

**College Algebra - MA 111**  
**Section 01, CRN 10417**  
**Winter 2025, 8:00 – 8:50 PM MTWR**  
**The Science Building 1705**

**Instructor:** Kayla Bittenbinder

**Office:** 2227 Jamrich, Department of Mathematics

**Hours:** Tuesday 4pm-6pm, Wednesday 1pm-3pm.

Other times available upon request.

**Email:** kbittenb@nmu.edu

**COURSE DESCRIPTION**

The study of quadratic and higher degree polynomials and rational expressions, exponential and logarithmic equations and functions (emphasis on exponential and logarithmic functions).

**Prerequisite:** Placement exam or MA100 (C- or better).

**Text:** Crauder et al. Preparations for Calculus: Functions and How They Change

- This text is *not* required to buy, and you will have access to the Ebook through Achieve.
- Access to Achieve is built into the price of the course and you do *not* have to purchase it through the bookstore!

**The Math Lab:** The math tutoring center is in 2100 Jamrich and is open 10am-7pm MTWR and 10am-5pm on Friday. It is a fantastic resource! Use it!!

**NMU General Education Learning Outcomes:**

- Critical Thinking
  - Evidence - Assesses quality of information that may be integrated into an argument
  - Integrate - Integrates insight and or reasoning with existing understanding to reach informed conclusions and/or understanding
  - Evaluate - Evaluates information, ideas, and activities according to established principles and guidelines.
- Quantitative reasoning and analysis
  - Calculation - Calculates mathematical and numerical operations
  - Analysis/ Application - Use data to make judgments and/or draw conclusions
  - Interpretation - Explains information presented in mathematical forms (e.g. equations, graphs, diagrams, tables, and words)

**Course Learning Outcomes:**

- Perform operations with functions, including composition of functions, polynomial long division and synthetic division.
- Solve equations, including degree 2 and higher polynomials, rational expressions, logarithmic functions (emphasis on the natural log), and exponential functions.

- 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.
- Solve applied problems involving the application of polynomial, rational, radical, exponential, and logarithmic functions.
- Solve systems of equations including linear and nonlinear systems, and solve linear systems using matrices (if time permits).

**Homework: Assignments will be completed online through Achieve.** Assignments will be due on Sunday at 11:59pm. I highly recommend starting your homework prior to Sunday, as there will be multiple assignments due each week. Generally there will be one homework assignment corresponding to every 1-2 lectures.

**ACHIEVE COURSE CODE:** eq535y

**Exams:** There will be four in-class exams and a comprehensive final exam. To receive a passing grade in the course, you need to earn at least 60% on the final exam.

You may *NOT* use a graphing or programmable calculator of any kind on exams. It is your responsibility to come with a scientific calculator to exams.

Exams will \*generally be given on Thursday of week 4 and then every 3 weeks thereafter, subject to change at my discretion. I will *always* announce an exam at least 7 days in advance. These announcements are always made in class and I may or may not also announce them via email. I expect you to be present in class so I generally do not prioritize making such announcements online. If you miss class and **email me prior to your absence**, I will be sure to notify you via email.

**Breakdown:**

Homework:	20%	
Quizzes	10%	
Exam 1:	10%	
Exam 2:	10%	
Exam 3:	10%	
Exam 4:	10%	
Final:	30%	(Comprehensive)

**Grade scale:**

93 – 100%	= A
83 – 89%	= B
73 – 79%	= C
63 – 69%	= D
< 60%	= F

**Course Communication**

The best way to contact me is either face-to-face during office hours or via email.

- **Achieve and Email:** I generally respond to extension requests, questions, and emails by the end of the same business day during the week. I may or may not be available to respond quickly to emails outside of business hours and on weekends, but in this case I *will* get back to you on the next business day. If I don't, feel free to email me again!
- I will notify you via email of your current grade after each exam and upon (reasonable) request.

About me:

I am typically a rather informal, laid back person, but there are some things which tend to make me unhappy. Here's a short list:

- Repeatedly skipping class and expecting me to 'lecture' in office hours.
  - Attendance is not graded. Your education is your responsibility and I expect you to be present and attentive.
  - If you miss class, I am happy to direct you to the section(s) in the ebook which cover that content. Before coming to office hours I *do* expect you to have consulted the ebook and at least attempted some of the problems. This will allow us to have an effective discussion. Generally an ad-hoc 'lesson' off of the top of someone's head will not be remotely as effective as a prepared lecture.
- Cheating, etc. Academic dishonesty will result in the immediate failure not only of the assignment/ exam, but the course as a whole, and can be grounds for dismissal from the University. Don't do it.
- Not asking questions! If you are not understanding something right away, ask! This course builds on itself, so there is really no "waiting to move on" from something you don't understand. The only stupid question is one you don't ask! Raise your hand, come find me, or visit the math lab.

**Appropriate behavior:** I expect students to behave in a respectful, considerate and courteous fashion in any activity related to this course (e.g. Lecture, discussion, office hours etc).

Rude, disrespectful or disruptive behavior will never be tolerated.

#### **ADA Statement**

If you have a need for disability-related accommodations or services, please inform the Coordinators of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (906-227-1737 or [disability@nmu.edu](mailto:disability@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.

**Remember that if you wish to take an exam in the testing center it is your responsibility to put in an accommodation request with disability services 5 days in advance of the exam.**

#### **Religious and Spiritual Observance Statement**

Faculty, staff, and students practice a variety of religious and spiritual traditions, which enhance the diversity of our campus community. NMU acknowledges that scheduling conflicts between required academic activities and religious and spiritual obligations are inevitable. Additionally, we recognize that some religious and spiritual obligations extend for multiple days and/or start at sundown of one day and extend through sundown of another day. In the event of conflicts, I will make every effort to help students avoid any negative academic consequences of observing religious and spiritual obligations. Students should consider the implications of missing class due to religious and spiritual obligations and should take into consideration these impacts when making decisions regarding any other absences during the term.

When an exam, assignment, or class conflicts with a previous arrangement, students are responsible for notifying me **in advance** of the date(s). You are not exempt from meeting course requirements or completing assignments in a timely manner as determined.

*This syllabus is subject to change with notice.*