

**Instructor:** Sam Mulholland

**Email:** mmulholl@nmu.edu

**Office:** Jamrich 2235

**Class room:** 3803 TSB

**Office Hours:**

Monday 9:00am-9:50am

Tuesday 9:00am-9:50am

Wednesday 9:00am-9:50am

Thursday 9:00am-9:50am

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

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

1. Critical thinking
2. 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.

- 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. The book can be bought both in a physical copy, or with an online copy at the NMU bookstore, an online copy can also be bought at [www.webassign.com](http://www.webassign.com) . Scientific calculator. Graphing and/or programmable calculators are NOT allowed on exams.

**Assignments:** Homework will be done online through WebAssign. 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 Educat near the top you will find Webassign-NMU MA 111, click on that resource. From there you will also need to create an account for the site. If you have not yet obtained the textbook you can buy an online copy.

**Course Grading:**

Homework: 20%  
Exams (4): 40%  
Final Exam: 30%  
Quizzes: 10%

**Course Grade:**

90%-100% - A  
80%-89% - B  
70%-79% - C  
60%-69% - D  
0%-59% - F

plus and minus are assigned to a letter grade based on single digit percent value, bottom 3.3% is minus, top 3.4% is plus. Example: 83.4%- 86.7% is an B

**Quizzes:** There will be weekly Quizzes, usually on Thursday. I am more than accommodating about making up quizzes, However if I notice a pattern of repeated absences on the days we do quizzes I will not let you make up quizzes.

**Attendance:** Note that participation and Attendance are not a part of your grade. However, I highly recommend that you attend class.

**Participation:** Participation in class is crucial to your success in the class, it may not be graded, however following along in class will help you. On that note, please keep the cell phone use to a minimum during class. It is disrespectful to your classmates and it is disrespectful to me. Acceptable laptop use in class, is as follows homework questions, or if it is relevant to

lecture.

**Academic Dishonesty:** There are many situations that working together can be beneficial. On homework, and quizzes I encourage you to work together. With that being said, during tests you must work on your own, and it must be your work. **If a person is caught cheating, they will receive a zero for the assignment and an F for the course.**

**NMU's Non-Discrimination Statement:** Northern Michigan University does not unlawfully discriminate on the basis of race, color, religion, sex, national origin, age, height, weight, marital status, familial status, handicap/disability, sexual orientation, or veteran status in employment or the provision of services, and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities an equal opportunity to participate in all programs and activities. Anyone having civil rights inquiries may contact the Equal Opportunity Office, 502 Cohodas Hall, telephone number 906-227-2420.

**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.

**Final Disclaimer:** As the semester progresses I reserve the right to alter or change the policies of the syllabus given I notify the class to the changes.