## **Math 301 – Real Analysis** MWF 10:30 – 11:20

DDS Discovery Center 1313

## Bill Goldbloom Bloch

DDS Discovery Center 1307 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) email: bbloch@wheatoncollege.edu website: bbloch.webspace.wheatoncollege.edu/

*Prerequisites* **Mathematical maturity**. A good sense of humor. Dedication and concentration. The desire to learn. Ideas from a number of other math courses will arise. The text for the course is *Real Mathematical Analysis*, 2nd edition, by Charles Chapman Pugh. I expect at least 7-9 hours of work from you outside of class every week. Math is an inverted pyramid, and if you do not work hard to keep on top of the material, it will crush you. Or impale you. Or at least make you stressed and unhappy.

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

*Course Objectives* By the end of the course, you will have seen a sampling of the history and power of beautiful, fascinating, and cutting edge math. You will be in awe. You will be in a state of religous mystification and ecstasy. You may well be able to apply these visions to the world around you.

*Homework, Quizzes, etc.* There will be a total of 12 homework assignments over the course of the semester, and your two lowest scores will be dropped. They will be hard. You may work together and even hand them in jointly! (Unless I change my mind.) The homework is normally due at 11:59pm, Eastern Time Zone, on days marked on the schedule. (I won't check until the next morning.) **There is no such thing as 'late homework.'** If people straggling in late begins to annoy me, there will be quizzes. Also: no phones. Really.

*Exams* There will be a midterm and a final. Both exams will be take-home. Both exams will have an oral component. Make-up exams require documentation of extraordinary circumstances.

*Grading Policy* Each homework will be graded 0-10, for a total of 100 possible points. Each exam will be graded 0-80, with the oral component being worth 20 points (I haven't worked out these details, yet). At the end of the term, your total number of points (out of 300) will be added together to give your final grade. **Note**: All points are the same; 'exam points' don't count differently than 'homework points.'

It's important to note that this schema does not guarantee that 270 points and above guarantees an A: I usually curve the grades, but that's no guarantee for the future. Extra points can be earned in the following fashion: 3 points for catching me in a mathematical or spelling error while I'm using the blackboard; and 5 points for coming to office hours (points given only on first visit). Also, attendance and classroom participation will only raise my opinion of you, which can raise your grade, so ask and answer questions. If you wish to argue about points assigned, you must do it within a week of the return of the work in question. Furthermore, I reserve the right to *lower* your points if I think you are merely haggling.

*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 initiative, for all course work, students must write and sign the following: "I have abided by the Wheaton College Honor Code in this work."

Your first homework assignment involves the Honor Code.