# Course Syllabus



# MTH 122 College Algebra

#### Spring 2025

**Disclaimer:** This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

## **Course Description**

This course is primarily intended to prepare students for Finite Mathematics and Calculus for Business and Social Sciences. This course will also serve as a prerequisite to Trigonometry. College algebra topics include, but are not limited to: conic sections, sequences and series, systems of nonlinear equations, matrix algebra, polynomial, rational, exponential, and logarithmic functions and accompanying equations. Modeling and applications are incorporated throughout the course.

**NOTE:** A specific graphing calculator is required for this course. Contact EMPS Division Office for details. Credit will not be given in MTH 122 to those with prior credit in MTH 144 Precalculus. This course will not meet the General Education Math Requirement for AA or AFA degrees but may serve as an elective. This course with the combination of an IAI MTH course meets the Math requirement for the AS degree. Check the catalog for other Associate degrees including AAS degrees to see if this course meets the Math requirement.

## **Prerequisites**

MTH 108 C or better, or appropriate score on CLC Math Placement Test, Math SAT, or MATH ACT

## Course Objectives

Upon completion of the course a student will be able to do each the following in a real world context:

- Evaluate sequences and series
- Determine sequence formulas from given sequence element values
- Express a given series using sigma notation
- Create graphs and equations of conic sections
- Identify any vertices, foci, and asymptotes of conic sections
- Identify the domain and range of functions and relations
- Demonstrate an understanding of function graphs, their transformations, and their properties
- Construct and analyze the composition of functions
- Create and analyze graphs of polynomial functions
- Use appropriate theorems and techniques to determine the zeros and factors of polynomial functions
- Create and analyze graphs of rational functions
- Recognize when an inverse function exists, and form the inverse when possible
- Create and analyze graphs of exponential and logarithmic functions
- Solve exponential and logarithmic equations
- Solve linear and non-linear systems of equations
- Perform operations on matrices using matrix algebra
- Solve systems of linear equations using matrices
- Apply the algebraic and graphical techniques learned in this class to solve application problems

#### **COLLEGE OF LAKE COUNTY LEARNING OUTCOMES:**

- 1. Critical Thinking Identify issues, define vital questions and analyze evidence that lead to well-reasoned judgments and conclusions.
- 2. **Quantitative Literacy** Compute, reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations.
- 3. **Technological Competency** Select and apply contemporary forms of technology to solve problems, compile information or produce a product.

### Contact Information

**Instructor**: Cristina Sizemore (she/her) (feel free to call me Cristina or Prof Sizemore)

Email: <u>csizemore@clcillinois.edu (mailto:csizemore@clcillinois.edu) (mailto:csizemore@clcillinois.edu) (Best way to contact me. Always use your CLC email account to correspond.)</u>

Phone: 847-543-2901

#### Office Hours in C162:

- Monday:
- Tuesday:
- Wednesday:
- Thursday: 12-2:15pm

Additional office hours available for students by appointment in person or Zoom. Please email me to let me know your preferred availability. Send emails from your student CLC email account or Canvas Inbox. Please inform me which class and section you are enrolled in.

## Required Materials

- Textbook: Text: Miller & Gerken, College Algebra, 3e, McGraw Hill, 2023
- Calculator (Recommended): TI-84 or TI-83 plus or TI-83 graphing calculator. You can buy new, used or <u>check out one (and other technology) from CLC here (https://clcillinois.libanswers.com/fag/215531)</u>
- Notebook
- Folder to keep all classroom materials
- Access to Alecks included with your tuition

## **Grading Overview**

Your overall course grade will be based on your performance on the Homeworks, In Class Activities, Exams and Final Exam.

#### Exams:

You will have fours exams and a mandatory cumulative final exam. You may not use books, notes, unauthorized calculators, phones, tablets, or software applications during the exams. Each exam is **taken in class**. Exams include vocabulary, short essay, and problems based on homework and notes. Exams are **paper and pencil**.

