

Fall 2024
MA111: COLLEGE ALGEBRA FOR CALCULUS PREPARATION
Division II
JXJ (JAMRICH) 3313
M,W,R,F 9 - 9:50 AM

Instructor: Trent Holmgren

Instructor email: tholmgre@nmu.edu

Office hours: JXJ 2232

Monday: 10:00 - 10:55 AM

Tuesday: 12:00 – 1:00 PM

Wednesday: 10:00 - 10:55 AM

Thursday: 10:00 - 11:30 AM

Friday: 10:00 - 11:30 AM

Else by appointment

Prerequisites: MA 100 (C- or better) or satisfactory score on the Math Placement Exam.

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

Critical thinking

interpretation of quantitative data leading to conclusions

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.

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).

Course Materials: *Algebra & Trigonometry , 10th Edition*. Author: Ron Larson. ISBN-10: 1-337-27117-9. This is a First Day course, meaning you don't need to make an additional purchase for this textbook. You will have access to the eBook once you join my WebAssign class. **A Scientific calculator is allowed, no graphing calculators are allowed.**

Assignments: Homework will be done through WebAssign online. Assignments will be due at 11:59 each Sunday. Do not start the homework on Sunday, as there are roughly 4 homework assignments due each week. All assignments will be made available from the first day of the semester if you choose to work ahead. Go to www.webassign.com at the top right of the screen you can enter our class key **nmu 8689 1318** which will enroll you into “NMU MA 111, section Holmgren”. You will also need to create an account for the site.

Exams: There will be four in-class exams and a comprehensive final exam. If you are unable to be in class on an exam day, please let me know before the exam.

Course Grading: Homework: 20%
Exams (4): 44%
Final Exam: 30%
Quizzes: 6%

Course Grade:

A 93-100%	A- 90-92.9%	
B+ 87-89.9%	B 83-86.9%	B- 80-82.9%
C+ 77-79.9%	C 73-76.9%	C- 70-72.9%
D+ 67-69.9%	D 63-66.9%	D- 60-62.9%
F below 60%		

Suggestions: Learning, in my experience, is best in a team. Please answer questions and don't be afraid if you are wrong! We learn through trial and error. In addition to my office hours, the University has established tutoring services that are free-of-charge to NMU students, and I highly encourage you to take advantage of both the Math Department's Math Lab in Jamrich 2100, as well as NMU's All-Campus Tutoring in Harden Hall and the Woods.

At the same time, learning is an active process, and it is critical that you respect this process. Attending every class, being mentally present in those classes, and engaging yourself in the activities we do in class will have a tremendous influence on your success. Work with your classmates, and your peers at the tutoring centers, to grow your skills as you struggle with concepts and problems, make mistakes, and then find the solution. There is a direct relationship with effort and academic success, and I want you to know what resources (and I am one of those resources!) are at your disposal to help you translate your effort into the grade you want, given requisite effort.

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). 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.*

Final Disclaimer:

As the semester progresses, I reserve the right to alter or change the policies of the syllabus to fit the needs of the classroom and the guidelines placed by Northern Michigan University.