Math 896-002 - Mathematical Landscapes Seminar **Spring 2009**

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You are welcome to drop by outside of office hours although I may be busy (in which case we can make an appointment), or out of the office (leave a message, preferably using email).

Course Summary The purposes of this course are:

1. to introduce you to the range of mathematical research done in the department and how these areas fit into the broad context of research and teaching in mathematics;
2. to provide perspective on career issues, how the graduate program works, and graduate students' responsibilities;
3. to discuss issues of importance to participants in an informal setting, to meet other students and faculty, and to encourage a sense of collegiality.

The formal component of the course is a one-hour seminar each week. Most seminars will be presentations by department faculty, introducing their research area in broad terms and giving a sense of what that part of the "mathematical landscape" is like. There will be a few talks with a different focus, as time permits.

Grading Participants are expected to actively participate in the seminar, i.e., to attend the seminar and, from time to time, to prepare questions for the speakers. Those who do this can expect to get an A.

Schedule The definitive schedule, with abstracts, will be kept on the course webpage. The schedule for the first few weeks is:

Date	Speaker	Approximate Subject
Jan 12	Allan Donsig	Introduction
Jan 19	Martin Luther King, Jr Day	
Jan 26	Graduate Student Panel	Advising - A Student Perspective
Feb 2	Al Peterson	
Feb 9	Jamie Radcliffe	

Department Grading Appeals Policy The Department of Mathematics and Statistics does not tolerate discrimination or harassment on the basis of race, gender, religion, or sexual orientation. If you believe you have been subject to such discrimination or harassment, in this or any other math course, please contact the department. If, for this or any other reason, you believe your grade was assigned incorrectly or capriciously, then appeals may be made to (in order) the instructor, the department chair, the department grading appeals committee, the college grading appeals committee, and the university grading appeals committee.

Reading Material The following idiosyncratic list is of books (and one journal) on mathematics, mathematicians, or the culture of mathematics that have entertained and enlightened me. You are not required to read them, but they may help you in surveying the mathematical landscape.

- The Nature and Growth of Modern Mathematics, Edna E. Kramer, Hawthorn Books, 1970.
- The World of Mathematics (4 vols), Edited by James R. Newman, Simon and Schuster, 1956.
- Proofs and Refutations : The Logic of Mathematical Discovery, Imre Lakatos, Cambridge University Press, 1970.
- How to Solve It : A New Aspect of Mathematical Method (2nd Ed.), G. Polya, Princeton University Press, 1957.
- A Mathematician's Survival Guide, Steven G. Krantz, American Mathematical Society, 2003.
- Handbook of Writing for the Mathematical Sciences (2nd Ed.) , Nicholas J. Higham Society for Industrial and Applied Mathematics, 1998.
- The Way I Remember It, Walter Rudin, American Mathematical Society, 1996.
- Hilbert-Courant, Constance Reid, Springer-Verlag, 1986.
- Letters to a Young Mathematician, Ian Stewart, Basic Books, 2006.
- A Mathematician's Apology, G. H. Hardy, Cambridge University Press, 1940.
- The Pleasures of Counting, T.W. Körner, Cambridge University Press, 1996.
- The Mathematical Intelligencer, Springer-Verlag. (This is a journal; the math library has a subscription.)
- Women Becoming Mathematicians: Creating a Professional Identity in Post-World War II America, Margaret A. M. Murray, The MIT Press, 2000.