Exam dates are fixed and listed in the course schedule below. Mark these dates on your calendar now and plan accordingly - request time off work, arrange transportation, and avoid scheduling other commitments on these days. If you anticipate any conflicts, contact me immediately rather than waiting until exam day.

Exam 1	Tuesday Feb 11th
Exam 2	Tuesday, March 11th
Exam 3	Thursday, April 10th
Exam 4	Thursday, May 1st

#### Alecks Online Homework:

Online homework will be assigned after each class session and is due by the start of the next class period. While assignments are designed to be completed between classes, you have until the following week as a final deadline to submit your work. Regular practice through homework is essential for mastering mathematical concepts - problems are carefully selected to reinforce your understanding and build computational fluency. If you find yourself struggling with the material, please utilize office hours, the math tutoring center, or email me to get help early rather than falling behind.

#### Written Homeworks:

- Written homework assignments are designed to develop proper mathematical notation and exam-ready problem-solving skills. You will submit these by scanning all pages into a single PDF using a scanning app and uploading to Canvas. Solutions will be posted 48 hours after the deadline, so no late work can be accepted. If you need an extension due to extenuating circumstances, email me before the deadline.
- To address extenuating circumstances, one written assignments grade will be dropped.

#### In Class Group Activities:

In class group activities can be in the form of a:

- **Group quiz**: Group quizzes will be completed and submitted during class with randomly assigned teams. These hand-written assignments cover material from homework, notes, and the textbook, with all group members receiving the same grade. Group work provides valuable opportunities to both teach and learn from peers at different skill levels. Teaching others reinforces your own understanding, while learning from classmates offers fresh perspectives. This collaborative environment helps everyone succeed, as mathematics is inherently strengthened through teamwork and shared understanding.
- **Individual Quiz**: Individual quizzes will be given throughout the semester and announced during the previous class period. These closed-note assessments are designed to familiarize you with exam-style questions and time constraints. Quizzes serve as

checkpoints to ensure you're keeping pace with the material and give you targeted practice with the types of problems you'll encounter on exams.

• Other activities: Throughout the semester, we'll engage in various interactive learning activities including games, Kahoot, and mathematical simulations. These activities are designed to reinforce concepts through collaborative learning and will be graded based on your active participation rather than correct answers. Showing up and engaging with the material is what matters for these assignments.

In class activities are meant to be done in class, thus **one cannot make-up in class activities**. However, some of each of the in class activities type grades will be dropped to account for unforeseen circumstances that prevent you from attending class.

#### **Final Exam:**

The Final Exam is a cumulative final that covers all the material. The final is set up like the unit exams but covers more material. **Final** must be taken to receive a passing grade (A, B, C, or D).

Final Exam is on Tuesday, May 13 at 10-11:50am.

Grade Distribution	Final Grade Scale
Best 3 out of 4 Exams 45%	> 89.5% = A
Alecks Homework 15%	> 79.5% = B
Written Homeworks 10%	> 69.5% = C
In class group activities 10%	> 59.5% = D
Final exam 20%	below 59.5% = F

### Late Work Policies

Extensions will be granted on a case-by-case basis and is situation dependent. I understand that things come up, and communication is essential. Emailing me to communicate your situation (if possible before the missed class/assignment) is your responsibility, but not a guarantee of an extension. (csizemore@clcillinois.edu (mailto:csizemore@clcillinois.edu).) . There are no make-ups for in class activities but a few lowest grades will be dropped at the end of the semester. There is no make-up for exams. Three best exams scores out of the four semester exams will be kept. While this policy provides a safety net for an off day or unexpected circumstances, you should plan to take all four exams. Missing an exam intentionally removes your buffer against illness, emergencies, or underperformance on a later test. Be strategic - take every exam and give yourself the best chance at success in the course.

## Withdrawing from the Class: There are 3 types of Withdrawals

Withdrawing from a class means that you no longer want to be enrolled in the class. Your transcript and the grade for the course may vary depending on the time at which you withdraw or request to withdraw from a course. The table below briefly outlines the actions you must take and the potential outcomes if you decide to withdraw from

this course. I can help with understanding the difference. We can discuss different options if you are unsure.

