

MTH 110-03

Introduction to Concepts in Mathematics and Computing, Elmhurst University
1:00–2:05 M W F, Koplin Hall 131, Fall 2025

Course Description: This course is designed to develop mathematical reasoning skills and the ability to apply mathematical thinking to solve problems in our contemporary world. Topics may include mathematics of finance, voting and apportionment, counting methods with probability theory, and graph theory. Computer spreadsheets, using Microsoft Excel, will be introduced and used. Course credit: 1.0. One course credit (1.0) at Elmhurst University is equal to four (4.0) semester hours.

Professor: Dr. A. Rogers, he/him, Daniels Hall 218, allenr@elmhurst.edu

Email: If you email me Sunday through Thursday, I probably will respond by the end of the next calendar day. If you email me on Friday or Saturday, I probably will respond by the end of the following Monday.

Office hours: Online or in-person, send email to make appointment.

Course Materials: The online homework platform MyLab Math is required. You must purchase access to MyLab, which includes an eTextbook (Blitzer, Thinking Mathematically, 8th ed., Pearson). You can purchase access when you first register in our course on MyLab, or select “Get temporary access” to access your course materials now and make a purchase decision later.

MyLab due dates and homework procedures are discussed below.

Using Your Laptop in Class: In class, but not on exams, use whatever technology helps you learn.

Delivery Mode: Our class meets in person every day. I’ll email you if there’s a change: for example, if we meet remotely because of snow. The delivery mode of this course is subject to change based on county, state or federal guidelines, local conditions, or unforeseen circumstances.

Names and Pronouns: Feel free to tell me the name you use, including pronunciation, and the pronouns you use. Please correct me if I make a mistake. You can change your first name in Blackboard; this only changes how it displays in Blackboard. Contact the Office of Registration and Records to change your name with the University.

Grading: Letter grades are computed from seven components, weighted as follows:

Group Participation/Attendance	10%
Presentations	10%
MyLab Homework	20%
Exam 1 (Fri, Sep 19)	15%
Exam 2 (Fri, Oct 17)	15%
Exam 3 (Fri, Nov 14)	15%
Final Exam (Wed, Dec 10, 1:00–3:00)	15%
(the final only covers the last few weeks)	
Total	<hr/> 100%

Grading Scale: A [92, ∞), A- [90,92), B+ [88,90), B [82,88), B- [80,82), C+ [78,80), C [72,78), C- [70,72), D+ [68,70), D [60,68), F ($-\infty$, 60)

Group Participation/Attendance: Some days you’ll solve worksheet problems in groups. Your attendance and full participation in the group activities are important elements of this course. For group activities, I expect you to be engaged in learning, to listen to others, to ask relevant questions, and to contribute to the problem-solving process, in a positive manner. I’ll assign a daily grade for each day’s group participation/attendance.

For days that aren’t exam days, your first three absences are automatically excused. After your third absence, if you have to miss class, email me as soon as possible with an explanation, in advance if possible, and I’ll decide whether the absence is excused or not. The daily grade for an unexcused absence will be zero with no makeup allowed. Daily grades for excused absences are dropped.

Exams and Final Exam: If you miss an exam, you need a good reason for me to excuse you and allow a makeup. You must email me as soon as possible with an explanation, in advance if possible.

Presentations: Four oral homework problem presentations will be required. The presentation is a step-by-step explanation of how to do a homework problem. You choose the day, following this schedule.

<u>Presentation #</u>	<u>Give it on a class day, not an exam day</u>
1	before Exam 1
2	between Exam 1 and Exam 2
3	between Exam 2 and Exam 3
4	between Exam 3 and the Final

On the day you're giving a presentation, you choose a problem from the current homework assignment, and prepare in advance your presentation to give during class.

If you don't give your presentation during the time frame shown in the above table, no credit. The available time period is very lenient to accommodate any issues that may arise, including excused absences. Don't put off doing your presentation.

MyLab Due Dates: Most class days there will be new MyLab homework. Try to finish it before the next class day.

All Week 1 MyLab homework is eligible for full credit if completed by Wed of Week 2. Points you earn during this time are banked.

Then there is a grace period with a small penalty after Wed of Week 2. The grace period lasts through Wed of Week 3. Any new points earned during the grace period will be docked with a penalty that increases each day. The penalty is 2% per day. No more points after the one-week grace period ends.

This is the pattern. All Week X MyLab homework is due by Wed of Week $X + 1$, with a grace period through Wed of Week $X + 2$. In the grace period, new points earned are docked 2% for each day late. After the grace period, no additional points. Due dates always mean 11:59 p.m. Chicago time on the due date.

The original due date and grace period are very lenient to accommodate any issues that may arise, including technology issues or excused absences. Don't put off doing your homework.

Try to complete your Week X homework during Week X . Then you can focus on Week $X + 1$ homework during Week $X + 1$. If you put it off, you risk falling behind with learning new material, getting confused about due dates, and forgetting to complete your homework.

