**Lecturer:** Athipat Thamrongthanyalak

**Office:** MW714  
**OH:** MWF 8:00 to 9:00


**Grading:** Homework and Quizzes (100 points); First Midterm Exam (100 points); Second Midterm Exam (100 points); Final Exam (400 points). I will calculate your final grades as follows: first, I assign a letter grade based on your total scores accumulated during the semester (homework+quizzes+midterms+final), and, independently, another letter grade based on only the final; then I take the better one.

**General Remarks:**

The main goal of this course is to help you to learn to read and write mathematical proofs. In class we will work on a lot of proofs and I will guide you on how to read and systematize you arguments; however, to learn and understand the material, you need to practice and write your own proofs. The main purpose of homework assignments is to help you through this.

To write proofs, there are several concerns that you need to keep in mind. First, don’t think of me as your audience and assume that I would know what you are trying to imply. Your proofs should be able to understand by anyone who is not familiar with the material and can learn from them. Next, you need to know definitions of the terms that are used in the statements you are trying to prove (or disprove). At the beginning, I recommend that
you should learn and remember the definitions word for word. In many cases, even a minor change can completely change the meaning of the definitions.

I will focus on your writing. When you write up your homework, you need to use complete sentences, (sentence fragments don’t belong in the final version of your work,) and write in paragraph (do not use bullet-point writing.) Use only notations that we use in class (or in the textbook). Other symbols will be treated as unreadable so it will be ignored. In addition, please sure to read the

Since we will start everything from scratch, we will try to take a fewest facts for granted. Here are some facts that you are allowed to use at the beginning of this course:

- basic arithmetic.
- $0 < 1$.
- the sum of two integers is an integer.
- the sum of two real numbers is a real number.

All problems in the homework “seems” super easy; however, most of the time when you start learning to write mathematical proofs, it is not easy to give precise solutions. So I strongly recommend that you should start your homework early and try to write down your solutions.

**Academic Misconduct Statement**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct.
The term academic misconduct includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7). For additional information, see the Code of Student Conduct at http://studentlife.osu.edu/csc/.

Disability Services Statement

Students with disabilities that have been certified by Student Life Disabilities Services (SLDS) will be appropriately accommodated and should inform the instructor as soon as possible of their needs. SLDS contact information: slds@osu.edu; 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.