If you wish to withdraw:	You must:	What you will see on your transcript:
Prior to the Refund Date Thursday, Feb 6th	Withdraw from course via Student Center	transcript will not reflect enrollment in the course and you will be refunded
	Withdraw from course via Student Center	a grade of "W" will be recorded on your transcript  NOTE: you will still be responsible for payment for the course (100%) There is no partial refund
completion of the final project	Request a withdrawal from your instructor and follow their directions	<ul> <li>If you are passing the course and obtain your instructor's approval: a grade of "WS" will be recorded on your transcript</li> <li>If you are failing the course at the time of request: a grade of "FW" will be recorded on your transcript.</li> </ul>

## **Important Dates**

Course Dates: Tuesday Jan 21st - Thursday May 8th

Last Date to Withdraw with a Refund and No Grade: February 6th

Last Date to Withdraw with a Grade: April 16th

Midterm: March 19th

Last Day to Complete an Incomplete: September 9th, 2025

## **Support Information**

• For Canvas support contact:

- o (888) 970-4638
- Chat with Canvas Student Support (https://cases.canvaslms.com/liveagentchat?chattype=student&sfid=001A000000AIHLulAN)
- CLC Account Passwords or any other computer-related technical support contact the <a href="https://www.clcillinois.edu/aboutclc/depts/hlp">CLC Helpdesk</a>
  <a href="https://www.clcillinois.edu/aboutclc/depts/hlp">(https://www.clcillinois.edu/aboutclc/depts/hlp</a>).
  - o (847) 543-HELP (4357)
  - helpdesk@clcillinois.edu
  - Chat with CLC Helpdesk (Students only) (https://collegeoflakecounty.sysaidit.com/ChatEnduserWelcomePage.jsp? queue=1&accountID=collegeoflakecounty&notAddingIndexJSP=true)
- For help with Class Material
  - o If you need help in the course, your first stop should be my office hours. I am here to help you succeed and/or direct you towards the necessary resources/steps. You are welcome to attend any office hours and no appointment is necessary. Office hours will be very informal. You can just come and work in my office and see if any questions arise.
  - <u>CLC Tutoring center (https://clcillinois.instructure.com/enroll/648YCX)</u> is also a great resource. You must enroll in their Canvas course to see hours, resources and make an appointment. They offer drop in help and you can also make appointments with specific tutors.
- Access and Disability Resource Center (ADRC) If you have a documented disability that requires academic accommodations,
  please let me know within the first two weeks of classes. You will need to send me the Instructor Notification Form, so I can
  prepare the accommodations correctly. To request academic accommodations due to a disability, please contact the ADRC (847) 5432474 in Room B171. More info <a href="https://www.clcillinois.edu/aboutclc/diversity-at-clc/access-and-disability-resources/steps-for-receiving-accommodations">https://www.clcillinois.edu/aboutclc/diversity-at-clc/access-and-disability-resources/steps-for-receiving-accommodations</a>)

#### Other

- <u>CLC Academic Resources page (https://www.clcillinois.edu/why-clc/how-will-clc-help-me-to-be-successful/supporting-your-academic-journey)</u> for more general resources.
- Snapshot pdf (https://clcillinois.instructure.com/courses/49127/files/11952152?wrap=1)\_ ↓
   (https://clcillinois.instructure.com/courses/49127/files/11952152/download?download\_frd=1)\_
   (https://clcillinois.instructure.com/courses/47766/files/11207147/download?download\_frd=1)\_with all available resources

### CLC Student Resources

Thriving in college involves studying and taking care of you. CLC offers many free resources to ensure that you will achieve your educational goals. Support for your basic needs such as food, housing, finances, technology, and access to wellness and mental health services are available. You are eligible for most resources simply by being a CLC student. Visit <a href="mailto:student resources">student resources in the Student Portal</a> <a href="mailto:clcillinois.edu/resources">(https://stuportal.clcillinois.edu/resources)</a> or the resources section inside Navigate360 for information. Email <a href="mailto:resources@clcillinois.edu">resources@clcillinois.edu</a> (mailto:ersouces@clcillinois.edu) for assistance.

