

# Math 1130: College Algebra for Business

## 2024 Spring Semester

## Course Syllabus

### Course Description

Math 1130 is a precalculus course with applications to business and finance. Topics include the following: solving equalities and inequalities involving algebraic, exponential, and logarithmic functions; matrix algebra; and applications to business and finance.

### Prerequisites

A grade of C- or above in 1075; or credit for 104; or Math Placement Level M or N; or ACT math subscore of 22 or higher that is less than 2 years old.

### Carmen Canvas and Electronic Communication

This course uses the Carmen Canvas learning management system (Carmen), which may be accessed by visiting [carmen.osu.edu](https://carmen.osu.edu) and clicking the course title.

In addition to in-class announcements, this course uses Carmen Announcements, Carmen Messages, and Buckeyemail to communicate with students. It is your responsibility to check Carmen Announcements, Carmen Messages, and Buckeyemail daily for course-related information or instructions. It is strongly recommended that you enable Carmen notifications for Announcements and Messages.

### Mode of Instruction

This course is scheduled as **in-person** instruction. Any exceptions will be announced on Carmen or via email.

### Textbook

*Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences*, 13th edition.  
Ernest F. Haeussler Jr., Richard S. Paul, and Richard J. Wood. (ISBN-13: 9780321732378)

### Purchasing the Textbook and Access to MyMathLab

Students will need access to both the textbook and MyMathLab. MyMathLab includes online access to a digital copy of the textbook. Physical copies of the textbook are also available; physical copies are optional.

There are four ways to acquire access to both the textbook and MyMathLab:

- 1. Purchase a new textbook bundled with a MyMathLab access code from the University Bookstore.**  
The University Bookstore sells a loose-leaf physical copy of the textbook bundled with a MyMathLab access code. Online access to a digital copy of the textbook is included (via MyMathLab). The ISBN for this bundle is 9780321732378. To use your bundled MyMathLab access code, click the *Access Pearson* link in Carmen and follow the prompts to use an access code (do not purchase access to MyMathLab separately; use your code).
- 2. Purchase MyMathLab access through Carmen (which includes online access to a digital copy of the textbook).**  
If you choose not to purchase the textbook bundle from the University Bookstore, you may instead purchase access to MyMathLab through Carmen. MyMathLab includes online access to a digital copy of the textbook. Ohio State has negotiated a discounted price for its students. To receive the discounted price, students must purchase access to MyMathLab by clicking the *Access Pearson* link in Carmen.
- 3. Purchase MyMathLab access through Carmen and purchase a used textbook separately.**  
If you purchase a used physical copy of the textbook (or if you rent the textbook), you must purchase access to MyMathLab separately. Purchase access to MyMathLab by clicking the *Access Pearson* link in Carmen.
- 4. Continue MyMathLab access from a previous semester of Math 1130.**  
If you took Math 1130 during the previous year and registered for MyMathLab access, then you should still have access to MyMathLab. If you do not automatically receive the access code when you sign in to MyMathLab, email [mymathlab@math.osu.edu](mailto:mymathlab@math.osu.edu) for assistance.

### Instructor Contact Information and Office Hours

Visit the Math 1130 homepage on Carmen to find your instructors' contact information and office hours.

When emailing an instructor, always use your Buckeyemail account and include "Math 1130" in the subject line.

## Calculators

A graphing calculator is **required**. Approved calculators may be used during assessments. Approved models include: TI-83 Plus, TI-84 Plus, TI-84 Plus CE, TI-Nspire CX, and TI-Nspire CX II.

Graphing calculators that have a built-in Computer Algebra System (CAS) are forbidden. Forbidden models include: TI-89 Titanium, TI-Nspire CX CAS, and TI-Nspire CX II CAS, TI-92, HP 49, HP 50g, HP Prime, Casio fxCG500.

For other calculators, please consult your instructor before attempting to use the calculator during an assessment.

See the Calculator Policy on Carmen for additional details.

## MSLC Free Tutoring

The Mathematics and Statistics Learning Center (MSLC) offers free tutoring services during the semester.

Drop-in tutoring is available beginning the second week of classes. No appointment is necessary.

Weekly one-on-one, 30-minute appointment tutoring may also be requested by filling out an online form.

The MSLC drop-in 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 having a tutor and peers nearby. MSLC tutors not only help you solve exercises, but they also help you build your understanding and knowledge to prepare you for exams.

