

Notice Concerning the Honors Sequence  
MATH 20700-20800-20900  
2012-2013 Academic Year

During the 2012-2013 academic year, the Honors Analysis sequence Math 20700-20800-20900 (an honors version of the sequence Math 20300-20400-20500) will again be made available to one section of truly outstanding sophomores and exceptional freshmen. Any student may apply for admission, but admission is by invitation only. Each course in the sequence will be offered in the MWF 10:30 time slot.

Math 20700-20800-20900 is conducted at a level that is equivalent to a graduate course at most universities. The material covered includes metric spaces, normed linear spaces, the Lebesgue integral and the many related convergence theorems, differential calculus in Euclidean space, functions of a complex variable, Fourier series and integrals, calculus on manifolds, and other topics. In this course, the student will:

1. Learn about all the basic structures that play a role in mathematics.
2. Learn to prove difficult theorems (especially in Analysis).
3. Learn to work on complicated problems, some of which may take weeks to solve (and perhaps several hours to understand completely).
4. Learn to spend 25 hours or more per week outside the classroom doing serious mathematics.
5. Learn to investigate a variety of mathematical ideas not necessarily related to the material covered in class.

Problem sessions are held weekly, and students are encouraged to participate actively both in class and in problem sessions. Math 20700-20800-20900 is designed to provide a solid foundation for further study in mathematics. These courses are intended for serious students with an interest in analysis and a capacity for sustained effort. To be eligible, a student must:

- earn an A in each of Math 16100-16200-16300 during 2011-12 (possibly including one or two grades of A-); and
- have a strongly affirmative recommendation of his or her Math 16300 instructor.

Any student who thinks he or she will be eligible for honors Math 20700-20800-20900 by September 2012 and who wishes to be considered for admission should submit an application form to Stephanie Walthes in Eckhart 211 while undertaking his or her advanced registration for Autumn 2012. We will e-mail all applicants of their admission status in Summer 2012. Students seeking additional information about Math 20700-20800-20900 should consult John Boller in Ry 354, Diane Herrmann in Eckhart 212 or Paul Sally in Ryerson 351. The **one page** application is due no later than Friday, June 1. Return applications to E 211.

APPLICATION FOR ADMISSION TO THE HONORS SEQUENCE  
MATH 20700-20800-20900

Your name (print clearly): \_\_\_\_\_

Your e-mail address: \_\_\_\_\_

Your student ID Number: \_\_\_\_\_

Give the final grade and the name of the instructor in the appropriate blanks following  
(if you're still taking the course, give just the instructor's name):

Math 16100 Instructor: \_\_\_\_\_ Grade: \_\_\_\_\_

Math 16200 Instructor: \_\_\_\_\_ Grade: \_\_\_\_\_

Math 16300 Instructor: \_\_\_\_\_

Who is your College Adviser? \_\_\_\_\_

What is likely to be your major field of study? \_\_\_\_\_

What courses besides mathematics courses do you expect to take in Autumn 2012?

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\_\_\_\_\_

Note: Applicants should select Math 20300, section 31 or 41, as their analysis course for Autumn 2011 during pre-registration. Applicants admitted to the honors sequence Math 20700-20800-20900 in Autumn 2011 will receive an e-mail in summer admitting them to the sequence and John Boller or Diane Herrmann will add these admitted students to Math 20700. Others may remain in Math 20300 (31) or (41) or can be added to one of the other sections of Math 20300; students will be asked to select a particular section of Math 20300 in an e-mail in August.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Return this sheet to Stephanie Walthes in E211 by Friday, June 1.