

## **Math 421: The Theory of Single Variable Calculus**

**Instructor:** Minh-Binh Tran

- Office: 803VV
- email: mtran23@wisc.edu
- WWW home page: <http://minhbinhtran.org/> (with homework and exam information)
- Class 1 Schedule TuTh 11:00SA - 12:15CH. Room VAN HISE 115
- Class 2 Schedule TuTh 2:30CH - 3:45CH. Room VAN VLECK B115

**Office hours:**

- Tuesday 17:00PM - 18:00PM. Thursday 17:00PM - 18:00PM.

**Textbook:**

- Michael Spivak: Calculus (4th edition).
- ISBN: 9780914098911.
- The text is also available on reserve through the UW libraries.

**Lecture Notes:** Slides of the course will be available on my website.

**Course website:** Available through <http://minhbinhtran.org/teaching/>

**Overview of course goals:** This course covers material in first and second semester calculus but it is intended to teach math majors to write and understand proofs in mathematics in general and in calculus in particular.

**Homework:**

- There will be 10 homeworks.
- The lowest homework score will be dropped.
- Homework is assigned weekly on Tuesday and collected at the beginning of lecture the following Tuesday.
- Rules for homework submission: All homework should be written clearly.
  - You are required to prepare your homework assignments on your own (but are allowed to work on the problems with others). Writings up the solution on your own is a way to ensure you understand all of the relevant concepts completely.
  - All homework should be submitted in hard copy before the start of lecture on the day it is due (hand in to me or slide under the door of my

office).

- Consulting solutions from prior years or using collections of solutions found on the internet is not allowed in the course.
- No credit for copied or unexcused late homework. Valid excuses for late homework are illness or family emergency.

**Exams:**

- Two in-class midterms (Feb 27 and April 3) and a final exam (7/5/2018, Monday 12:25CH - 2:25CH for class 1 and 10/5/2018, Thursday 10:05SA - 12:05CH for class 2)
- Makeup exams will be scheduled only with the instructor's consent, and only in case of illness, family emergency, or conflict with a class requiring your attendance.
- No books, notes or electronic devices will be allowed during the exams.

**Syllabus:** We will cover chapters 1-14 of the book, as well as chapters 15, 18 and 20 as time permits. The final exam will cover mostly the first 14 chapters.

**Grades:** Based 20% on homework, 20% on each of the two midterm exams, and 40% on the final exam.

**McBurney center:** Students with a McBurney visa should contact me as soon as possible so that we can discuss arrangements to fit your needs.