## Access and Disability Resource Center (ADRC)

The College of Lake County prohibits discrimination against individuals with disabilities in its services, programs, activities, and employment. The Access and Disability Resource Center (ADRC) (https://stuportal.clcillinois.edu/resources/adrc) provides academic accommodation, information and support to students with disabilities. Individuals with disabilities may be provided the following classroom accommodations, including but not limited to extended time for exams, in-class note-takers, sign language interpreters, and assistive equipment. The ADRC is located in Room B171 at the Grayslake Campus. Additional information may be obtained by contacting the ADRC office at (847) 543–2474 or ADRC@clcillinois.edu (mailto:ADRC@clcillinois.edu). If you have already sent the Faculty Notification Letter through myADRC, please set a time to meet with your instructor to discuss your needs.

## **Advising Center**

The <u>Advising Center</u> (https://stuportal.clcillinois.edu/resources/advising) supports students with making the transition to college life and reaching their academic and career goals. Each student is assigned an Academic Success Advisor (ASA) who will be the point person for assisting the student during their time at CLC. Students can find who their ASA is via the <u>My Classes</u> (https://stuportal.clcillinois.edu/my-classes) section on the Student Portal or in Navigate360 and connect with them via Navigate360's online

appointment scheduler, in addition to via email, text, or phone. Students can also contact the Advising Center at (847) 543–2085, <a href="mailto:advising@clcillinois.edu">advising@clcillinois.edu</a> (mailto:advising@clcillinois.edu) or stop by the Welcome and One Stop Center at the Grayslake Campus.

## Career and Job Placement Center (CJPC)

<u>Career and Job Placement Center (CJPC)</u> ⇒ (<a href="https://stuportal.clcillinois.edu/resources/cjpc">https://stuportal.clcillinois.edu/resources/cjpc</a>) helps CLC students learn the skills to prepare job search materials such as cover letters and resumes, find student employment jobs on campus, and job leads, interview successfully, network and find an internship and apprenticeship opportunities. Career Specialists are available to meet with students individually. <a href="mailto:Make an appointment">Make an appointment</a> ⇒ (<a href="http://clcillinois.joinhandshake.com/appointments/new">http://clcillinois.joinhandshake.com/appointments/new</a>) to get a jumpstart on your career!

## Counseling and Psychological Services (CAPS)

FREE mental health services are available at Counseling and Psychological Services (CAPS). ⇒

(https://stuportal.clcillinois.edu/resources/caps) Please call (847) 543–2032 or come to the office in Room A151 at the Grayslake Campus to make an appointment and to learn more about appointment options across all three campuses. Currently enrolled students at ALL campuses are eligible for CAPS services and can take advantage of both in-person and zoom appointments. Students can also <a href="make-an-appointment-with-the-Community-Resource-Coordinator">make-an-appointment-with the Community-Resource-Coordinator</a> (<a href="https://stuportal.clcillinois.edu/resources/caps/community-resources/">https://stuportal.clcillinois.edu/resources/caps/community-resources/</a> who helps address social needs (e.g., housing insecurity, food insecurity) that may be impacting your ability to achieve academic success. Read about our therapy and outreach services, learn about our Mental Health Peer Educators, and take a free mental health screener on the <a href="https://stuportal.clcillinois.edu/resources/caps">https://stuportal.clcillinois.edu/resources/caps</a>. If you have a crisis outside of CAPS hours, please call or text 988 to be connected to a trained crisis support professional.

## Educational Technology

Regular computer access is important for your success in this course. Students who need assistance to access computers, internet hotspots, calculators and other technology tools should visit the <u>technology resources page in the Student Portal</u> (<a href="https://stuportal.clcillinois.edu/resources/help-desk/technology">https://stuportal.clcillinois.edu/resources/help-desk/technology</a>) for information about accessing and borrowing technology.

