

Syllabus
Three Rivers Community College
MAT 146 – Math for Liberal Arts
Fall 2017

INTRODUCTION

Welcome to MAT 146! MAT 146 is your opportunity to explore mathematics that is interesting, beautiful, fun, and powerful. We will investigate applications from the following topics: voting theory, apportionment, graph theory, financial mathematics, symmetry, probability, and statistics.

In addition to discussing mathematical ideas and techniques for problem solving, in this course we will emphasize the development of critical thinking skills to help make sense of the world. This includes skills such as reading carefully, recognizing unstated assumptions, paying attention to details as well as to the big picture, and connecting past learning with current topics.

THE BASICS

Instructor:

Roxanne N. Tisch
Office: C-248
Email: rtisch@trcc.commnet.edu

All communication will occur by email or announcements in BlackBoard or MyOpenMath. Note that BlackBoard and MyCommNet use your TRCC email address. Please make sure that you check your TRCC email or forward it to an address you do check. Check your email regularly to be informed of any changes in schedule.

Required Materials:

This semester we will be using OpenSource material. You can use the online version of the text or you can print it directly from the website.

- ◆ The text is Math in Society by David Lipmann.
(<http://www.opentextbookstore.com/mathinsociety/>)
- ◆ Access to MyOpenMath software (www.myopenmath.com)

Course Objectives:

This course should help students:

1. Learn how to learn both independently and collectively from peers rather than passive learning
2. Develop skills of inquiry, abstract and logical thinking, and critical analysis
3. Learn and apply concepts of mathematics

STUDENT SUCCESS

Your learning and success are important to me. I want you to succeed by really knowing and understanding the material and being able to show it. You can give yourself the best opportunity for success by doing the following:

1. Read regularly – Read the recommended section of the text and make notes to yourself. Try to condense the important points of the reading into a single page.
2. Watch the Videos – The videos are meant to supplement the reading. Just reading the text or just watching the videos will not be enough. Make sure you do both!
3. Ask questions – Feel free to ask questions using the discussion board.
4. Study by yourself – This should be quality time. It is best if you make a first attempt at each problem on your own.
5. Study with others – It is a good idea to work with a study group if possible. Other people have different approaches and additional insights. There is an email link in BlackBoard so you can contact other members of the class.

Problem Solving Suggestions:

You will learn the most from homework only if you make an honest attempt at every problem that seems difficult to you at first. Don't give up too soon! Here are some suggestions if you are not sure what to do:

1. Reread the text about relevant material and sample problems.
2. Find a simpler example or try to create a simpler example.
3. Try something and see where it leads.
4. Spend at least a half an hour on the problem, then if you don't seem to be getting anywhere, give it a rest or seek help.

Assessments and Grading

The semester will be divided into three units. Each unit will consist of the following assignments.

- ◆ Online Homework (Weekly) – (18% of unit grade)
The online homework is meant to help you practice the basic skills necessary for each unit. You will have as many attempts as necessary before the due date to complete the online homework to your satisfaction.
- ◆ On-Line Quizzes (Approximately BiWeekly) – (16% of unit grade)
The topics of the online quizzes will be announced in advance. You will have only one attempt for each online quiz.
- ◆ Individual Written Assignments (Weekly) – (18% of unit grade)
Individual written assignments are used as more of a critical thinking assessment than a basic skills assessment. These assignments are meant to be challenging. Documenting your thought process and showing an understanding of the material is just as important as the final answer. You may discuss the problems with others but the assignment you turn in should represent you. These assignments will only be seen by the instructor.
- ◆ Discussion Boards (Approximately BiWeekly) – (18% of unit grade)
Discussion Boards are also used as to assess critical thinking rather than basic skills. Within the discussion board, you will be expected to regularly contribute new ideas and respond to classmates.
- ◆ Unit Assessment – (30% of unit grade)
At the end of each unit, you will be given a project or problem set to demonstrate your understanding of the material.

Your final grade will be based on the average of your three unit grades.

Grade	Final Average
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	Below 60

Extra Credit:

There will be no extra credit assignments.

OTHER

Disabilities Statement:

Students with disabilities are guaranteed reasonable accommodation under the provisions of the Americans with Disabilities Act of 1992. Disclosure of a disability must be voluntary. Valid and reliable documentation to verify eligibility for accommodation is required and must be submitted to the Student Development Offices of Student Services. If you have accommodations documented through the Student Services office, please see me as soon as possible so arrangements can be made. If you would like more information or want to schedule a confidential meeting, please contact the Counseling Center, at 860-215-9017.

College Withdrawal Policy:

You may withdraw from this class any time up to and including December 11 and you will receive a *W* grade on your transcript. However, you must complete a withdrawal form in the Registrar's Office at the time of withdrawal; *if you merely stop attending classes you will be assigned a grade of F or UF* depending on the date you stop attending.

Academic Integrity:

Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor. A full copy of the college's academic integrity policy is in the school's catalog and in the student handbook.

Title IX:

UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY: "Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX. Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX-regardless of their sex; sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient's educational programs and activities."

If any student experiences sexual misconduct or harassment, and/ or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Edward A. Derr (860-215-9255; Derr@trcc.commnet.edu), the Diversity Officer and Title IX Coordinator:

Tentative Schedule

This schedule is subject to change. Any changes to the schedule will be announced through both BlackBoard and MyOpenMath.

Week 1 (Week of August 28)	Unit 1 - Voting Theory
Week 2 (Week of September 4)	Unit 1 - Voting Theory
Week 3 (Week of September 11)	Unit 1 - Weighted Voting
Week 4 (Week of September 18)	Unit 1 - Weighted Voting
Week 5 (Week of September 25)	Unit 1 - Apportionment
Week 6 (Week of October 2)	Unit 1 - Apportionment
Week 7 (Week of October 9)	Unit 2 – Sets
Week 8 (Week of October 16)	Unit 2 - Counting
Week 9 (Week of October 23)	Unit 2 - Counting
Week 10 (Week of October 30)	Unit 2 - Probability
Week 11 (Week of November 6)	Unit 2 - Probability
Week 12 (Week of November 13)	Unit 3 – Growth Models
Week 13 (Week of November 20)	Unit 3 – Growth Models
Week 14 (Week of November 27)	Unit 3 - Finance
Week 15 (Week of December 4)	Unit 3 - Finance
Week 16 (Week of December 11)	Unit 3 - Finance