

MA 108: Mathematics as a Profession and a Discipline

Fall 2009

Lawson B155 Thursdays 3:30-4:20 pm

Each week an invited speaker gives a talk about the mathematician's role in his/her profession and how mathematics is used in her/his work. Attendance is required. You are also required to write a 200-300 word paper on each presentation. Your course grade is determined by the average of the grades on each of these papers, with the cutoff being 90-80-70-60 for the A, B, C, D respectively. If you miss a given presentation, you will receive a 0 for that presentation, regardless of whether or not you submit a paper. The lowest grade will be dropped, meaning that in effect, you are allowed one unexcused absence. **Any additional excused absences require documentation, preferably ahead of time.**

I am especially interested to your reactions to these presentations. What did you learn? Did it change your plans in any way? What did you not find out that you would have liked to know? That would be more interesting to me (and perhaps you, I hope!) than just reading a dry summary of what was presented.

- **Please use the blackboard.purdue.edu path to submit your comments.** This is a very large class, and reading over 70 pages a week will already take a lot of time, so your cooperation is greatly appreciated!

Since a primary purpose of the course is to acquaint you with the modern world of mathematics, please feel free to contact me, David Drasin (drasin@math.purdue.edu; (49)4-1974).

I will keep this page current as we assign more speakers and activities. Please feel free to offer suggestions as well.

David Drasin

MA 622

September 10, 2009

COURSE SCHEDULE (often updated)

Date	Speaker
27 August	Initial meeting
3 September	Dean Harshvardan, Michael Bittinger: Study Abroad
10 September	<p>Prof. Carl Cowen "Why should YOU major in Math or Stat at Purdue?"</p> <p>A discussion of opportunities for careers connected to the mathematical sciences will be presented. References to websites and other sources for further investigation will be included as well as a chance for questions.</p> <p>Prof. Cowen is a past president of the Mathematical Association of America, emeritus in the Purdue Mathematics Department and former Head of the Department. He is currently on the mathematics faculty at IUPUI, and he has won several teaching awards.</p>
17 September	<p>Reception in lobby of Lawson building; meet some faculty, advisers, and other math majors (who might not be in our class)</p> <p>However, there is also an ASSIGNMENT. I would like you to look on the web sites of other mathematics departments (choose your favorite university) or organizations [the American Mathematical Society –ams.org—the Mathematical Association of America –maa.org—the Society of Industrial and Applied Mathematics –siam.org – or actuary societies, newspapers: you choose. Include in your report a link you used, and tell me of some application or career possibility in mathematics which you discovered this way.</p>
24 September	Prof. Greg Buzzard, Math Biology
1 October	Prof. M DeHoop, Center for Applied Mathematics
8 October	Prof. A. Gabrielov, earth sciences
15 October	<p>Donna Osborn (teaching): Teaching Mathematics can be a life-changing experience for both student and teacher. Donna Osborn taught mathematics for 34 years in Lafayette, Indiana; Paris, France; Billerica, England; and Hong Kong, China.</p>
22 October	Prof. Jose Figuera-Lopez (Mathematical Finance)
29 October	Plans for spring semester/registration: C. Furtner, S. Dunderman
5 November	Raytheon (industry connection)
19 November	Dongbin Xiu (applied mathematics)
3 December	Prof. Victor Raskin (Mathematics Linguistics)
10 December	Final meeting.