MyLab Homework Procedures: Homework is open book, open note, open talk. You should work together with others. You may use online resources. Your homework goal is to master the material so that you can do the problems alone.

Usually for each question, you will have a number of tries, and then if you still want to improve your score, you may make another attempt on a similar question. After using all your attempts, you may email me and I will give you more attempts.

As stated above, if you email me Sunday through Thursday, I probably will respond by the end of the next calendar day. If you email me on Friday or Saturday, I probably will respond by the end of the following Monday. If you email me for help or for additional attempts on a due date, it may be too late.

Since you are allowed multiple tries and attempts, you should have a goal of 100% correct. If you fall short of 100%, it is still very important to get at least 80% correct on each homework assignment.

When you ask me for help by email, if you give me more detail in your attempted solution, then I'll be able to give you better help.

MyLab Homework Expectations: Work out and fully write out your homework problem solutions neatly on your own paper. Don't do your homework on scratch paper. Don't do your homework by simply entering the answers in MyLab. Keep your written homework solutions organized in a notebook.

Student Learning Outcomes:

- Solve problems associated with personal finance.
- Use Microsoft Excel to create spreadsheets illustrating financial concepts.
- Solve problems about voting and apportionment.
- Solve problems using counting methods and the theory of probability.
- Solve problems in basic graph theory.

Outline of Course Topics:

- Ch 8: Personal Finance
- Ch 13: Voting and Apportionment
- Ch 11: Counting Methods and Probability Theory
- Ch 14: Graph Theory

Tentative Class Schedule: (subject to change)

Aug 25	Ch 1	Aug 27	Ch 8	Aug 29	Ch 8
Sep 1	No class	Sep 3	Ch 8	Sep 5	Ch 8
Sep 8	Ch 8	Sep 10	Ch 8	Sep 12	Ch 8
Sep 15	Ch 8	Sep 17	Review	Sep 19	Exam 1
Sep 22	Ch 8	Sep 24	Ch 13	Sep 26	Ch 13
Sep 29	Ch 13	Oct 1	Ch 13	Oct 3	Ch 13
Oct 6	Ch 13	Oct 8	Ch 13	Oct 10	Ch 13
Oct 13	No class	Oct 15	Review	Oct 17	Exam 2
Oct 20	Ch 11	Oct 22	Ch 11	Oct 24	Ch 11
Oct 27	Ch 11	Oct 29	Ch 11	Oct 31	Ch 11
Nov 3	Ch 11	Nov 5	Ch 11	Nov 7	Ch 11
Nov 10	Ch 11	Nov 12	Review	Nov 14	Exam 3
Nov 17	Ch 14	Nov 19	Ch 14	Nov 21	Ch 14
Nov 24	Ch 14	Nov 26	Ch 14	Nov 28	No class
Dec 1	Ch 14	Dec 3	Ch 14	Dec 5	Review
		Dec 10	Final 1:00–3:00		

Different Instructors Have Different Policies: Among your different classes, there will be different policies about homework resources, authorized materials, absences, due dates, emails, and so on. It is important to reexamine the syllabus for each class from time to time, to remind yourself requirements and expectations.

Changes: This syllabus is subject to reasonable change. I'll email any changes as soon as possible.

Additional Academic Integrity Information for This Course: You may use any resources for homework. Other courses may be different. Master the material so that you can do the problems alone.

On tests, however, intentionally obtaining or attempting to use unauthorized materials or information or unauthorized help from another person is considered cheating. The following comments are illustrative but not exhaustive.

Tests test how well the student has learned. Therefore, unless the professor specifies otherwise, all examinations are to be completed by the student alone, without extraneous assistance of any kind. That means no help is to be given to or received from other persons during the test; no books, notes, calculators, or other materials of any kind are to be consulted; and if a calculator or other hand-held electronic device is permitted to be used for mathematical calculations, no other information may be programmed into or retrieved from the device. Whenever the professor permits an exception to any part of these rules, the exception applies only as far as specified by the professor. Such exceptions must be expressly permitted and cannot be presumed from prior exceptions on other tests. (From *A Student's Guide to Academic Integrity at the University of Oklahoma*, Office of the Senior Vice President and Provost, University of Oklahoma, Norman Campus, <http://web.archive.org/web/20060824175857/http://www.ou.edu/provost/integrity/>, accessed August 23, 2006.)

Learning Center: Academic Support: The Learning Center is the place to go for convenient, free access to academic support for all Elmhurst University students. We offer in-person and online peer tutoring, “after hours” and drop-in tutoring, study groups, academic workshops, and academic coaching on topics such as study strategies and time management. We can work with you to understand your assignment, get organized, explore your options, and use metacognitive, or self-reflective, strategies to grow and learn. It’s never too early to come work with a tutor! We have peer tutors in various disciplines, including math and writing, who can meet with you at any step in your learning process. To find out more, go to elmhurst.edu/LC.

To sign up for tutoring, study groups, and academic workshops, go to My Tutoring, located on the portal. Contact Molly Rentscher, Director of the Learning Center, at molly.rentsch@elmhurst.edu, for more information.

