Math 480 – Senior Seminar – Syllabus
Spring 2014

MW – 1:30-12:20 – KELL 404

1 Professor and contact information

Professor: David Ross
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Course Website: www.math.hawaii.edu/~ross/480.htm
Professor Website: www.math.hawaii.edu/~ross
Office Hours:
Walk-in:
MW 11:30-12:20
W 2:30-3:20 (starting in February).
Other times by prior appointment. See website for updates.

2 Course Description

Math 480 is a seminar for senior mathematics majors. Among its objectives are:

1. Reviewing and unifying the mathematics studied as part of the undergraduate program

2. Experience in independent reading in/learning of ‘new’ mathematics

3. Learning some tools of mathematical exposition, including LaTeX

4. Practicing written and oral exposition of mathematics
The official syllabus is available here:


Operationally, this course provides a capstone for your undergraduate experience, and an assessment tool for our program. Beyond that, it satisfies the General Education 'O' (=oral) focus requirement, so there is some emphasis on oral presentation.

Text: there is no text. There will be some assigned readings.

Attendance: Mandatory. Participation is a large part of the class, not showing up would be unfair to the rest of the students. If for any reason you will be unable to attend class, please arrange with me in advance for an excused absence. Unexcused absences are not permitted, and more than 2 excused absences need to be made up (by arrangement with me).

3 Grades:

Math 480 is graded on a CR/NC basis. Grades will be determined by the assessment of the students performance in the course, based on attendance, quality of the presentations, the final project, and the completion of all three parts of the Mathematics Department Assessment Exam.

The following are all essential requirements of the class. Missing any of them will be an automatic grade of "NC":

- 3-5 “small presentations” (such as presentation of solutions of homework problems)
- A final project, consisting of a 15-20 minute presentation and a 3-5 page write-up of that presentation.
- Attendance at all special lectures (such as “undergraduate colloquia”) that are assigned
- Taking the Assessment Exam.

4 Coverage

There are essentially four components to the class:

35% Review of basic college math (Calc, ODEs, Linear Algebra) and of proof techniques

20% Some new math (eg transfinite induction, Gödel’s theorem, fractals - depends on time and interest)

10% Math in society

35% Your presentations