

Clarendon College
Course Syllabus
MATH 1314 – College Algebra Online
Fall Mini 2025

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Office Hours: I will check my email 3 to 4 times a day.

Required Text: MathXL account. See grading policy section below.

Optional Text: Algebra and Trigonometry, 6e
Blitzer, Pearson

You **DO NOT** really need the physical textbook for this class, because you can access it on MathXL while working on homework, or by going to the “Study Plan.” Of course, having a physical textbook is always convenient, but it is by no means necessary to have one.

Recommended Readings: These books don't really have to do with the class, but they are fun and give either some nice mathematics history or show you what mathematics is about from a bigger picture standpoint:

- Number: The Language of Science, Tobias Dantzig. Gives a very comprehensive history of number systems up to our own and beyond, as well as a history of 16th to 19th century mathematics.
- Mathematics From the Birth of Numbers, Jan Gullberg. A mathematics overview book. Is fun to flip through and look at all the pictures.
- Flatland, A Romance of Many Dimensions. Edwin Abbott. A whimsical book designed to help people imagine a world with more than three dimensions.
- The Language of Mathematics, Making the Invisible Visible, Keith Devlin. One of any number of “popular math” books, which are written to give the reader a sense of higher mathematics and its relationship to the world, without the rigorous diction of a regular mathematics text.
- Anything by Lewis Carroll. While most famous for his two books about Alice, Lewis Carroll's primary vocation a mathematician. He wrote many logic puzzle books that are quite challenging.
- Democracy, the God that Failed, Hans Herman Hoeppe. This is a political science book, and a difficult read, but is an excellent example of deductive reasoning at its finest.

Supplies: Reliable internet access and MathXL account (see below). A graphing calculator with matrices is an option, but online tools may be used instead.

Purpose of the Course: College Algebra partially satisfies the requirements for the Associates Degree at Clarendon College and is designed for transfer to a senior college.

Course Description: In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

Prerequisites: Student must be TSI complete in Mathematics.

Core Objectives:

Critical Thinking Skills

- to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

Communication Skills

- to include effective development, interpretation and expression of ideas through written, oral and visual communication

Empirical and Quantitative Skills

- to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Learning Outcomes:

Upon successful completion of this course, students will:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, and inverses. (Assesses EQS with Quiz for Student Understanding of THECB Learning Outcome One)
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations. (Assesses CT, EQS, and COM with Quizzes to Demonstrate Mastery of THECB Learning Outcome Two and Learning Outcome Three B)
3. Apply graphing techniques. (Assesses CT, EQS with Quiz to demonstrate Mastery of THECB Learning Outcome 2)
4. Evaluate all roots of higher degree polynomial and rational functions. (Assesses CT and EQS with Quiz to demonstrate Mastery of THECB Learning Outcome Four)
5. Recognize, solve and apply systems of linear equations using matrices. (Assesses EQS with homework assignment followed by a quiz to check for understanding and mastery)

Methods of Instruction:

1. Reading assignments.
2. Online lecture notes.
3. Problem assignment.
4. Discussion of problems.

Grading Policies:

All assignments must be completed on MathXL at www.mathxl.com.

I will send you login information for MathXL when you send me a message in OpenLMS (aka Moodle).

Homework: 40% Math takes practice, and the importance of homework cannot be exaggerated.

Practice Tests: 5% Practice Tests are available for each of the regular tests and the Final Exam. They are generated with the exact same parameters as the real test, and you can take them as many times as you wish.
As long as you give an honest attempt on each practice test before taking the real one, I will record them as 100 when I compute overall grades. So if you take each practice test at least once before the real test, and you score higher than zero on it, you will get these 5

points on your overall grade.

Tests: 30%

There will be three regular tests. I will reverse replace test grades, so that a test can replace the immediately prior test if the grade is higher. For example, if a student scores higher on the second test than the first, I will replace the first test's grade with the second. Also, if a student scores higher on the final than on the third test, then I will replace the third test's grade with the grade of the final.

Long story short, if you do poorly on one test, working hard and doing better on the next test will allow you to drop the poor test grade.

Final: 25%

The final is comprehensive.

For those of you who like formulas, the above says that your numerical grade will be computed using the formula

$$\text{Your grade} = .40 (\text{HW ave}) + (\text{Number of practice tests attempted at least once, +1 extra for Final Exam practice test}) + .30 (\max\{T1, T2\} + \max\{T2, T3\} + \max\{T3, \text{Final}\}) / 3 + .25 (\text{Final}).$$

Grading Scale:	90-100	A
	80-89	B
	70-79	C
	60-69	D
	<60	F

All work is to be turned in on time. All the homework and tests are already open. If you know you will be busy around the due date of an assignment, then you can do it early. **The final exam date cannot be changed.** (Part of the reason that I drop the lowest homework and reverse replace tests is to not penalize unexpected absences due to illness, being in jail, etc.)

