

MTH 125-201: Mathematical Thinking (CT)
Spring 2015

Instructor: Stacy Scudder

Meeting Times: MWF 12:00 p.m. – 12:50 p.m.

Classroom: SH 513

Office: SH 743F

Phone: 304-696-3035

Office Hours: MWF 8:30 a.m. – 8:50 a.m. & 11:00 a.m. – 11:50 a.m.

Monday 2:00 p.m. – 3:00 p.m.

Wednesday 2:00 p.m. – 4:00 p.m.

Other hours by appointment

Email: scudder@marshall.edu

Instructor Contact & Feedback

The best way to contact me is through email. I usually respond within a few hours, although this isn't always possible. I also try to leave Blackboard IM running when I'm home. You may call my office, but make sure you leave a message if I'm not available. The voicemail messages get emailed to me so I may respond by either method – most likely through email.

I expect you to participate in class by joining the discussion, answering questions or asking questions. If you aren't comfortable asking questions in class, you can email me or drop by my office. The only stupid questions are the ones you never ask!

I will do my best to get work back to you within 2 classes of the due date.

University Policies:

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Textbook

Math in Our World, 2nd Edition by Sobecki. ISBN: 9780077356651

Calculator

A graphing calculator is suggested.

MUOnline

Although this isn't an online class, I will use MUOnline to post material throughout the semester. Homework problems are all online. Practice exams will be posted at least one week prior to the exams. In-class worksheets will also be posted the day they are done in class. I post the section(s) covered in class, any textbook homework, and any other relevant information in the calendar.

If you have to miss class, you need to check the calendar entry so you don't fall behind. There will also be other resources (videos, links to websites, etc.) posted in the resources link. I try to keep the grades up to date online when possible, but you're always welcome to come to my office for an update.

Tech support information is listed on the New and Due page of the class website. You can also ask me for help, but I don't always guarantee I can answer your question.

Course Description

A critical thinking class for non-majors that develops quantitative reasoning skills. Class includes topics in elementary finite mathematics; sets, counting, probability and statistics, matrices and linear equations.

PR: MTH 099 or Math ACT 19 or better

Course Objectives

- To form a basis for developing critical thinking skills in the context of mathematics.
- To attain a better understanding of several rich mathematical ideas as well as the times and creators of those ideas.
- To discover the power of mathematical and abstract thinking in everyday life that will change our view of the world.
- To be able to communicate mathematical and abstract concepts effectively.

Attendance

Your success in this class is directly related to your own efforts. You will be more likely to succeed if you attend class each day and come prepared to contribute. Students are expected to attend and participate in each class; however, attendance will not be counted towards your final grade.

Math Lab

There is a math lab located in SH 115 for anyone who needs more help in this, or any math class. I highly recommend you take full advantage of this service as much as possible, not just before exams.

Learning Outcomes

- Students should develop rigorous thinking skills and an ability to analyze and assess information;
- Students should be able to display skill in asking essential questions, questions that enable them to analyze and assess the thinking of others as well as their own thinking;
- Students should have a strong number sense and be proficient in estimation;
- Students should be able to communicate intelligently about mathematics;
- Students should be familiar with basic uses of mathematics in art, especially the golden rectangle and fractals;
- Students should have a familiarity with spatial geometry, the fourth dimension, and rubber sheet geometry;
- Students should understand how repeated simple processes can result in chaos.
- Students should be able to demonstrate that mathematics is a product of human endeavors by citing its history and discussing several main contributors and their contributions.

Cell Phone and Electronics

The classroom is a learning environment and I do not feel students are able to learn while being distracted. Therefore, all cell phones are to be turned off or set to vibrate. Texting is not permitted during class. If you are seen texting in class, you will be asked to leave. Furthermore, you are not allowed to have any electronic devices I feel may distract you or other students from the material being presented (i.e. MP3 players, laptops, tablets, etc...). If you are found to be operating any of these devices in an inappropriate way, you will be asked to leave.

Homework

Homework exercises may show up on quizzes or exams, so it is in your best interest to understand how to work them. We will go over a few homework problems you have questions about at the beginning of class. You may also ask me after class or during office hours about a particular problem.

Exams

There will be a total of four exams including the final. Exams may consist of multiple choice, matching, short computational problems, essays, and comprehensive problems. Exams must be taken at the scheduled times unless advance arrangements have been made with me. Failure to follow this policy will result in a zero for the exam. If you are absent the day of an exam, you will only be allowed to take a make-up exam after presenting me with a university excused absence.

Grading Scale

Your final grade will be based on the total points possible for the class based on assignments, quizzes and exams. To determine your score at any time during the semester:

- 1.) Add up all your points
- 2.) Add up the total possible points
- 3.) Divide your points by the total points and multiply it by 100

For example, suppose you have 250 points and there are 295 points possible.

$$250 / 295 = .8475 \times 100 = 84.75\%$$

The percentage ranges and corresponding letter grades are as follows

- A 90% - 100%
- B 80% - 89%
- C 70% - 79%
- D 60% - 69%
- F 0% - 59%

I will try to keep the grades up to date on MUOnline, but you're always welcome to come to my office to see your current grade. I can't email grades so please don't ask.

Academic Dishonesty

Cheating is taken very seriously in this class. If you are caught cheating on a quiz, you will be issued ONE warning. After that, you will be asked to leave and will receive a failing grade for the class. There will be NO warnings if you're caught cheating on an exam. The first instance of confirmed cheating will result in a failure for the class, not just the exam.

Gear Upload:

This is a CT course and requires an upload to Gear. You will be assigned a project to upload and instructions will be provided on the MUonline website and during class.

Important Dates:

January 19, Monday
Martin Luther King, Jr. Holiday – no classes

March 9, Monday
Deadline for Submitting Freshmen Mid-Term Grades

March 15 – 22, Sunday - Sunday
Spring Break

March 27, Friday
Last Day to Drop a Full Semester Individual Course

April 14, Tuesday
Assessment Day – no classes

May 1, Friday
Last Class Day and Last Day to Completely Withdraw for Fall Semester

FINAL EXAM
Friday, May 8th from 10:15 a.m. until 12:15 p.m.