

UMTYMP Calculus III Fall 2005 Syllabus

Text: Calculus: Concepts and Contexts - Combined Edition Stewart

Note: Assignments listed are basic assignments. Additional problems may be distributed in class.

Professional problems are marked with *.

Class	Day	Date	Section	Title	Due
1	Wed	09/07/2005		<i>Course Overview</i>	9/14
			13.1	<i>Vector Fields</i> HW: 3, 4, 6, 7, 8, 11-14, 15-18, 22, 23, 25, 26, (29-32)*, 33	
2	MON	09/12/2005	13.2	<i>Line Integrals</i> HW: 1, 3, 5, 6, 8, 9, 11, 13, 14*, 17, 22a, 24a, 25, 31, 33, 34, 37	9/21
3	Wed	09/14/2005	13.3	<i>Topology and The Fundamental Theorem of Line Integrals</i> HW: given in class; problems on a handout plus a portion of 13.3: 1, 2, 4, 8, 10, 11, 12, 15, 16, 21, 23, 26*, 27, 29, 30, 31, 32	9/21
4	Wed	09/21/2005	13.3	<i>Fundamental Theorem of Line Integrals (finish)</i> HW: leftover problems from previous class; specifics given in class	9/28
5	Wed	09/28/2005	12.1	<i>Double Integrals over Rectangles</i> HW: 1, 3, 5, 6, 9, 13, 15, 16*	10/5
			12.2	<i>Iterated Integrals (start)</i> HW: 2, 5, 8, 9, 10, 13, 14, 15, 19, 22*, 23, 30, 32b	
Exam 1	Wed	10/05/2005		<u>Vector Fields through Iterated Integrals</u>	
6	Wed	10/12/2005	12.2	<i>Iterated Integrals (finish)</i>	10/19
			12.3	<i>Double Integrals over General Regions</i> HW: 4, 11, 16, 20, 29, 30, 31, 34, 38, 40, 42*, 44, 46	
7	Wed	10/19/2005	12.9	<i>Change of Variables in Multiple Integrals - Double Integrals</i> HW: 2, 5, 6, 8, 9, 10, 11, 14*, 15, 19, 22, 24	10/24
			12.4	<i>Double Integrals in Polar Coordinates</i> HW: 1, 3, 4, 6, 10, 11, 13, 14*, 15, 19, 23, 24, 28, 30	
8	MON	10/24/2005	13.4	<i>Green's Theorem</i> HW: 4, 8, 11, 14, 17, 20, 21a*, 27	11/2
9	Wed	10/26/2005	10.5	<i>Parametric Surfaces (Review)</i> HW: 1, 2, 3, 4, 11, 12, 13, 14, 16, 19, 21, 27, 29a	11/2
			12.6	<i>Surface Area</i> HW: 2, 5, 7, 8, 18ab, 21, 23*, 24, 26	
Exam 2	Wed	11/02/2005		<u>Double Integrals (General Regions) through Surface Area</u>	
10	Wed	11/09/2005	13.5	<i>Curl and Divergence (Part I)</i> HW: 1, 2, 4, 7, 8, 9, 10abdfhl, 11, 13, 14, 19*, 20	11/14
11	MON	11/14/2005	13.5	<i>Curl and Divergence (Part II)</i> HW: 18, 22, 23, 24, 29*, 33	11/21
			13.6	<i>Surface Integrals (Part I)</i> HW: 4, 6, 7, 12, 13, 16, 18	