STUDENT ACADEMIC INTEGRITY AND CLASSROOM ETHICS

Clarendon College is committed to a philosophy of honesty and academic integrity. It is the responsibility of all members of the Clarendon College community to maintain academic integrity at Clarendon College by refusing to participate in or tolerate academic dishonesty. Any act of academic dishonesty will be regarded by the faculty and administration as a serious offense. Academic dishonesty violations include, but are not limited to:

1. obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion;
2. discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given;
3. observing the work of another during an examination or providing answers to another during the course of an examination;
4. using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment;

5. entering an office, classroom, laboratory, or building to obtain an unfair advantage;
6. taking an examination for another person;
7. completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person;
8. altering grade records;
9. using any unauthorized form of an electronic communication device during an examination, classroom activity, or laboratory activity; and/or,
10. plagiarism. (Plagiarism is defined as the using, stating, offering, or reporting as one's own an idea, expression, or production of another person's work without proper credit. This includes, but is not limited to, turning in a paper purchased or acquired from any source, written by someone other than the student claiming credit, or stolen from another student.)

Students are responsible for reporting known acts of academic dishonesty to a faculty member, the program coordinator, the vice president, and/or dean. Any student with knowledge of a violation who fails to report it shall him/herself be in violation and shall be considered to have committed an act of academic dishonesty.

While academic integrity and honesty are the responsibility of the individual student, each individual faculty member, teaching assistant, and/or laboratory instructor is responsible for classroom management and for maintaining ethical behavior within the classroom and/or laboratory. Faculty who discover or suspect a violation should discuss the matter with the suspected violator(s) and attempt to resolve the case at that point. In cases of convincing evidence, the faculty member should take appropriate action. The faculty member and student should complete a Counseling Sheet regarding the violation. (The Counseling Sheet should contain at a minimum the date and time of the violation, the course, the instructor's name, the student's name, an explanation of the infraction or facts of the case, and the resolution to the incident.) This form should be signed by the student, faculty member, program coordinator, and the Vice President of Academic Affairs. The Vice President of Academic Affairs will maintain a file on all violations. If a faculty member prefers to report the case directly to Vice President of Academic Affairs, it remains his/her prerogative to do so. Additionally, if the faculty member and the accused student cannot reach a resolution or if the faculty member believes that suspension from school is the only fair sanction, the case should immediately be reported, by the faculty member, in writing, to the Vice President of Academic Affairs. If the Vice President of Academic Affairs observes any trends in student behavior which involve more than one violation or act of academic dishonesty, the Vice President of Academic Affairs is responsible for notifying all faculty members involved, for contacting the student(s) involved, and after consultation with the faculty member(s) involved for taking the appropriate action. The Vice President of Academic Affairs is responsible for the timely notification (normally within two weeks) to all parties of an action taken.

Students wishing to appeal a disciplinary decision involving academic integrity or acts of academic dishonesty may do so through the Student Appeals and Grievance Procedure.

Classroom Policies:

1. **Online Attendance Policy:** Weekly attendance is mandatory in all online courses. Specific

activities will be identified each week that must be completed in order for students to be considered “in attendance.” Students are expected to log into their online course(s) at least twice a week. Progress towards satisfactory completion of weekly assignments is expected on a weekly basis. No progress could jeopardize good standing and financial aid.

My Policy: For this course, I will submit an attendance report each *Wednesday morning*. I will mark as student “present” if they completed at least 30% of the HW assignment due for that week. Students can be placed on academic probation or lose financial aid for non-attendance or failure to work through the course assignments.

2. **Final Exams:** The schedule of final exams times is published at the beginning of the semester. You can find the schedule for final exams at:
<https://www.clarendoncollege.edu/studentservices/student-resources-forms.html>.
3. **Scholastic Honesty:** I adhere to a strict policy regarding academic honesty. Anyone who is dishonest in any way will receive a zero on that assignment or exam with no opportunity to make up the zero and may be dropped from the course with a grade of F. That student, if allowed to remain in the course, will not be allowed to receive any extra credit points from the time of the infraction through the remainder of the course. Furthermore, that student will not be allowed to drop their lowest quiz grade or exam grade. A second act of dishonesty will result in an F for the course. Students who commit an act of academic dishonesty will not be allowed to withdraw from the course with a “W.” Note that dishonest behavior includes both the act of copying someone else's work as well as allowing someone to copy your work. Both students are equally guilty and will be equally punished.
4. **Course Withdrawal**--Students desiring to make schedule changes after their initial registration each semester must do so during the designated “Drop and Add” period as scheduled in the College Catalog. Students will be required to pay tuition and fees applicable to any class(es) added to their schedule.

