Math 1420 Foundations of Mathematics University of Memphis

Instructor Information Instructor: Jon McCurdy

Email: <u>irmccrdy@memphis.edu</u>
Class Time: MWF 8:00am-8:50am

Office Hours: MWF 9:00am-10:00am or by Zoom Appointment

Course Description: (3 credit hours.) Critical thinking skills including recognizing fallacies, propositions, truth tables, Venn Diagrams, and analyzing arguments. Approaches to Problem Solving. Managing money: taking control of finances, compounding interest, savings plans and investments, loan payments, credit cards and mortgages. Basic statistics.

Prerequisites: <u>ALEKS math assessment test</u>

Course objectives: To expand the student's ability to think logically, problem solve, manage finances, statistics, analyze basic concepts of algebra, and the real number system.

Student population: Lower Division Students. This course will fulfill a mathematics general education requirement in some degree programs.

Required Materials: *Using and Understanding Mathematics*, 5th Custom Edition. MyMathLab access which can be purchased online. We will discuss this this information more in depth during class.

Mymathlab plus tech support number: 844.292.7015

Mymathlab website: http://mymathlab.com/

How to get to mymathlab from a UofM computer: Use Google Chrome. Do not use Mozilla Firefox. Registration procedures and access to MyMathLab will be discussed in class.

Coronavirus: This class will remain fully remote throughout the whole semester. This means that even if the University opens for in-person learning, this class will still remain online. We will not be having in-person lectures or meetings.

Methods: This course will be given in Lecture format over Zoom. During the class time, there will be a short lecture and then there will be time allotted to work on the homework. During this time, students are encouraged to ask questions about material and questions they are uncertain of. Lecture notes, PowerPoints and video resources will be posted on eCourseware and MyMathLab in order to assist students in learning the material.

Tutoring: Free tutoring is available through the University's Education Support Programs. They offer <u>online assistance</u> and are available to tutor students with appointment.

Email Rules: *All* email correspondence must be made through your <u>University of Memphis</u> email account. Check your email daily, and make sure that your "inbox" isn't so full that no new messages will get through. Please include your section number in your email.

Student Accommodations

Students with accessibility issues or learning accommodation issues due to a disability should contact Disability Resources for Students (DRS) to submit an official request for course accommodations. Contact DRS at 901.678.2880 or at drs@memphis.edu/drs/index.php) (https://www.memphis.edu/drs/index.php)

Evaluation: We will go over 4 Chapters during this semester (see below for details on each chapter). Because of that, we will have regularly assigned homework, 4 Tests, and 1 Cumulative Final Exam.

Test(s): 50% (12.5% for each test)

Homework/Quizzes: 25% Final Exam: 25%

Grading Scale

90-100 - A

80-89 - B

70-79 - C

60-69 - D

below 60 -F

Attendance: Attendance will be taken during each class session. It is vital that you attend class and stay up to date on the current assignments.

Academic Integrity

Plagiarism, cheating and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance, are immediately responsible to the instructor of the class in addition to other possible disciplinary sanctions which may be imposed through the regular institutional disciplinary procedures. (https://www.memphis.edu/osa/students/academic-misconduct.php)

Student Health

Students who have a positive COVID-19 test should contact the Dean of Students at deanofstudents@memphis.edu

Student Resources

Students who need additional resources can visit the Dean of Students Office website at https://www.memphis.edu/deanofstudents/crisis/index.php. Additionally, the Math Department will have resources and information at https://www.memphis.edu/msci/news/covid.php

Topics covered:

CHAPTER 1 – THINKING CRITICALLY
Recognizing Fallacies
Propositions and Truth Values
Sets and Venn Diagrams
Analyzing Arguments

CHAPTER 2 – Approaches to Problem Solving

The Problem Solving Power of Units

Standardized Units: More Problem Solving Power

Problem Solving Guidelines and Hints

CHAPTER 4 – MANAGING MONEY

Taking Control of Your Finances
The Power of Compounding
Savings plans and Investments
Loan Payments, Credit Cards and Mortgages

CHAPTER 5 – STATISTICAL REASONING

Fundamentals of Statistical reasoning Should You Believe a Statistical Study? Statistical Tables and Graphs Graphics in the Media

Syllabus Changes: The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Technical Support:

Call the Helpdesk: 901-678-8888

Online Helpdesk: https://helpdesk.memphis.edu/