

LECTURE: C 315 Wells Hall, MWF 11:30 – 12:20

INSTRUCTOR: Prof. R. Fintushel

OFFICE: D218 Wells Hall

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URL: http://www.math.msu.edu/~ronfint/MTH234_60Syllabus_F09.pdf

or more simply:

<http://www.mth.msu.edu>

and follow the links under 'Class Pages'. Alternatively, there is a link on my home page:

<http://www.mth.msu.edu/~ronfint>

OFFICE HOURS: M,W,F: 12:30 – 1:30, or by appointment.

RECITATION SECTION: T: 11:30 – 12:20, C308 Wells Hall

RECITATION INSTRUCTOR: Matthew Bond, bondmatt@msu.edu, A102 Wells Hall

TEXTBOOK: Thomas' Calculus, 11th Edition, Part Two

GENERAL COURSE DESCRIPTION: The topic of this course is vector calculus. We will study the differential and integral calculus of functions of several variables. This includes the topics of partial differentiation, multiple integrals, line and surface integrals, and the theorems of Green and Stokes. See the detailed course outline below.

PREREQUISITES: A score of 4 or 5 on the AP examination in BC Calculus.

IMPORTANT DATES:

Sep 9: Online open add period for Fall ends at 8pm.

Sep 16: Last day to change sections

Sep 16: Last day to change to an approved lower level course or prerequisite

Sep 22: Hourly test #1

Sep 28: End of tuition refund period

Oct 20: Hourly test #2

Oct 21: Last day to drop the course with no grade reported

Nov 10: Hourly test #3

Dec 8: Hourly test #4

Dec 14: Final Examination 10:00 am - 12:00 noon

SUGGESTED PROBLEMS: These are listed on the **Tentative Schedule** below. They will not be collected or graded. However, solving these problems is essential for keeping up with this class. You should work out these problems and as many of the other problems from each section of the text that is covered in this course in order to be prepared for examinations. In solving these problems, you should strive for clearly written solutions. Being able to demonstrate your understanding in this fashion will be required on all examinations.

MATH LEARNING CENTER: The MSU Mathematics Learning Center, located on the first floor of the A-Wing of Wells Hall, opens on September 8. The Learning Center provides assistance for students in this class. Some of you might find this helpful. If you go to the window in the lobby of the A-Wing of Wells Hall by the elevators, a monitor will direct you to the appropriate room for this

class. In the Learning Center, by working with other students and experienced staff, you will come to better understand the concepts covered in this class. The Mathematics Learning Center Schedule for the Fall Semester of 2009 is as follows:

Monday: 10:10 a.m. - 4:00 p.m. and 6:20 p.m. to 9:50 p.m.
Tuesday: 10:10 a.m. - 4:00 p.m. and 6:20 p.m. to 9:50 p.m.
Wednesday: 10:10 a.m. - 4:00 p.m. and 6:20 p.m. to 9:50 p.m.
Thursday: 10:10 a.m. - 4:00 p.m. and 6:20 p.m. to 9:50 p.m.
Friday: 10:10 a.m. - 1:40 p.m.
Sunday: 4:00 p.m. - 9:50 p.m.

You can find more information about the Mathematics Learning Center at the MSU Mathematics Department webpage for this center:

<http://www.math.msu.edu/CurrentStudents/LearningCenter/Default.aspx>

QUIZZES: A quiz will be given in each recitation section except on weeks when there is an hour test.

HOURLY TESTS: There will be 4 of these.

MAKE-UP TEST POLICY: Make-up hourly tests will only be given in case of a medical or emergency absence, and only with a written excuse from a doctor or other appropriate individual. Such exams are only given in extreme cases - which I consider to be sufficiently convincing and serious.

CALCULATORS: None will be allowed for the hourly tests or the final exam.

GRADES: Your course grade will be based on a total of 600 points – each hourly test will count 100 points – your lowest test score will be dropped, the final exam will count 200 points, and your quiz percentage will count 100 points. The grading scale will be:

90 – 100% : 4.0 83 – 89% : 3.5 75 – 82% : 3.0 68 – 74% : 2.5
60 – 67% : 2.0 55 – 59% : 1.5 50 – 54% : 1.0 0 – 49% : 0.0

(Divide total points by 6 to find this number.)

GRADE-CHANGE POLICY: If you have any questions regarding the grading of any of your examinations, you should return the examination to me before leaving the classroom and plan to speak with me about your concerns during my office hours. Otherwise, once your examination has left the classroom, no grading changes will be made.

