

MA 111, College Algebra, Fall 2024
4 Credits, MWRF, 11:00 – 11:50 AM, JXJ 3309

Instructor: Evan Phillips

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Office: JXJ 2234

Office Hours: M 1:00 - 1:50 PM, WRF 12:00 - 12:50 PM

Textbook and Other Requirements:

Algebra and Trig, 11th Edition, by Ron Larson with Cengage

Scientific Calculator is allowed, but not necessary (Graphing Calculators aren't allowed)

Grading Scale:

A: Less than or equal to 100%, and greater than or equal to 90%

B: Less than 90%, and greater than or equal to 80%

C: Less than 80%, and greater than or equal to 70%

D: Less than 70%, and greater than or equal to 60%

F: Less than 60%, and greater than or equal to 0%

(+ and – are the top third and lower third respectively)

Attendance: Come to class. The class will probably be harder for you if you miss class.

Homework: Homework will be online and will be due weekly. Homework will comprise 25% of your grade. The exams will probably be easier for you if you do your homework on time. I understand that life gets in the way sometimes, so due dates are flexible.

Exams: There will be 5 exams total, including the final exam. The final exam will be comprehensive and will comprise 35% of your grade, and the other exams will each comprise 10% of your grade. Exams will be taken in class during the allotted time period. Please communicate with me if you are unable to make it to an exam.

Course Topics:

The study of quadratic and higher degree polynomials and rational expressions, exponential and logarithmic equations and functions. Emphasis on exponential and logarithmic functions. Other mathematical concepts may be covered as well.

Course Learning Outcomes:

1. Perform operations with functions, including composition of functions, polynomial long division and synthetic division.
2. Solve equations, including degree 2 and higher polynomials, rational expressions, logarithmic functions (emphasis on the natural log), and exponential functions.
3. Graph and determine the domain and range of a function, including the inverse map or function. Demonstrate placement of vertical and horizontal asymptotes for rational, logarithmic, and exponential functions.
4. Solve applied problems involving the application of polynomial, rational, radical, exponential and logarithmic functions.

5. Solve systems of equations including linear and nonlinear systems, and solve linear systems using matrices (if time permits).

NMU General Education Learning Outcomes for Quantitative Reasoning and Analysis (QUAR) – Students will demonstrate:

- Critical thinking
- Interpretation of quantitative data leading to conclusions

ADA Statement:

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1737 or disserv@nmu.edu). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.

This syllabus is subject to change with notice.