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12	Wed	11/16/2005	13.6 <i>Surface Integrals (Part II)</i> HW: 19, 22*, 25, 27, 31, 42	11/21
13	MON	11/21/2005	13.7 <i>Stokes' Theorem</i> HW: 1, 2, 3, 5, 8, 9, 11ac, (12ac(no graph))* , 16, 19	11/28
THANKSGIVING BREAK				
14	MON	11/28/2005	12.7 <i>Triple Integrals</i> HW: 2, 5, 8, 10, 13, 16*, 23, 24, 26, 30 (just $dx dz dy$, $dx dy dz$, and $dz dy dx$), 35, 45	12/5
15	Wed	11/30/2005	12.8 <i>Triple Integrals in Cylindrical & Spherical Coordinates</i> HW: 1, 4, 6, 8, 14a, 15, 18, 19, 26*, 28a, 29, 32 12.9 <i>Change of Variables in Multiple Integrals - Triple Integrals</i> HW: 17 + additional problems given in class. <i>Extra Credit</i> 12.5 1, 5, 6, 9, 10 12.8 14b	12/5
16	MON	12/05/2005	13.8 <i>The Divergence Theorem</i> HW: 1, 2, 8, 10, 11, 17, 19, 20*, 21, 22	12/12
Exam 3	MON	12/12/2005	<u>Curl and Divergence through Divergence Thm</u>	
17	MON	12/19/2005	Wrap Up and Enrichment	

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Class	Day	Date	Section	Title
1	Tues	09/06/2005		<i>Course Overview</i>
			13.1	<i>Vector Fields</i> HW: 3, 4, 6, 7, 8, 11-14, 15-18, 22, 23, 25, 26, (29-32)*, 33
2	Thurs	09/08/2005	13.2	<i>Line Integrals</i> HW: 1, 3, 5, 6, 8, 9, 11, 13, 14*, 17, 22a, 24a, 25, 31, 33, 34, 37
3	Thurs	09/15/2005	13.3	<i>Topology and The Fundamental Theorem of Line Integrals</i> HW: given in class; problems on a handout plus a portion of 13.3: 1, 2, 4, 8, 10, 11, 12, 15, 16, 21, 23, 26*, 27, 29, 30, 31, 32
4	Thurs	09/22/2005	13.3	<i>Fundamental Theorem of Line Integrals (finish)</i> HW: leftover problems from previous class; specifics given in class
5	Thurs	09/29/2005	12.1	<i>Double Integrals over Rectangles</i> HW: 1, 3, 5, 6, 9, 13, 15, 16*
			12.2	<i>Iterated Integrals (start)</i> HW: 2, 5, 8, 9, 10, 13, 14, 15, 19, 22*, 23, 30, 32b
Exam 1	Thurs	10/06/2005		<u>Vector Fields through Iterated Integrals</u>
6	Thurs	10/13/2005	12.2	<i>Iterated Integrals (finish)</i>
			12.3	<i>Double Integrals over General Regions</i> HW: 4, 11, 16, 20, 29, 30, 31, 34, 38, 40, 42*, 44, 46
7	Tues	10/18/2005	12.9	<i>Change of Variables in Multiple Integrals - Double Integrals</i> HW: 2, 5, 6, 8, 9, 10, 11, 14*, 15, 19, 22, 24
			12.4	<i>Double Integrals in Polar Coordinates</i> HW: 1, 3, 4, 6, 10, 11, 13, 14*, 15, 19, 23, 24, 28, 30
8	Tues	10/25/2005	13.4	<i>Green's Theorem</i> HW: 4, 8, 11, 14, 17, 20, 21a*, 27
9	Thurs	10/27/2005	10.5	<i>Parametric Surfaces (Review)</i> HW: 1, 2, 3, 4, 11, 12, 13, 14, 16, 19, 21, 27, 29a
			12.6	<i>Surface Area</i> HW: 2, 5, 7, 8, 18ab, 21, 23*, 24, 26
Exam 2	Thurs	11/03/2005		<u>Double Integrals (General Regions) through Surface Area</u>
10	Thurs	11/10/2005	13.5	<i>Curl and Divergence (Part I)</i> HW: 1, 2, 4, 7, 8, 9, 10abdfhl, 11, 13, 14, 19*, 20
11	Thurs	11/17/2005	13.5	<i>Curl and Divergence (Part II)</i> HW: 18, 22, 23, 24, 29*, 33
			13.6	<i>Surface Integrals (Part I)</i> HW: 4, 6, 7, 12, 13, 16, 18