Student Accessibility Services: Elmhurst University is committed to creating an inclusive learning environment for its diverse student population. If you experience or anticipate any barriers to learning, please notify the instructor as soon as possible. If you are a student with a documented disability and would like accommodations to participate fully in your classes, contact Dr. Linda Harrell, SAS Director, at accessibility.services@elmhurst.edu. For more information, visit elmhurst.edu/SAS. If you have previously received accommodations, please remember that they must be renewed each term.

Code of Academic Integrity: Elmhurst University is a community of scholars. Such a community places the highest value on academic honesty and integrity. Therefore, Elmhurst University’s Code of Academic Integrity is designed to ensure:

1. A fair academic environment where students are evaluated on the scholarly merits of their work.
2. An academic environment where personal integrity is fostered.
3. An understanding of standard academic practices when formulating ideas, conducting research, and documenting sources.

There are general campus-wide definitions of academic honesty as well as departmental guidelines, which are articulated in individual course syllabi. Students are responsible for educating themselves on this matter since sanctions for academic dishonesty may be severe. Thus, Elmhurst University students are expected to act honestly in all academic work.

The entire Code of Academic Integrity may be found in the Student Handbook available on the Student Life section elmhurst.edu/student-life of the University website.

Artificial Intelligence Tools: The use of generative AI tools (e.g., ChatGPT) is permitted for the following activities:

- Brainstorming ideas, topics, and searching terms,
- Drafting outlines to organize your thoughts, and
- Checking grammar and APA style.

The use of generative AI tools is *not* permitted in this course for the following activities:

- Submitting any work for points, including quizzes, preparation assignments, drafts, and final assignments.
- Impersonating yourself in course communications (e.g., email) or online posts and peer feedback.
- Writing partial or entire sentences, paragraphs, or papers to complete assignments.

You are responsible for the information based on an AI query (e.g., if it violates intellectual property laws, contains misinformation, or unethical content). If you have questions about permitted use, ask the professor for clarification.

Non-Discrimination and Non-Harassment Policy: The University’s Non-Discrimination and Non-Harassment Policy may be found on the University website. elmhurst.edu/TitleIX

Community Standards: The Community Standards may be found in the Elmhurst University Student Handbook available on the University website. elmhurst.edu/student-life

Support Resources and Supporting Fellow Students in Distress: As members of the Elmhurst University community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or your own, we encourage you to refer this behavior to the Director of Student Support Services and Intervention in the Office of Student Affairs through the Student of Concern referral form on the University website at <https://www.elmhurst.edu/student-life/support-services/support-services-intervention/>. Based upon your report, staff in the Office of Student Affairs reach out to students to make sure they have the support they need to be healthy and safe.

Additionally, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Director of Student Support Services and Intervention through studentaffairs@elmhurst.edu for support and referrals to campus and/or community resources. For any emergencies, call Public Safety at (630) 617-3000 or call 911.

Online Communication Guidelines: To help create a respectful and engaging learning space, please keep the following in mind when interacting online (via discussion boards, email, chat, etc.):

- **Be respectful.** Our course includes people with diverse backgrounds and perspectives—listen generously and respond thoughtfully.
- **Use clear, professional language.** Avoid slang, excessive abbreviations, and all caps (which can seem like shouting).
- **Support your ideas.** Develop your thoughts, evaluate sources for credibility, and cite your sources following any guidelines provided by your instructor,
- **Stay on topic.** Focus on course content and contribute meaningfully to the conversation.
- **Pause before you post.** Review your message before hitting “send”—tone and clarity matter, especially without nonverbal cues.

In the absence of nonverbal communication, misunderstandings are more frequent. If something feels unclear or upsetting, contact your instructor privately rather than escalating in a public forum.

Elmhurst University Civility Statement: The Elmhurst University Civility Statement has been endorsed by many major bodies on campus (Faculty Council, Academic Council, President’s Cabinet, PACoDEI, Student Affairs Council).

In the spirit of our mission, vision, and core values, the Elmhurst University community aspires to co-create and maintain an environment of respect, integrity, courtesy, inclusivity, and human decency. This invites rigorous and respectful debate in which individuals are encouraged to participate in honest and open civil discourse. Honoring a tradition of social justice, Elmhurst University fosters a diverse, positive, and inclusive culture where members change and grow as they encounter new people and ideas.

Discrimination and Retaliation: As an employee of Elmhurst University, I am a Mandated Reporter of sexual harassment and retaliation that occurs toward students, faculty or staff. This means that if I receive notice of or specific information about an incident of sexual harassment, sexual assault, dating or domestic violence, stalking, or retaliation, I am obligated to share this with the University’s Title IX Coordinator. This report to the Title IX Coordinator will enable the University to take appropriate action to ensure the safety of and to offer appropriate resources to those involved. For students, faculty, or staff not wishing to make an official report, confidential reporting options are available. Please see the University’s Title IX webpage elmhurst.edu/TitleIX for more resources or to file a report.