Official withdrawal from a course is initiated in the Office of the Registrar. However, each student should consult with his/her academic advisor or the Associate Dean of Enrolment before officially withdrawing from a course. A student who stops attending a class without officially dropping it may receive a grade of “F” for that class.

5. **Grievance/Appeals:** If you have a dispute concerning your grade or policies in this class, it is the student's responsibility to contact the instructor to discuss the matter. Should things remain unresolved, please follow the procedures described in the Clarendon College Student Handbook or College Policy Manual.
6. **Accommodation Statement** REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT:
In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, any student who feels that he or she may need any special assistance or accommodation because of an impairment or disabling condition should contact the Associate Dean of Enrollment Services at 806-874-4837 / janean.reish@clarendoncollege.edu or visit the Clarendon campus at Clarendon College. It is the policy of Clarendon College to provide reasonable accommodation as required to afford equal educational opportunity. It is the student's responsibility to contact the Associate Dean of Enrollment Services.
7. **Nondiscrimination Policy**

Clarendon College, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, or veteran status. It is the policy of Clarendon College not to discriminate based on gender, age, disability, race, color, religion, marital status, veteran's status, national or ethnic origin, or sexual orientation. Harassment of a student in class, i.e., a pattern of behavior directed against a particular student with the intent of humiliating or intimidating that student will not be tolerated. The mere expression of one's ideas is not harassment and is fully protected by academic freedom, but personal harassment of individual students is not permitted.

The full details of **Student Rights and Responsibilities** policies can be viewed on Clarendon College's website at: <https://www.clarendoncollege.edu/Sites/ClarendonCollegeNew/Resources/Legal/24-25/StudentRightsResponsibilities.pdf>

Course Schedule:

All assignments are due at **11:59pm Central Time**. Notice that the "due date" does not mean the day you are supposed to submit an assignment. The "due date" means the last possible day that an assignment will be accepted.

I encourage you to stay a few days ahead of the due dates. You never know when computers/internet will crash or when life situations will prevent you from being able to work on an assignment. If you are a few days ahead of the due dates, you won't be stuck with the possibility of missing an assignment due to unforeseen issues.

This is an especially fast term. A homework assignment in the long semester would be about a week's worth of work. Here in the short semester there's a homework due every two days, with only one extra day for tests. Of course, this session also has a lot of holidays to work in as well. Again, late work isn't accepted, so it's very important to stay on task and not get behind.

December 18	Last day to Add/Drop
December 19	HW 1 due
December 21	HW 2 due
December 23	HW 3 due
December 24	Exam 1 & Practice due
December 26	HW 4 due
December 28	HW 5 due
December 30	HW 6 due
December 31	Exam 2 & Practice due
January 2	HW 7 due
January 4	HW 8 due
January 5	Last Day to Drop as a W
January 6	HW 9 due
January 8	HW 10 due
January 9	Exam 3 & Practice due
January 11	HW 11 due
January 11	Final Exam Available
January 13	HW 12 due

Course Outline:

- Unit 1: Expressions, Exponents, Roots, and Polynomials
(Sections P.1 thru P.4 in textbook)
- Unit 2: Factoring and Rational Expressions
(Sections P.5 and part of P.6 in textbook)
- Unit 3: The Binomial Theorem, Polynomial Division, and Partial Fractions
(Sections 11.5, 3.3, rest of P.6, part of 8.3 in textbook)
- Unit 4: Graphing Intro, Linear Equations, and Algebraic Modeling
(Sections 1.1 thru 1.3 in textbook)
- Unit 5: Complex Numbers and Quadratic Equations
(Sections 1.4 and 1.5 in textbook)
- Unit 6: Applications of Quadratic and Other Kinds of Equations
(1.5—just application problems, section 1.6 and 3.7 in textbook)
- Unit 7: Functions and Graphing
(Sections 2.1, 2.2, 2.6 in textbook)
- Unit 8: Linear Functions and Slope, Quadratic Functions
(Sections 2.3, 2.4, 3.1 in textbook)
- Unit 9: Composite and Inverse Functions, Polynomial Functions
(Sections 2.6, 2.7, 3.2 in textbook)
- Unit 10: Roots of Higher Order Polynomials, Rational Functions
(Sections 3.3 thru 3.5 in textbook)
- Unit 11: Systems of Linear and Non-Linear Equations
(Sections 8.1 thru 8.4, and 9.1 in textbook)
- Unit 12: Exponential and Logarithmic Functions
(Chapter 4 in textbook)