

TOPICS: Linear, Compound and Absolute Value Inequalities, Functions, Relations, Linear Equations in Two Variables, Linear Functions, Applications of Linear Equations and Modeling, Systems of Linear Equations in Two and Three Variables and their applications, Transformations of Graphs, Analyzing Graphs of Functions, Piece-wise Defined Functions, Algebra of Functions, Function Composition, Quadratic Functions, Polynomial Functions, Polynomial Division, Rational Functions, Polynomial and Rational Inequalities, Inverse Functions, Exponential and Logarithmic Functions, Properties of Logarithms, Exponential and Logarithmic Equations and Applications, and Modeling with Exponential and Logarithmic Functions.

INFORMATION: This Mathematics course can be used, depending on your degree program, to satisfy the Quantitative Reasoning: Mathematical or Logical Analysis category of the General Education Requirement (GE). The goals and learning objectives for this category are:

GEN GOALS: Successful students will be able to apply both quantitative or logical reasoning and/or mathematical/statistical methods to communicate their results.

EXPECTED LEARNING OUTCOMES: Successful students are able to:

1. Use logical, mathematical, and/or statistical concepts and methods to represent real-world situations.
2. Use diverse logical, mathematical, and/or statistical approaches, technologies, and tools to communicate about data symbolically, visually, numerically, and verbally.
3. Draw appropriate inferences from data based on quantitative analysis and/or logical reasoning.
4. Make and evaluate important assumptions in estimation, modeling, and logical augmentation and/or data analysis.
5. Evaluate social and ethical implications in mathematical and quantitative reasoning.

GEL GOALS: Students develop skills in quantitative and logical reasoning, including the ability to identify valid arguments, and mathematical models.

EXPECTED LEARNING OUTCOMES: Mathematical or Logical Analysis

1. Students comprehend mathematical concepts and methods adequate to construct valid arguments.
2. Students comprehend mathematical concepts and methods adequate to understand inductive and deductive reasoning
3. Students comprehend mathematical concepts and methods adequate to increase their general problem solving skills.

MATH 1148 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/1148>.

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: **yourlastname.##@buckeyemail.osu.edu** or **yourlastname.##@osu.edu**. All university correspondence to your lecturer and instructor must be through that official OSU e-mail address. You should **check your e-mail, Carmen messages, and announcements/notifications** at least **once per day**.

COURSE HELP: In addition to lecture and recitation instruction, additional course help is provided by

1. The Lecturer during office hours
2. The Recitation Instructor during office hours,
3. The **Mathematics and Statistics Learning Center (MSLC)** offers free drop-in tutoring. Everyone can benefit from drop-in tutoring. During the day, the MSLC's in-person tutor rooms are a great place to work on math homework or study for exams. Students often use the space like a library with the added benefit of a tutor or peers nearby. MSLC tutors focus not only on helping you solve the problem at hand, but also work with you to build your understanding and knowledge to prepare you for exams. Please visit the MSLC site <https://mslc.osu.edu> for more information and instructions on how to use this free service.

TECHNOLOGY REQUIREMENTS:

1. A **20-digit Access Code** for the Online Homework system known as Connect Math. See how to obtain an access code below.
2. **Computer or iPad**
3. **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.

Connect Math (CM)

Your online homework system is known as Connect Math. To obtain Connect Math you need a **20-digit Access Code**: To obtain this code, you must purchase a book using **one of the two options listed below**. (A used book will not contain an access code and access codes are not transferable.)

1. HARDCOPY OF THE TEXTBOOK: J. Miller, D. Gerken. College Algebra & Trigonometry (Enhanced). 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.** Buy the OSU copy from the OSU campus Barnes and Noble bookstore at reduced rate. Do not purchase a used book. New hardcopy books come with an Connect Math access code.

or

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.

COURSE GRADE: Your final grade will be based on your online homework, midterms, quizzes, in-class participation (lecture and recitation), and final exam scores. The percentages for each are given below.

Total Percentages:

ONLINE HOMEWORK in Connect Math (CM).....	10%
RECITATION PARTICIPATION:	5%
QUIZZES in recitation:.....	10%
MIDTERMS:.....	50%
FINAL EXAM:.....	25%
TOTAL:	100%

GRADING SCALE (Percent):

A	A-	B+	B	B-	C+	C	C-	D+	D
90	87	83	80	77	73	70	67	63	60

Please note that both the textbook and online homework will form the basis for examinations; however, exam questions may differ from homework and could test conceptual familiarity along with computational fluency.

Math 1148

Syllabus

Autumn 2022

CONNECT MATH ONLINE HOMEWORK: It is **required** that you **access** ConnectMath **only through** CARMEN/CANVAS. Homework consists of **22** online homework assignments (graded) available through the ConnectMath system. Homework is due on primarily Mondays and Fridays with a few exceptions. 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 **two** lowest scores will be dropped.

LECTURE: They consist of the introduction of new material.

RECITATION: Meetings with recitation instructors will take place in person on Mondays and Wednesdays. Attendance in recitation will be checked and participation will be assessed by asking and/or answering questions.