For additional information, visit [mslc.osu.edu/tutoring](https://mslc.osu.edu/tutoring) and select Math 1130.

## Goals and Expected Learning Outcomes

This course is part of the new general education (GEN) program and the legacy general education (GEL) program. Goals and expected learning outcomes for each program appear below.

*Goals (GEN).*

1. Successful students will be able to apply quantitative or logical reasoning and/or mathematical/statistical methods to understand and solve problems and will be able to communicate their results.

*Expected Learning Outcomes (GEN).* Successful students are able to:

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

*Goals (GEL).*

Students develop skills in quantitative literacy and logical reasoning, including the ability to identify valid arguments, and use mathematical models.

*Expected Learning Outcomes (GEL).* (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.

## Grading Scale

91% A    88% A-    85% B+    82% B    79% B-    76% C+    73% C    70% C-    67% D+    60% D

Minor adjustments to this scale may be made at the end of the semester. The Carmen grade computation may use a different grading scale until the end of the semester.

## Grade Components

Grades are computed based on six scored components: MyMathLab Homework, Quizzes, Midterm Exam 1, Midterm Exam 2, Midterm Exam 3, and the Final Exam. Extra credit is not available. The weighted contribution of each component to the final grade is specified in the table below.

MyMathLab Homework	15%
Quizzes	15%
Midterm Exam 1	15%
Midterm Exam 2	15%
Midterm Exam 3	15%
Final Exam	25%

**Warning.** Carmen may display inflated and incorrect grades until every grade has been entered at the end of the semester. Carmen may not properly count missed items until the end of the semester.

## Midterm Exams & Final Exam

Exams are completed **in person**. The exam locations will be announced on Carmen. Lists of covered textbook sections and other details are available in Carmen Assignments. The final exam is cumulative.

The exam dates and times are as follows:

Midterm Exam 1	Thursday, 8 February, at 6:30pm-7:25pm.
Midterm Exam 2	Thursday, 7 March, at 6:30pm-7:25pm.
Midterm Exam 3	Thursday, 4 April, at 6:30pm-7:25pm.
Final Exam	Wednesday, 24 April, at 6:00pm-7:45pm.

**Do not make travel plans that conflict with the exams** (except for University-sponsored travel).

To take a make-up exam, you must have permission from your *lecture instructor*. The standard make-up exam is scheduled at 8:00am on the business day after the regularly scheduled exam. Make-up exams should be scheduled in advance whenever possible. **Documentation is required in most cases. Exams may not be taken early.**

The allotted time for midterm exams is 50 minutes, and the allotted time for the final exam is 1 hour 40 minutes. (The time windows listed for exams include an additional 5 minutes as a buffer for administrative delays.) All physical exam pages must be given to an instructor before leaving the exam room.

## Quizzes

Missed quizzes receive a score of zero. The lowest quiz score will be dropped.

**Quizzes are completed in person during recitations at the beginning of class.** If you arrive late for a quiz, you will not receive the full amount of time to complete the quiz. Quiz dates are indicated on the Course Calendar. (The Course Calendar is available in Carmen Modules.) Lists of covered textbook sections and other details are available on Carmen in Assignments and Modules.

If you must miss a quiz due to illness, quarantine, or University-sponsored travel, contact your *recitation instructor* immediately to schedule a make-up quiz. Make-ups should be arranged in advance whenever possible.

**Documentation is required in most cases.** In certain documented circumstances, a missed quiz may be excused; however, no more than two quizzes may be excused.

## Gradescope

Instructors will scan and upload exams to Gradescope. Exams will be scored and returned to students on Gradescope. Feedback is best viewed using a web browser on a PC/Mac. Original copies of exams will not be returned.

Additional instructions, video demonstrations, and documentation regarding Gradescope are available on Carmen.

## MyMathLab (MML) Homework

MyMathLab homework assignments are due most weeks. Missed MML assignments receive a score of zero. The lowest two MML scores will be dropped.

Follow the *Access Pearson* link on Carmen to complete your MML homework assignments. MML homework assignments are due at 11:59pm on the dates indicated on the Course Calendar. (The Course Calendar is available in Carmen Modules.) Late MML homework submissions will be accepted until 10:00am the next day without penalty. This late policy is designed to mitigate *all* instances of technology failure. You may not submit MML homework after 10:00am the next day unless you receive an extension from your *recitation instructor*.

