Syllabus

Math 1150 (precalculus)   Spring 2023

The content of this syllabus may be subject to change due to COVID-19

Topics:
Functions and Relations. Linear Functions(the average rate of change) Transformations of Graphs. Analyzing Graphs of Functions. Algebra and Composition of Functions. Quadratic Functions. Introduction to Polynomial Functions. Division of Polynomials and the Remainder and Factor Theorems. Zeros of Polynomials. Rational Functions. Polynomial and Rational Inequalities. Inverse functions. Exponential Functions. Logarithmic Functions. Properties of Logarithms. Exponential and Logarithmic Equations. Modeling with Exponential and Logarithmic Functions. Angles and Their Measure. Right Triangle Trigonometry. Trigonometric Functions of any Angle. Trigonometric Functions and the Unit Circle. Graphs of Sine and Cosine Functions. Graphs of Other Trigonometric Functions. Inverse Trigonometric Functions. Fundamental Trigonometric Identities. Sum and Difference Formulas. Double-Angle and Half-Angle Formulas. Trigonometric Equations. The Law of Sines. The Law of Cosines. Complex Numbers in Polar Form. Vectors. Dot Product. Systems of Linear Equations in Two Variables. Systems of Linear Equations in Three Variables. The Ellipse(Centered at the origin). The Hyperbola(Centered at the origin). The Parabola (with the vertex at the origin).

GEC INFORMATION:
This Mathematics course can be used, depending on your degree program, to satisfy the Quantitative and Logical Skills category of the General Education Requirement (GEC).
The goals and learning objectives for this category are:
Goals:
To study the conceptual foundations of precalculus mathematics and to develop the computational and problem-solving skills needed for that purpose.
Learning objectives:
Understanding the basic properties of "elementary" functions: polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions; modeling real-life situations in terms of these functions.
Introduction to vectors, systems of equations, and conic sections.

MATH 1150 **HOMEPAGE IN** *CARMEN*: **Carmen** is the primary web-based course tool that will host course content, notifications, link to the online homework system Connect Math and the electronic textbook. You can access Carmen by visiting http://carmen.osu.edu. You will need your OSU ID and password.

MATH DEPARTMENT HOMEPAGE: The Mathematics department provides additional course information found at: http: // www.math.ohio-state.edu/courses / 1150

E-MAIL and ANNOUNCEMENTS/ NOTIFICATIONS:

You are responsible for information contained in e-mail messages, announcements, and notifications sent to your OSU e-mail address:
your **last name.#@buckeyemail.osu.edu** or your **last name.#@osu.edu**. All university correspondence to your lecturer and instructors *must be through that official OSU e-mail address*. You should **check** your **e-mail and announcements/notifications at least once per day**.

TECHNOLOGY REQUIREMENTS:

1. Graphing Calculator: It is recommended that you use a TI-83, TI-83 plus, or a TI-84. Note that the TI-89, TI-92, and calculators that use a Computer Algebra System are not permitted. There are some online graphing calculators that are free.

2. Computer or iPad

ConnectMath (CM)
Your Homework on line system is known as Connect Math.
To access ConnectMath you need A 20-digit Access Code. You must purchase a book to obtain this code.

Your options for the text book are:

1. HARDCOPY OF THE TEXTBOOK: J. Miller, D. Gerken. College Algebra & Trigonometry. 1st Edition, McGraw-Hill. The ISBN for loose-leaf version of the textbook with a Connect Math Access Code is: $978 - 1259976612$. This option includes the electronic version as well. Make sure to purchase the OSU copy from the OSU campus Barnes and Noble bookstore at *a reduced rate*.

2. ELECTRONIC OPTION FOR THE TEXTBOOK: A (searchable) electronic version of the textbook. Buy this version online in Connect Math. The ISBN-10 code for the electronic textbook is 0078035627.

Please note that a used book will not contain an access code and access codes are not transferable.

COURSE GRADE:
Your final grade will be based on your quizzes score, homework score (CM), midterms scores, and final exam score. The point values for each are given below.
Total Percentages:

ONLINE HOMEWORK in Connect Math (CM) : 10%
QUIZZES in recitation: 10%
Three midterm exams: Each mid-term exam has 20%; a total of 60%
FINAL EXAM (**Comprehensive**): 20%
TOTAL: 100%

GRADING SCALE :

A	A−	B+	B	B−
90% to 100%	87% to 89.99%	83% to 86.99%	80% to 82.99%	77% to 79.99%
C+	C	C−	D+	D
73% to 76.99%	70% to 72.99%	67% to 69.99%	63% to 66.99%	60 to 62.99%

QUIZZES:
There will be 10 quizzes, all quizzes will be in person and during your recitation classes. The 2 lowest scores will be dropped for each student. There will be **no makeups for quizzes** without a valid (documented) and a significant reason for the student's absence.
HOMEWORK (**HW**):
CONNECT MATH ONLINE HOMEWORK: It is required that you access ConnectMath only through CARMEN/CANVAS. Your Homework consists of 13 online homework assignments (graded) available through the ConnectMath system. HomeWorks are due on Wednesdays. Students are responsible for knowing the due dates and times. Students are responsible for completing online homework before it becomes due the online homework system does not accept homework that is overdue. The three lowest scores will be dropped. Therefore, **no time extension** will be offered for an overdue HW. There are also some suggested HW problems, these assignments will not be graded. Solving these problems will help you to be better prepared for your quizzes and tests.
DOING THE HOMEWORK ON A REGULAR BASIS IS THE BEST WAY TO PREPARE FOR THE EXAMS!

EXAMS:
Exam Schedule:
The DATES are indicated on the daily calendar. Attendance at the exams is required. You must have your OSU ID at each exam.
STUDENTS SHOULD NOT MAKE TRAVEL ARRANGEMENTS THAT CONFLICT WITH THE FINAL EXAM. SUCH A CONFLICT IS NOT A VALID EXCUSE FOR MISSING THE REGULARLY SCHEDULED EXAMS and in particular the FINAL EXAM.

ALL EXMAS AND QUIZZES WILL BE IN PERSON. **The Final Exam is Comprehensive.**

HELP WITH THE COURSE:

OFFICE HOURS:
Your lecturer and recitation instructor will have office hours for individual help.
MATHEMATICS AND STATISTICS LEARNING CENTER (MSLC):
The MSLC offers the following services:
TUTOR ROOM, EXAM REVIEWS, WORKSHOPS.
For more information about these services please visit the MSLC website:
http://www.mslc.ohio-state.edu/courses/1150.

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.

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/.

Writing a Make-up test in Testing Center

If for a valid, significant and documented reason your lecturer approves a Make-Up mid-term Exam at the Testing Center then: In order to take a test at the Testing Center, you must sign up for an exam registration. Here are instructions for how to do so:

1. Go to testing.osu.edu

2. Select Online Registration

3. Select "Make-up Exam" for the Group and Exam

4. Select the Date and Time/ based on your lecturer time approval

5. Follow remaining prompts

Make sure you sign up as far ahead in advance as possible. Test registrations cannot be registered less than 12 hours in advance due registration cutoff times. Registrations are also limited, and you may not be able to find the time that fits into your schedule if you wait too long