QUIZZES: There will be 10 quizzes to be taken **in recitation class**. The quizzes will be given at the beginning of the class. Exceptions are made for students registered with SLDS. All quizzes are on Wednesdays and will be 15 minutes in duration. Consult the calendar to see the section you will be quizzed over.

Quiz 1 August 31

Quiz 2 Sept. 7

Quiz 3 Sept. 14

Quiz 4 Sept. 28

Quiz 5 October 12

Quiz 6 Oct. 19

Quiz 7 Nov. 2

Quiz 8 Nov. 9

Quiz 9 Nov. 16

Quiz 10 Dec. 7

EXAMS: There will be three midterm exams and a cumulative final exam given.

EXAM SCHEDULE: You are required to comply with all university mandated procedures associated with examinations. Exceptions are made for students registered with SLDS. Rooms assignments for evening exams will be announced in class.

Exam 1 Wednesday, Sept. 21 (Sections 1.7, 2.3 - 2.6, and 9.1 - 9.2)at 5:20 p.m. (55 minutes)

Exam 2 Wednesday, Oct. 26 (Sections 2.7-2.8, 3.1- 3.3, and 3.5-3.6) at 5:20 p.m. (55 minutes)

Exam 3 Wednesday, Nov. 30 (Sections 4.1-4.5)at 5:20 p.m. (55 minutes)

Final Exam Wednesday, Dec. 9 (All Sections)at 6:00 p.m. (1 hr. & 45 mins.)

MAKE-UPS: Students that have a time conflict with another scheduled OSU course or other types of time conflicts (such as work schedule or travel for athletic events) may take the make-up exam. **Written evidence of any conflict must be provided to the lecturer in order to received permission to take a make-up.** Plan ahead and notify your lecturer. **Please note that no early exams are permitted for any reason.**

COVID-19 SAFETY STATEMENT. To learn about safety protocols mandated by the university visit <https://safeandhealthy.osu.edu/>.

CONTINGENCY FOR COVID-19- RELATED COURSE ATTENDANCE ALTERATIONS. If illness prevents you from participating, please contact your lecturer about it as soon as possible.

ADDITIONAL RESOURCES FOR STUDENTS:

The OSU Keep Learning website <https://keeplearning.osu.edu/> includes tips and resources to help students make the shift to online learning, addressing strategies for success as well as technology tools. The OFFICE OF STUDENT LIFE'S "We Are Here For You" website <https://studentlife.osu.edu/articles/we-are-here-for-you> includes several resources to support mental, physical and financial health. The Wexner Medical Center's Coronavirus Outbreak Site <https://wexnermedical.osu.edu/features/coronavirus> includes the latest information and guidance about COVID-19.

DIVERSITY STATEMENT: The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

MENTAL HEALTH STATEMENT: As a student you may experience a range of issues that can cause barriers to learning such as: strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 988 or at <https://988lifeline.org> or <https://suicidepreventionlifeline.org/>.

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/>." In particular, **it is strictly forbidden** to contact or engage with any individuals, websites, or use software tools outside of your course **for any portion of the course that is assessed towards your course grade. This includes all online homework assignments and examinations.**

STUDENT LIFE DISABILITY SERVICES (SLDS):

"The University is committed to supporting students and program participants including students with COVID-19 based-risk factors and students with disabilities that have been certified by Student Life Disabilities Services (SLDS) and will be appropriately accommodated. It is the student's responsibility to seek the services of SLDS, should they be required. The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, you should register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

SLDS contact information:

<https://slds.osu.edu/>

E-mail for General Questions: slds@osu.edu

Exam/Quiz Accommodations: slds-exam@osu.edu

Phone: 614-292-3307;

VP: 614-500-4445; (Hearing impaired)

Address: 098 Baker Hall, 113 W. 12th Avenue.

See the following page for important SLDS deadlines!

Please be aware of the following important requirements with SLDS:

1. **Seat Cap for Scheduling:** Student will only be able to schedule an exam in our AIM database if there truly is a seat available.
2. **3-Day Scheduling Window:** To implement the seat cap while meeting exam demand, SLDS will allow students to schedule their exams within a 3-day window (class exam day plus 2 days (but not at an earlier time)). Students are expected to schedule as close to their class time as possible, but due to the seat cap and scheduling conflicts this will not be feasible for all assessments.
3. **Start Times on the Half-Hour:** To maximize efficiency of available seats, SLDS will require exam start times to be scheduled on half-hour increments (10 a.m., 10:30 a.m., 11 a.m.). SLDS will also implement a plus or minus 15-minute grace period for check-ins to accommodate students' travel time or class conflicts.

Please observe the following SLDS scheduling deadlines:

Remember to schedule your exams early in the semester. Late exam scheduling requests are not guaranteed and must be approved by an Exam Services team member.

- **Quizzes/Midterms, first 2 weeks:** ASAP
- **Quizzes/Midterms, week 3 or after:** 3 business days in advance
- **Finals held during Finals Week :** 1 month in advance

Other useful resources:

- **Struggling with Test Anxiety?** Visit go.osu.edu/testanxiety
- **Managing Distractions:** Visit [Creating-distraction-free-study-space](#)
- **Digital skills support:** Visit [Tech tutoring](#)