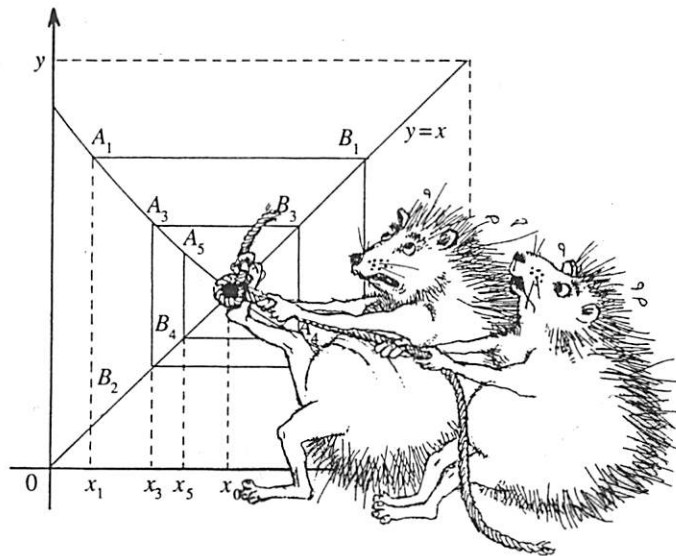


# Mathematics 132

## Mathematical Analysis II



**Time and Place:** T & Th 12:00- 1:10 pm, Davidson Lecture Hall, Spring 2013

**Instructor:** Asuman Guven Aksoy, [www.asumanaksoy.com](http://www.asumanaksoy.com)

**Office:** Adams 215, Campus x72769 Off-Campus: dial 607-2769

**Email:** [aaksoy@cmc.edu](mailto:aaksoy@cmc.edu)

**Text:** *Elementary Classical Analysis, Second Edition by Marsden and Hoffman*

**Course Description:**

Possible topics include, Uniform convergence and integration and differentiation of series, the space of continuous functions and Arzela-Ascoli Theorem, Contraction mapping theorem and its applications, the Stone-Weierstrass Theorem, differentiable mappings the inverse and implicit function theorems and related results. Integrable functions and Lebesgue's theorem. Fubini's theorem and the change of variables formula. Fourier Analysis and if time differential forms.

**References:**

George F. Simmons, *Introduction to Topology and Modern Analysis*

B. R. Gelbaum and J. M. H. Olmsted, *Counterexamples in Analysis*

M. Spivak, *Calculus on Manifolds*

S. Lang, *Undergraduate Analysis*

W. Rudin, *Principles of Mathematical Analysis*

D. Brossoud, *A Radical Approach to Real Analysis*

**Exams and Homework**

2 Midterms Exams on February 28<sup>th</sup> and April 18<sup>th</sup>.

Weekly homework (10-15 questions), generally due on Thursday

Comprehensive Final Exam Friday, May 16<sup>th</sup> at 7:00 pm

There will be **NO** make-ups for any exams unless there is a very good reason.

**Grading Scheme:**

Final grade is computed as follows:

Homework 20%, Quizzes 10%, Midterm I 20%, Midterm II 20%, Final Exam 30%.

**Homework Grader:**

Sixian Jin (CGU), [jsxjsx12345@hotmail.com](mailto:jsxjsx12345@hotmail.com)

**Tutoring:**

Tutoring will be held in the Math Commons Room, located at 209 Adams Hall CMC.

Jennifer Thompson (CGU), [jennifer.thompson@cgu.edu](mailto:jennifer.thompson@cgu.edu)

Monday and Wednesday from 8:00-9:30 pm