

Mw427L Summer 2009

Unique No. 91560

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Rules: Don't miss class. Don't be late. Don't buy plane tickets which conflict with exams. Don't pack up early. Staple homework. Don't be rude.

Text: (Required) *Vector Calculus* 5th Ed., Marsden and Tromba.

Students with disabilities: The University of Texas at Austin provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY

Grading: Homework/Attendance:	10%
8 Quizzes:	40%
Midterm	20%
<u>Final Exam:</u>	<u>30%</u>
Total:	100%

90% is at least an A, 80% is at least a B, etc.

Exams and Quiz Dates: Nearly chiseled in stone, the date for the midterm exam is Monday July 20. Quizzes are every Thursday in the discussion session. There won't be a quiz on July 16th before the Midterm. The Final will be scheduled by the Registrar on either the 15th or 17th of August. Exams and quizzes will be closed-book, closed-notes, and no-calculator.

Homework Assignments on are on the next page and are subject to change. Due dates are announced in class and no where else. Late home work will not be accepted, and it hurts to ask. Homework is due at the *beginning* of the discussion session. Staple multiple pages and polish your work; we take points off for missing staples and sloppy or disorganized work.

Overview In this course we will study differentiation of multivariable and vector-valued functions and applications thereof. Then we will study integration over higher-dimensional regions, and over paths and surfaces. The course culminates in Stokes' Theorem, which is the multi-dimensional version of the fundamental theorem of calculus. Prerequisite: A grade of C or better in M408D or the equivalent.

Section	Warm-up Exercises	Hand-in Exercises
1.1	3, 6, 9, 11, 21	8, 14, 16, 18, 22
1.2	2, 6, 8, 12, 13	3, 11, 14, 17, 18
1.3	2, 3, 5, 8, 10, 13, 18, 25, 27, 31	4, 6, 16c, 24, 28
1.4	1, 3, 4, 8 S16.7 / 1, 3, 6, 7, 9; S16.8 / 2, 3, 5, 7, 10	6, 12, 15
1.5	2a, 5, 7, 13	2c, 8, 12
1.R	1, 4-7, 12, 14, 16, 23, 25, 26, 44, 47	

Section	Warm-up Exercises	Hand-in Exercises
2.1	1, 2b, 6, 16, 19, 23, 28	9, 12, 18, 32
2.2	8, 9	
2.3	1c, 3e, 5, 6c, 7b, 8a, 13a, 14a, 16	3c, 4d, 7c, 9, 12c, 13b, 14b
2.4	2, 5, 6, 10, 14, 15, 17	4, 8, 12, 16, 18, 20
2.5	2abd, 3ab, 5a, 13 S15.5 / 3, 4, 8, 11, 19, 21	2eg, 8, 9, 11, 15
2.6	2, 4b, 6, 7	3, 5ab, 8, 13a, 14, 24
2.R	3, 5, 6, 7d, 8d, 10, 12c, 17, 18a, 25, 32, 35, 36	
3.1	4, 7a, 10a, 19	8a, 13, 20def
3.2	2, 3	4
3.3	4, 5, 25, 32	9, 12, 22, 27
3.4	1, 4, 10, 15, 25 S15.8 / 3, 5, 9, 17, 19	5, 9, 16, 29
3.R	2c, 3, 4, 10, 12, 19	
4.1	2, 6, 9	4, 7, 11, 17
4.2	1, 2, 13d, 15c S9.1 / 7, 9, 15; S11.2 / 39, 43, 53; S14.3 / 1, 9, 14	4, 8, 16
4.3	1, 4, 10, 11, 13 S17.1 / 1–18, 35a	8, 14, 15, 20
4.4	2, 3, 11, 14, 18, 21, 33a S17.5 / 5, 7, 25	4, 7, 8, 16, 26, 32
4.R	4, 6, 9, 10, 14, 22, 26, 27, 28	
5.1	1d, 2d	5, 9
5.2	3, 4	6, 7
5.3	2de, 6, 11	3, 7, 9
5.4	1ac, 2ab, 11	2cd, 5, 7, 12
5.5	3, 14, 17	10, 12, 22
5.R	3, 4, 7, 8, 11, 18, 22, 30, 37	
6.1	1, 3	6, 8
6.2	1, 3, 8, 13, 16, 25, 26, 31	2, 6, 12, 14, 15, 23, 30
6.3	3, 4, 7, 13	5, 8, 10, 14
6.R	1, 3, 4, 6, 7, 15, 17, 21, 23, 25	
7.1	2, 3, 6b	4, 7, 10, 13
7.2	1cd, 2a, 3, 11, 16	2d, 6, 12, 14, 15
7.3	1, 2, 10, 14	6, 8, 12, 15
7.4	1, 3, 9, 15	5, 6, 8, 20
7.5	1, 3, 7, 11, 12b	4, 5, 10, 13
7.6	2, 3, 5, 7	4, 6, 10, 15, 16
7.R	1c, 2a, 3b, 5, 7c, 8, 11, 12c, 13, 14, 16, 18, 19, 23	
8.1	1, 2, 3a, 13	4, 5, 7, 15
8.2	1, 2, 3, 9	5, 7, 10, 11, 23
8.3	2, 13, 17	3, 4, 9, 10, 15, 18, 20
8.4	1, 3, 7, 8	2, 5b, 9, 10
8.R	1, 3, 5, 5, 7, 9, 10, 14, 15, 17, 18, 19, 20	