

1. **Lectures:** MWF CB 204, 8:00 - 8:50, by John Lewis

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- Email : john@ms.uky.edu
- Phone: 257-1153
- Office Hours: MW 9-11 AM in POT 765, F 3-4 PM in CB 65 (Mathskeller)
or by appointment

2. **Recitation**

- Section 001 and 002 by Sunil Nanwani
- Office: POT 706
- Email : snanwani@ms.uky.edu
- Phone: 257 - 6805
- Office Hours: To be announced

- Section 003 by Aekyoung Shin Kim
- Office: POT 806
- Email : akim@ms.uky.edu
- Phone: 257 - 6817
- Office Hours: To be announced

Section 001 meets on tuesday - thursday in CB 347 from 8:00 - 9:15 am

Section 002 meets on tuesday - thursday in FB 213 from 9:30 - 10:45 am

Section 003 meets on on tuesday - thursday in CB 337 from 3:30 to 4:45 pm.

3. **Course Book** The book we shall use for this course is entitled *Calculus - fifth edition - by James Stewart*. During the semester we will cover parts of:

- Chapter 7 Inverse Functions
- Chapter 8 Techniques of Integration
- Chapter 11 Parametric Equations and Polar Coordinates
- Chapter 12 Infinite Sequences and Series

Chapter 7 is concerned with defining and differentiating the inverse trigonometric functions, as well as exponential and logarithmic functions. Chapter 8 deals with integration techniques: integration by parts, partial fractions, and by trigonometric substitution. In Chapter 11 we study parametric equations and develop formulas for arclength and area of a region bounded by a parametric curve. Chapter 12 is concerned with convergence tests for series: integral, comparison, ratio, root, absolute and alternating tests. In this chapter we also study Taylor series and properties of power series.

Homework problems will be assigned in lecture, after each testing period. Homework assigned before test 1 is at the end of this syllabus. The homework consists of two types: (a) possible homework quiz questions, (b) additional problems. As regards (a) and (b), homework will not be collected, as due to budget cuts the department does not have money to hire paper graders. Instead each friday a homework quiz (beginning Friday September 1) will be given in class,

except on the weeks in which we have a test. The quiz will consist of several problems from (a) (your assigned homework). If you have already done the problem, you may copy it from your homework onto the quiz sheet. The quiz will be graded by the recitation instructor and returned the following tuesday. Homework from (b) may be used for tests and also by the recitation instructor for examples. In general the recitation instructor will work some but not all of your assigned homework in class. The recitation instructor may also give quizzes, collect homework, or ask members of the class to put some of the problems in (a) or (b) on the blackboard. Some recitations he/she may choose to explain problems on the blackboard while other recitations he/she may ask students to work in groups and visit each group individually. Part of each student's grade will be based on his/her performance in recitation (class participation, attendance, scores on homework, quizzes, etc) (see Grades).

4. **Tests:** There will be three examinations during the semester and a final examination. All tests will be at night as follows:

- (a) First Test: Tuesday September 19, 7:30 - 9:30 pm
- (b) Second Test: Tuesday October 17, 7:30 - 9:30 pm
- (c) Third Test: Tuesday November 14, 7:30 - 9:30 pm
- (d) Final Test: Friday December 15, 8 - 10 am.

You should make sure you have these times available.

All tests during the regular semester will be in Memorial Auditorium (MEH AUD 705). We will be taking the test with all the other sections of MA 114. So make sure you get my test, as each instructor will be giving a different test. The final test will be in our regular classroom, CB 204. There will be no class on wednesday, the day after the first two night exams. We will have class on the wednesday after the third exam in order that we do not have to have class on November 22.

5. **Grades:** Points for your grades will be based on :

- Hour Tests = 300
- Final Test = 125
- Recitation Grade = 75.

At the end of the semester each students points will be added and his/her percentage of the total points will be calculated. You are guaranteed that if your percentage is the university standard, then you will get at least that grade:

- 90 - 100 percent = A
- 80 - 89 percent = B
- 70 - 79 percent = C
- 60 - 69 percent = D
- 0 - 59 percent = E.

However there may also be a slight curve given after the percentages are figured.

6. **Cheating:** You know what cheating is, DON'T. The work on the three tests and final must be independent. The University's minimum penalty for cheating is failure in the course. Cheating in mathematics is easy to detect and easy to prove. More to the point, your integrity is far more important than a good Calculus 2 grade.

7. **Calculators:** Graphing calculators such as the TI-82, 86 are not absolutely necessary but are strongly recommended for this course. Calculators which have a keyboard and are capable of doing symbolic manipulation are not allowed on exams.
8. **MA 194:** You should sign up for MA 194 sections 001 - 003 (your section number should be the same as for MA 114). Please check the section numbers carefully on your course enrollment sheet. MA 194 is worth one hour of pass-fail credit.
9. **Important Dates**
- Monday, September 4 Labor Day, no school
 - Friday, October 6 Fall Break, no school
 - Friday October 20 Last day to drop without a grade.
 - November 23-25 Thanksgiving holiday. No school .
 - Friday December 8 Last day of class during the semester.
10. **Online Support** A copy of this syllabus along with future review sheets for tests may be found under MA 114 at <http://www.ms.uky.edu/~john/index.html>
11. **Questions or Complaints about MA 114**
- First see the recitation instructor or me
 - Second see the mathematics department ombudsman
 - Third see the university ombudsman

Homework

- Section 5.5 (page 365) (possible HW quiz questions) 3,7,19,23,31,35,41, 43.
- Section 7.1 (page 420) (possible HW quiz questions) 6,12,14, 26,30,42.
- Section 7.1 (page 420) (additional problems) 7,11,13,19,21,27,29,37,39.
- Section 7.2* (page 458) (possible HW quiz questions) 8,12,16,20,26,38,56,64,68.
- Section 7.2* (page 458) (additional problems) 1,7,15,23,29,35,43,57,63,71,75.
- Section 7.3* (page 465) (possible HW quiz questions) 4,10,12,14,22,28,38,40,46,50.
- Section 7.3* (page 465) (additional problems) 3,7,11,15,17,21,27,31,39,47,51.
- Section 7.4* (page 475) (possible HW quiz questions) 4,10,24,30,38,42,44,48.
- Section 7.4* (page 475) (additional problems) 5,9,13,17,21,27,39,43,51.
- Section 7.5 (page 483) (possible HW quiz questions) 4,6,14,16,22,26,32,36,44,50,58,64,70,76.
- Section 7.5 (page 483) (additional problems) 1,7,15,23,29,37,43,49,53,59,63,65, 69,73.
- Section 7.7 (page 501) (possible HW quiz questions) 12, 14, 16,26,38,44,50,54,58,60,88,90.
- Section 7.7 (page 501) (additional problems) 13,17,23,29,33,39,49,55,61,81,83,89.
- Section 8.1 (page 516) (possible HW quiz questions) 6,10,16,20,22,26,36,42,50.
- Section 8.1 (page 516) (additional problems) 1,5,9,13,17,21,31,33,43, 47,57,63.
- Section 8.2 (page 524) (possible HW quiz questions) 6,8,14,22,28,32,34,38,44.
- Section 8.2 (page 524) (additional problems) 5,9,13,19,25,31,39,45.