## The Edge of Reason TTh 11:00 – 12:20

## Bill Goldbloom Bloch

DDS Discovery Center 2360

*Office Hours:* M 1:30 – 2:20

T 1:30 – 2:20 W 1:30 – 2:20

by appointment: call x3972 or email me (preferred)

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*Prerequisites* Intellectual passion. Boundless curiosity. Capacity for awe and wonderment. Desire to learn. A big mouth. The willingness to make a fool of yourself in public.

Two Principles First, your learning is in your head, not mine: You are responsible for your own education. (This is a liberating principle.) **Second**, learning is a continuum that starts before class with the readings, is enhanced by class interactions, and spirals into the future with Homework, Discussions with Friends and Classmates, Papers, and Late Night Musings.

## Course Objectives

- Realize that mathematics is the oldest, most elegant ongoing scientific, artistic and intellectual project created by humans. (Language is a close second!)
- Construct a new cognitive framework to organize reality.
- Solve challenging and nifty theoretical problems.
- Experience how the World of Ideas and the World of Literature coil around each other.
- Have fun as you grow in moral and intellectual stature.
- Transfiguration and epiphany.

*Books* Beyond the almost-award-winning book I wrote that grew out of this course, there is no formal textbook for this course. There will also be a 'book' comprised of a number of handouts written by me that cover material germane to what we will be talking about in class. In addition, there are also a number of short stories we'll read; there are an abundance of ways to get those books in different formats.

*Exams* There will be an epic finale the week of December 11. The format is as yet undetermined, but it will consist in part of problems solved by groups who will then explain and defend their solutions.

Homework There will be math-problem homework assignments over the course of the semester. They may be hard; I encourage you to work together and, in fact, I encourage you to hand these assignments in jointly, with a maximum homework group size of three people. Moreover, there will be weekly (at least) short writings. **There is no such thing as 'late homework.'** 

*Grading Policy* Your grade will be based on adding up points from your homework and the grouped epic finale, plus somewhat—as yet, undetermined—on the writings. Attendance is vital. Unexcused absences will almost certainly have a depressing (in multiple senses of the word) effect on your grade for the course.

*Extra points* You may earn extra math points in the following fashion: 3 points for catching me in a math or spelling error while I'm at the blackboard. No points are given for omitted or incorrect punctuation marks. Also, classroom participation will only raise my opinion of you, which can affect your grade, so ask and answer questions.

Honor Code Violations Over the years, I have caught many violations of the Honor Code. The punishment tends to be much worse than the grade received for handing in a bad assignment or test. There has been a surge of cheating incidents in the past few years, and when we uncover them, we respond mercilessly. Your first assignment is reading the Wheaton Honor Code and related materials, then sending me a note acknowledging having read them. Finally, as per student intiative, for all course work, students must write and sign the following: "I have abided by the Wheaton College Honor Code in this work."