use calculators or computers to check their work.
3. Quizzes and exams. Calculators are not allowed during exams and quizzes.

ATTENDANCE

Attendance in lecture and recitation is required. Attendance will be taken. Anyone with 3 or more unexcused absences may receive a **Section 3 report**.

GRADING

		COURSE AVERAGE	COURSE GRADE
100 points	Assignments—10 *points for each written assignment, the rest for the problem sets*	90%–100%	A– or A
100 points	Quizzes	80%–89%	B–, B, or B+
200 points	Hour exams—100 *points each*	70%–79%	C–, C, or C+
200 points	Final exam	60%–69%	D–, D, or D+
600 points	TOTAL	0%–59%	F

MAPLE INTRODUCTORY SESSIONS

Section	Date	Time	Room
10	Tuesday, September 1	12:10–1:00	Rauch 70
11	Tuesday, September 1	3:10–4:00	Grace 28
12	Thursday, August 27	12:10–1:00	Whitaker 257
13	Thursday, August 27	1:10–2:00	Whitaker 257
14	Tuesday, September 1	8:20–9:10	Grace 28
15	Tuesday, September 1	1:10–2:00	Rauch 70
16	Thursday, August 27	10:45–11:35	Grace 28
17	Thursday, August 27	3:10–4:00	Grace 28
18	Tuesday, September 1	10:45–11:35	Grace 28
19	Tuesday, September 1	3:10–4:00	Grace 28
20	Thursday, August 27	12:10–1:00	Computing Center 292
21	Thursday, August 27	1:10–2:00	Computing Center 292
22	Tuesday, September 1	9:20–10:10	Grace 28
23	Tuesday, September 1	12:10–1:00	Rauch 70
24	Thursday, August 27	8:20–9:10	Grace 28
25	Thursday, August 27	3:10–4:00	Grace 28
26	Tuesday, September 1	10:45–11:35	Grace 28
27	Tuesday, September 1	1:10–2:00	Rauch 70
28	Thursday, August 27	9:20–10:10	Grace 28
29	Thursday, August 27	12:10–1:00	Whitaker 257

No.	Date	Section	Homework—(m): Use MAPLE (not a calculator) (c): Use a calculator or a computer.
1	8/26	RP1–5	Read Review and Preview 1–5 and Appendices A–D
2	8/28	1.1	§1.1; 1,5,7,8
3	8/31	1.2	§1.2; 2,5,6,7,9(c),12(c),13(c),15,18,23(c),26
4	9/2	1.3	§1.3; 3,10,13,14,15,21,27,29,32,36,41,43,45,49,61,78
5	9/4	1.4	§1.4; 1,2,3,4,6(m),11,21,15,35,37
6	9/7	1.5	§1.5; 1,4,9,13,16,19,31,34,37,40,44,48,59
7	9/9	1.6	§1.6; 3,8,9,11,13,15,20,25,28,33(m),37(m),39,46,51,
8	9/11	1.7,2.1	§1.7; 1,2,5,7,12,13,15,19 §2.1; 1,5,9,14,26,27,32,34,36,47,49,51,59,60
9	9/14	2.2	§2.2; 1,3,6,9,11,16,18,23,25,27,29,39,47,48,55,59,63,67,72
10	9/16	2.3,2.4	§2.3; 1,2,9,13,14 §2.4; 2,5,6,10,13,14,18,20,25,30,33,37,39,44,45
11	9/18	2.5	§2.5; 2,5,9,11,15,17,23,24,27,30,33,36,38,39,41,51,57,60,70
12	9/21	Review	**4:00 EXAM # 1 WEDNESDAY 9/23**
13	9/23	2.6	§2.6 1,9,13,17,21,25,35,45
14	9/25	2.7	§2.7; 1,2,3,5,10,13,17,23,25,27,35,42,43,51
15	9/28	2.8	§2.8; 2,4,5,7,10,11,17,19,21,22,29
16	9/30	2.9,2.10	§2.9; 2,5,10,11,14,17,20,25,27,31,35,36,45,54 §2.10; 1,3(c),7(c),10(c),25
17	10/2	3.1	§3.1; 2(m),5,6,13,16,18,20,25(c),27,29,36,38,39,41,43,46,51
18	10/5	3.2	§3.2; 1,3,4,7,10,12,14,18,19,25,28,30,33(m),40
19	10/7	3.3	§3.3; 1,5,7,10,14,17,19,27,30,31,37,39,40,47,53,56(c),60,66,72,75
20	10/9	3.4	§3.4; 3,7,10,16,19,22,27,34,46,49,51,57,60,67
21	10/14	3.5	§3.5; 2,5,7,8,10,11,12,13,16,18,21
22	10/16	3.6	§3.6; 2,3,9,12,13,22,23,28,31,32,35,41,45,53,61,64,66,72
23	10/19	3.7	§3.7; 1,9,11,15,23,30,31,35,36,38,47
24	10/21	3.8	§3.8; 3,5,8,11,13,19,22,24,26,39,43,47,51,57,60
25	10/23	4.1	§4.1; 1,2,4,7,8,11,13,14,19,25,31,33,38,40,44,47,49,53
26	10/26	4.2	§4.2; 1,6,7,12,17,19,25,27,31,37
27	10/28	Review	**4:00 EXAM # 2 THURSDAY 10/29**
28	10/30	4.3	§4.3; 1,2,7,14,17,19,21,25,28,29,32,39,43,45,47
29	11/2	4.4	§4.4; 1,2,5,11,13,15,19,25,26,27,32,34,35(m),38,44
30	11/4	4.5	§4.5; 2,4,5,15,23,27,32,41,47,51,55
31	11/6	4.7	§4.7; 2,5,6,8,10,13,17,23,26,29,31,33,39,46,52
32	11/9	4.9	§4.9; 2,5,9,12,13,27,30,32,38,43,46,49,57,58,61
33	11/11	5.1	§5.1; 1,2,9,12,13,17,18,19,21,23,26,30,33,41,43,44,48,
34	11/13	5.2	§5.2; 1,2,3,7,9,12,14
35	11/16	5.3	§5.3; 3,4,7,8,9(c),17,23,25,31,38,45,47,49,52,55,58
36	11/18	5.4	§5.4; 1,3,5,12,17,20,23,26,29,32,33,41,43,47,48,51,52,58,86
37	11/20	5.4,5.5	§5.4; 60,69,73,75,78,79,83,93 §5.5; 1,2,3,4,5,6,9,10,18,20,21,23,25
38	11/23	5.5	§5.5; 30,36,37,41,44,46,47,53,56,63,64,74
39	11/25	6.1	§6.1; 1,2,3,5,11,15,19,21,31,33,35,37,45,57
40	11/30	6.2	§6.2; 1,5,10,12,27,28,29,33,36,43,49,50,52,53,63,60
41	12/2	6.3	§6.3; 1,2,7,11,14,17,18,33,34,35
42	12/4	Review	**FINAL EXAMS 12/8 – 12/16**