### SHARE Market

The <u>SHARE (Stopping Hunger and Reaching Excellence) Market</u> (https://stuportal.clcillinois.edu/resources/student-affairs/share-market) at the Grayslake and Lakeshore Campuses provides non-perishable food and household supplies to students who need basic

needs support. If a student has additional needs, contact 211 Lake County by calling 211 or texting your ZIP code to 898211. If you have questions, call (847) 543-2007 or email <a href="mailto:sharemarket@clcillinois.edu">sharemarket@clcillinois.edu</a> (mailto:sharemarket@clcillinois.edu).

## Tutoring - Including Writing Center & Math Center

The <u>Tutoring Center</u> (https://stuportal.clcillinois.edu/resources/tutoring) offers free, personalized academic support to CLC students in a range of subjects, including writing, math, science and business. Tutoring is available online via Zoom or in person at the Grayslake Campus (Room L135), Lakeshore Campus (Room 34-205), or Southlake Campus (Room V212). Writing support is also available asynchronously via email. Make an appointment using Navigate360 or visit the <u>Tutoring Center in Canvas</u> (<a href="https://clcillinois.instructure.com/courses/12094">https://clcillinois.instructure.com/courses/12094</a>) for a complete list of subjects, locations and hours. If you have questions, stop by, call (847) 543–2036 or email <a href="https://clcillinois.edu/mailto:tutoring@clcillinois.edu/mai

### Undocumented Student Advisor

The Undocumented Student Resource Advisor (USRA) supports and empowers undocumented, DACA and mixed-status students and helps them navigate their academic and personal journeys. Students who identify as undocumented, DACA, or from mixed-status families are encouraged to contact the advisor for guidance, campus services and other needs. <a href="mailto:Schedule an initial consultation">Schedule an initial consultation</a>
<a href="mailto:Chitps://outlook.office365.com/owa/calendar/UndocumentedStudentResourceAdvisor1@clc365.onmicrosoft.com/bookings/">https://outlook.office365.com/owa/calendar/UndocumentedStudentResourceAdvisor1@clc365.onmicrosoft.com/bookings/</a>) to receive support. The Undocumented Student Resource Advisor is located in Room B168 at the Grayslake Campus and S116 at the Lakeshore Campus. All services provided by the USRA are private.

## Academic Dishonesty

Please be aware, committing academic dishonesty is a serious offense. The College has a clear definition of academic dishonesty which includes but is not limited to the following five main categories: academic sabotage, cheating, fabrication, falsification, and plagiarism. There are consequences for committing academic dishonesty which involve both academic sanctions (penalties) and indication of the violation on the student's permanent CLC Conduct Record. That said, the College is committed to help reduce Academic Dishonesty through education, therefore please utilize the following resource: Academic Integrity Information Course (Canvas Course). (https://www.clcillinois.edu/student-resources/student-behavior/academic-dishonesty/)

### COVID-19 Information

Before coming to campus, please conduct a personal wellness check and stay home if you are sick. If you have been recently diagnosed with COVID-19, email the <a href="mailto:coviD-19">COVID-19 Concerns Team (mailto:COVID19Concerns@CLCILLINOIS.EDU)</a> at <a href="mailto:covid19concerns@clcillinois.edu">covid19concerns@clcillinois.edu</a> (mailto:COVID19Concerns@CLCILLINOIS.EDU) prior to coming to campus.

## Disclosure of Classroom Recordings

When appropriate, accommodations may allow a student to record or capture classroom instruction and discussion. Students who qualify for such accommodations are required to abide by the terms and conditions of the College regarding the appropriate use of such services and/or devices. This means that pursuant to 720 ILCS 5/14-2(2014), all students are hereby notified that all course content may be recorded without further announcement and without individual consent.

## Land Acknowledgement Statement

We respectfully acknowledge that the College of Lake County is on the ancestral homelands of the Kickapoo, Peoria, Potawatomi, and other Native Peoples. We recognize the longstanding significance of these lands for Indigenous Peoples past, present, and future. Historical awareness of Indigenous exclusion and erasure is critically important to preventing further atrocities. The College of Lake County pledges to acknowledge the grave injustices of the past and pledges to create awareness and advance education that invites truth.

