Instructor: Katie Mawhinney  
Office: Walker 340  
Office Hours: Monday 9-10 and 11-1, Wednesday and Friday 11-11, Tuesday 12-2 and 3-4, or by appointment  
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Text: Advanced Calculus, A Friendly Approach; Kosmala  

The Course: MAT 3220 is a course with many goals, including understanding calculus concepts, practicing different proof strategies, and practicing reading and writing mathematics. The main goal is to study the foundations of Calculus and to make the definitions and concepts more precise than what is traditionally taught at the beginning calculus level.  

Topics: We will cover some of Chapter 1, but spend most of our time in Chapters 2, 3, 4, and 5 (if time permits). Topics will include:  
1. Sets, induction, proof techniques  
2. Convergence and limits of sequences  
3. Limits of functions  
4. Continuity of functions  
5. Derivatives of functions  

Writing Component: As this is a writing course, there will be quite a bit of writing and revising. Writing good proofs is very difficult and takes quite a bit of practice. Many of the difficulties that one finds in writing good proofs (audience, organization, level of detail, what to include and not to include) are problems that come up in all writing and it is conceivable that this course will help you write better in general.  

Tentative Test Dates: Wednesday, Feb. 11  
Friday, March 19  
Friday, April 23  

Final Exam: Friday, April 30, Noon-2:30  

Grades: Tests 60%  
Final 20%  
Homeworks and Quizzes 20%  
LATE HOMEWORK is accepted one class period late and graded at 80%. NO OTHER LATE WORK IS ACCEPTED. Missed assignments or tests will be excused (made-up) with an accepted university, written excuse.
**Grading Scale:** 100-91 A, 90 or 89A-
88 or 87 B+, 86-80 B, 79 or 78 B-
77 or 76 C+, 75-68 C, 67 or 66 C-
and 65 or lower F.

**Expectations:** Attendance to class is required. Your name on each assignment is your guarantee that you adhered to the Academic Integrity Code, found within the Code of Student Conduct and Academic Integrity. Homework that is copied from a classmate is a violation of that code. I expect that you will come to class prepared, participate in class, read the text, and ask for any clarification on topics unclear to you.