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12	Tues	11/22/2005	13.6 <i>Surface Integrals (Part II)</i> HW: 19, 22*, 25, 27, 31, 42
13	Tues	11/29/2005	13.7 <i>Stokes' Theorem</i> HW: 1, 2, 3, 5, 8, 9, 11ac, (12ac(no graph))* , 16, 19

THANKSGIVING BREAK

14	Thurs	12/01/2005	12.7 <i>Triple Integrals</i> HW: 2, 5, 8, 10, 13, 16*, 23, 24, 26, 30 (just $dx dz dy$, $dx dy dz$, and $dz dy dx$), 35, 45
15	Tues	12/06/2005	12.8 <i>Triple Integrals in Cylindrical & Spherical Coordinates</i> HW: 1, 4, 6, 8, 14a, 15, 18, 19, 26*, 28a, 29, 32 12.9 <i>Change of Variables in Multiple Integrals - Triple Integrals</i> HW: 17 + additional problems given in class. <i>Extra Credit</i> 12.5 1, 5, 6, 9, 10 12.8 14b
16	Thurs	12/08/2005	13.8 <i>The Divergence Theorem</i> HW: 1, 2, 8, 10, 11, 17, 19, 20*, 21, 22
Exam 3	Wed	12/14/2005	<u>Curl and Divergence through Divergence Thm</u>
17	Tues	12/20/2005	Wrap Up and Enrichment

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			13.1	<i>Vector Fields</i> HW: 3, 4, 6, 7, 8, 11-14, 15-18, 22, 23, 25, 26, (29-32)*, 33	
2	Tues	09/13/2005	13.2	<i>Line Integrals</i> HW: 1, 3, 5, 6, 8, 9, 11, 13, 14*, 17, 22a, 24a, 25, 31, 33, 34, 37	9/21
3	Tues	09/20/2005	13.3	<i>Topology and The Fundamental Theorem of Line Integrals</i> HW: given in class; problems on a handout plus a portion of 13.3: 1, 2, 4, 8, 10, 11, 12, 15, 16, 21, 23, 26*, 27, 29, 30, 31, 32	9/21
4	Tues	09/27/2005	13.3	<i>Fundamental Theorem of Line Integrals (finish)</i> HW: leftover problems from previous class; specifics given in class	9/28
5	Tues	10/04/2005	12.1	<i>Double Integrals over Rectangles</i> HW: 1, 3, 5, 6, 9, 13, 15, 16*	10/5
			12.2	<i>Iterated Integrals (start)</i> HW: 2, 5, 8, 9, 10, 13, 14, 15, 19, 22*, 23, 30, 32b	
Exam 1	Tues	10/11/2005		<u>Vector Fields through Iterated Integrals</u>	
6			12.2	<i>Iterated Integrals (finish)</i>	10/19
			12.3	<i>Double Integrals over General Regions</i> HW: 4, 11, 16, 20, 29, 30, 31, 34, 38, 40, 42*, 44, 46	
7	Tues	10/18/2005	12.9	<i>Change of Variables in Multiple Integrals - Double Integrals</i> HW: 2, 5, 6, 8, 9, 10, 11, 14*, 15, 19, 22, 24	10/24
			12.4	<i>Double Integrals in Polar Coordinates</i> HW: 1, 3, 4, 6, 10, 11, 13, 14*, 15, 19, 23, 24, 28, 30	
8	Tues	10/25/2005	13.4	<i>Green's Theorem</i> HW: 4, 8, 11, 14, 17, 20, 21a*, 27	11/2
9	Tues	11/01/2005	10.5	<i>Parametric Surfaces (Review)</i> HW: 1, 2, 3, 4, 11, 12, 13, 14, 16, 19, 21, 27, 29a	11/2
			12.6	<i>Surface Area</i> HW: 2, 5, 7, 8, 18ab, 21, 23*, 24, 26	
Exam 2	Tues	11/08/2005		<u>Double Integrals (General Regions) through Surface Area</u>	
10			13.5	<i>Curl and Divergence (Part I)</i> HW: 1, 2, 4, 7, 8, 9, 10abdfhl, 11, 13, 14, 19*, 20	11/14
11	Tues	11/15/2005	13.5	<i>Curl and Divergence (Part II)</i> HW: 18, 22, 23, 24, 29*, 33	11/21
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12	Tues	11/22/2005	13.6 <i>Surface Integrals (Part II)</i> HW: 19, 22*, 25, 27, 31, 42	11/21
13	Tues	11/29/2005	13.7 <i>Stokes' Theorem</i> HW: 1, 2, 3, 5, 8, 9, 11ac, (12ac(no graph))* , 16, 19	11/28
14	Tues	12/06/2005	12.7 <i>Triple Integrals</i> HW: 2, 5, 8, 10, 13, 16*, 23, 24, 26, 30 (just $dx dz dy$, $dx dy dz$, and $dz dy dx$), 35, 45	12/5
15	Tues	12/13/2005	12.8 <i>Triple Integrals in Cylindrical & Spherical Coordinates</i> HW: 1, 4, 6, 8, 14a, 15, 18, 19, 26*, 28a, 29, 32 12.9 <i>Change of Variables in Multiple Integrals - Triple Integrals</i> HW: 17 + additional problems given in class. <i>Extra Credit</i> 12.5 1, 5, 6, 9, 10 12.8 14b	12/5
			13.8 <i>The Divergence Theorem</i> HW: 1, 2, 8, 10, 11, 17, 19, 20*, 21, 22	12/12
Exam 3 16	Tues	12/20/2005	<u>Curl and Divergence through Divergence Thm</u>	