ATTENDANCE: **Students are expected to attend all class meetings.** Any changes in this syllabus or in the scheduling of tests or quizzes will be announced during class meetings.

DETAILED COURSE OUTLINE AND HOMEWORK ASSIGNMENTS

(subject to minor changes):

	<i>Section</i>	<i>Homework Assignment</i>
Sep 2	12.1	9, 12, 14, 16, 18, 19, 23, 25, 26, 34, 38, 44, 46, 52
Sep 4	12.2	8, 9, 11, 13, 16, 17, 20, 23, 25, 26, 30, 33, 35, 41, 43, 47
Sep 9	12.3	5, 8, 9, 11, 13, 19, 21, 22, 29, 32, 43, 45
Sep 11	12.4	3, 8, 11, 13, 15, 17, 23, 25, 27, 28, 31, 33, 38, 42
Sep 14	12.5	3, 4, 5, 9, 10, 20, 23, 25, 26, 27, 29, 31
Sep 16	12.5	35, 37, 39, 42, 45, 47, 51, 53, 55, 57, 58, 61, 65, 66, 68, 69

Sep 18	12.6	1-11(odd), 17-27(odd), 33, 37, 47-75(every other odd)
Sep 21		Review for Hourly Test #1 on Chapter 12
Sep 23	13.1	1-11(odd), 14, 17, 23, 26, 27, 29, 32, 33, 35, 39, 41, 45
Sep 25	13.3	1, 3, 5, 8, 11, 13, 15
Sep 28	14.1	9, 12, 13-18(all), 22, 23, 26, 30, 31, 33, 35, 39, 41, 42, 45, 46
Sep 30	14.2	10, 11, 12, 17, 18, 24, 29, 30, 31, 32, 35, 37, 42, 45, 48, 50
Oct 2	14.3	7, 8, 11, 12, 13, 15, 16, 17, 19, 27, 29, 32, 43, 45, 46, 47, 49, 58, 63, 65, 68
Oct 5	14.4	3, 6, 7, 9, 11, 12, 15, 17, 18, 21, 24, 27, 28, 29, 31, 32, 35, 37, 38, 41, 47
Oct 7	14.5	1- 6, 7, 9, 11, 13 - 24
Oct 9	14.6	4, 5, 7, 9, 10, 13, 17
Oct 12	14.6	9, 22, 25, 28, 29, 33, 34, 39, 40, 43, 45
Oct 14	14.7	1, 3, 6, 17, 19, 26, 31, 37, 42, 46, 47
Oct 16	14.8	1, 3, 6, 17, 19, 22, 26, 31, 36, 37, 42
Oct 19		Review for Hourly Test #2 on Ch. 13 Sec. 1,3 and Ch. 14 Sec. 1-8
Oct 21	15.1	1-13(odd), 17-29(odd)
Oct 23	15.1	31-47(odd)
Oct 26	15.2	3,7, 11, 12, 21, 23, 24, 27, 32, 33, 35
Oct 28	15.3	4, 7, 10, 13, 15, 19, 22, 25, 27, 35, 36
Oct 30	15.4	1, 3, 5, 6, 9, 13, 15, 16, 21, 23, 24, 27, 28, 29, 31, 33, 34, 39, 41, 43
Nov 2	15.6	5, 7, 10, 13, 15, 16, 17
Nov 4	15.6	21, 23, 26, 29, 34, 35, 45, 49, 51, 52, 55, 56, 58, 61, 62
Nov 6	16.1	1-8(all), 11,13, 15, 21, 23, 26
Nov 9		Review for Hourly Test #3 covering Ch. 15
Nov 11	16.2	1, 3, 9, 13, 14, 19, 23, 29(a, b), 37, 39, 42
Nov 13	16.3	1-21(odd)
Nov 16	16.3	25-30, 31, 33, 34
Nov 18	16.4	7, 8, 11, 13, 15, 19, 20, 21, 23, 26, 29
Nov 20	16.5	1, 3, 5, 8, 9, 10, 11, 15, 17, 18
Nov 23,25	16.5	19, 21, 24, 25, 26, 29, 31, 33, 43
Nov 30	16.7	2, 5, 8, 11, 12, 19, 21, 22
Dec 2	16.8	5-11(odd), 14, 16
Dec 4	16.8	17, 21, 22, 23, 25, 26
Dec 7		Review for Hourly Test #4 covering Ch. 16
Dec 9, 11		Review
Dec 14		Final Exam 10:00 am – 12:00 noon