### Non-Discrimination

The College of Lake County is committed to providing an educational and workplace environment free from harassment and discrimination and accordingly will not tolerate discrimination or harassment against any person because of race, color, age, sex, national origin, disability, religion, sexual orientation, gender identity or expression, marital status, military or veteran status, genetic information, ancestry, citizenship, parental status, pregnancy, domestic violence, economic status or any other status protected by law. This Policy applies to all College employees, students, visitors, volunteers, independent contractors, elected officials, and third-parties in connection with any College program or activity, whether on or off campus. Any student who believes they have been subject to unlawful discrimination or harassment is encouraged to immediately contact the Title IX Coordinator or Student Conduct Officer.

## Religious Observance

The College of Lake County accommodates individual students' religious observances in regard to admissions, class attendance, scheduling of examinations, and work. To request accommodation, students who expect to miss classes, examinations, or other assignments as a consequence of their religious observance should provide me advance notice of the date or dates they will be absent.

### Safe Zone

As a means of increasing CLC's commitment to open access and educational opportunity, CLC has actively participated in the national Safe Zone program since the fall semester of 2003. The national program represents an effort to address homophobia, heterosexism, and transphobia in schools and is intended to provide support for LGBTQ+ students, faculty, and staff. The LGBTQ+ Resource Center facilitated program tangibly identifies safe allies for LGBTQ+ people in an effort to increase students' academic success and retention. I hereby declare myself as such an ally, and this class as a Safe Zone.

It is CLC policy for students to use whatever bathroom they wish to use on campus. This policy is supported by the gender-inclusive signs in front of every bathroom. There is also a single unit, gender-neutral bathroom stall in the C-wing on the first floor (C160A).

If you wish to change your name on Canvas to your preferred name, please contact the Dean of Student Life, by calling (847) 543-2287.

### Student Records/FERPA

The Family Educational Rights and Privacy Act (FERPA) gives students certain rights with respect to their education records. Please see the CLC catalog for more details, or learn more about **FERPA** (https://stuportal.clcillinois.edu/resources/student-records/ferpa).

## Student Rights and Responsibilities Policy (SRRP)

The Student Rights and Responsibilities Policy (SRRP) and associated procedures describe students' rights and responsibilities, as well as examples of misconduct inconsistent with the academic environment at CLC. For more information, refer to <a href="Student Rights and Responsibilities Procedures">Student Rights and</a> <a href="Responsibilities Procedures">Responsibilities Procedures</a> (PDF) (http://dept.clcillinois.edu/ssd/StudentRightsandResponsibilitiesProcedures.pdf).

### Title IX

The College of Lake County seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault, we encourage you to report this. If you report this to a faculty member, they *must* notify our college's Title IX coordinator about the basic facts of the incident. For more information about your options at CLC, refer to <u>Title IX</u>

Procedures (PDF) (http://dept.clcillinois.edu/ssd/TitlelXProcedures.pdf). You can also contact Kristin Jones, Title IX and Compliance Coordinator, at kjones24@clcillinois.edu or by calling (847) 543-2464.

## Withdrawing from Class

You are responsible for dropping or withdrawing from classes you do not intend to complete. Grades of W will only be assigned to students who withdraw themselves. Tuition and fee refunds will be issued to eligible students based upon the effective date of withdrawal, which is recorded in the system at the time the student drops the class.

Instructors are required to administratively withdraw students who never attended or stopped attending class. All administratively withdrawn courses will remain on your academic record and are not eligible for a refund. Grades will be assigned based on dates of attendance:

WN – You never attended class: no impact on GPA

WS - You stopped attending class: no impact on GPA

FW – You stopped attending class after the official withdraw deadline and your instructor deems you failing: equivalent of F grade for GPA.

In order to withdraw and receive a grade of W after the deadline, you must request a withdrawal from your instructor; requests must be made in writing and additional approvals may be required. You must have a passing grade at the time the withdrawal request is made. Once approved, you will be withdrawn from class.

# Course Summary:

Date Details Due