Twin Cities
UMTYMP Calculus I
 Spring 2006 Syllabus
 Text: Stewart, ET-5th edition

Jo: Boxed problems for class 11-18 are in hard copy Curriculum file.

and **bold** problems will be graded. Professional Solution Problems are designated by *.

<i>Class</i>	<i>Day</i>	<i>Date</i>	<i>Section</i>	<i>Due Date</i>	<i>Returned</i>
1	Thurs	01/12/2006	Sections 3.10, 3.11		
2	Thurs	01/19/2006	Section 4.1		
3	Thurs	01/26/2006	Section 4.2		
4	Tues	01/31/2006	Sections 4.3, 4.5		
5	Thurs	02/02/2006	Sections 4.4, 4.7		
Exam 1	Thurs	02/09/2006	<u>Sections 3.4-3.10, 4.1</u>		
6	Thurs	02/16/2006	Sections 4.7, 4.9		
7	Thurs	02/23/2006	Sections 4.9, 4.10		
8	Tues	02/28/2006	Sections 5.1, 5.2		
9	Thurs	03/02/2006	Sections 5.2, 5.3		
10	Thurs	03/09/2006	Sections 5.3, 5.4		
SPRING BREAK					
11	Tues	03/21/2006	Sections 5.5, 5.6 (Brief)		
12	Thurs	03/23/2006	Sections 6.1, 6.2		
Exam 2	Thurs	03/30/2006	<u>Sections 4.2-4.10, 5.1-5.4</u>		
13	Tues	04/06/2006	Sections 6.3, 6.4		
14	Thurs	04/13/2006	Section 7.1		
15	Tues	04/18/2006	Sections 7.2, 7.3		
16	Thurs	04/20/2006	Sections 7.4, 7.5		
17	Tues	04/25/2006	Section 7.8		
18	Thurs	04/27/2006	Sections 8.1, 8.2		

Twin Cities
UMTYMP Calculus I
Spring 2006 Syllabus
Text: Stewart, ET-5th edition

Class *Day* *Date* *Section*

Due Date *Returned*

Exam 3 Thurs 05/04/2006 Sections 5.5-5.6, 6.1-6.4, 7.1-7.5, 7.8

Students are also strongly encouraged to attend optional exam review days listed below:

Optional Exam 1 Review	Tuesday, February 7, 2006
Optional Exam 2 Review	Tuesday, March 28, 2006
Optional Exam 3 Review	Tuesday, May 2, 2006