You may contact your *recitation instructor* to request a **one-day extension** for up to **two homework assignments** (without explanation). **Extension requests should be made by email.** (If one day is not enough, please explain in your email.) No other extensions will be given except for serious and documented situations.

## Ungraded Textbook Homework

Textbook homework assignments are listed in Carmen Modules within the document entitled *Textbook Homework Exercises*. You are expected to complete the associated textbook homework assignment after each textbook section has been discussed in lecture. However, textbook homework assignments are not collected and are not graded.

Answers to odd-numbered exercises are available in the back of the textbook (click eBook in MML and then click the link listed under eText Resources). A solution manual is also available on MML by clicking eBook and selecting *Student's Solution Manual* from the side menu. The solution manual contains worked solutions to all odd-numbered exercises and all *Apply It* exercises.

## Attendance and Participation

Attendance and participation in class are essential to efficiently learning and fully understanding course material. Accordingly, attendance and participation are strongly encouraged. However, attendance is not a component of your final grade.

## Health and Safety Contingencies

In response to a health or safety concern, the University may decide to change our mode of instruction to virtual. In such event, we will take advantage of online technologies to hold classes and to administer assessments. The dates, times, or formats of assessments may change. An announcement will be made on Carmen that provides details and instructions for any switch to virtual instruction if necessary.

If an instructor is unable to teach in person, an announcement will be made on Carmen or via email. Depending on the circumstances, lecture or recitation may be delivered temporarily using Zoom meetings, recordings, or other methods. In such event, details and instructions will be included in the Carmen announcement or email.

## Quarantine, Isolation, and Excused Absence Guidelines

If the University or a qualified health professional advises you to quarantine or isolate, please contact your instructors immediately to arrange appropriate accommodations. Documentation may be required.

If you are isolating while awaiting a COVID-19 test result, inform both your lecture instructor and your recitation instructor immediately. If you test positive for COVID-19, refer to the [Safe and Healthy Buckeyes site](#) for resources.

Beyond five days of the required COVID-19 isolation period, your instructors may rely on Student Life Disability Services (SLDS) to establish further accommodations. Contact SLDS at [slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; or [slds.osu.edu](http://slds.osu.edu).

If you have a special situations or you require specific, long-term, or other accommodation, contact your *lecture instructor* and seek support from appropriate University offices such as [Student Advocacy](#), [Student Life Disability Services](#), and the [Office of Institutional Equity](#).

## Copyright

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

The assessments and study materials are protected by copyright law. Do **not** share or distribute any assessment (in part or in whole) outside of our class. You may **not** upload any part of any assessment to an online help service.

## 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 [studentlife.osu.edu/csc](http://studentlife.osu.edu/csc).

## Disability Statement

If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please register with Student Life Disability Services (SLDS). After registration, contact your instructors as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. Students with disabilities that have been certified by SLDS will be appropriately accommodated.

SLDS contact information:

[slds@osu.edu](mailto:slds@osu.edu)

614-292-3307

<https://slds.osu.edu>

098 Baker Hall, 113 W. 12th Avenue.

## Mental Health Statement (Counseling and Consultation Services)

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 Counseling and Consultation Services (CCS) by visiting [ccs.osu.edu](http://ccs.osu.edu) or by 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 by dialing 614-292-5766. Free and confidential support for people in distress is also available 24/7 through the 988 Suicide and Crisis Lifeline by dialing 988, dialing 1-800-273-TALK (8255), or visiting [988lifeline.org](http://988lifeline.org).

## Diversity Statement

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages everyone to strive to reach their own potential. The Ohio State University does not discriminate based on age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

[odi.osu.edu](http://odi.osu.edu)

[odi.osu.edu/racial-justice-resources](http://odi.osu.edu/racial-justice-resources)

[odi.osu.edu/focus-on-racial-justice](http://odi.osu.edu/focus-on-racial-justice)

[cbssc.osu.edu](http://cbssc.osu.edu)

## Title IX Harassment, Discrimination, and Sexual Misconduct Statement

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate based on age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the University community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. using the online reporting form at [equity.osu.edu](https://equity.osu.edu) ,
2. by calling 614-247-5838 or TTY 614-688-8605, or
3. by emailing [equity@osu.edu](mailto:equity@osu.edu) .

The University is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All University employees have reporting responsibilities to the Office of Institutional Equity to ensure the University can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

## Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.