

**Instructor:** Sam Mulholland

**Email:** mmulholl@nmu.edu

**Office:** Jamrich 2235

**Class room:** 319 TFA

**Office Hours:**

Monday 2:00pm-2:50pm

Tuesday 12:00pm-12:50pm

Wednesday 2:00pm-2:50pm

Thursday 12:00pm-12:50pm

**Prerequisite:** Placement Exam or MA111 (C- or better) or MA100 (A- or better)

**Course Description:** The study of exponential, logarithmic, and trigonometric equations and functions. Includes a review of higher degree polynomial and rational functions. Emphasis on trigonometric functions.

**Course Learning Outcomes:**

1. Apply algebraic techniques (including inverse functions) to solve equations involving polynomials, rational expressions, logarithms, exponential functions, and trigonometric functions.
2. Solve applied problems, such as applications of exponential and logarithmic functions, the Law of Cosines, and the Law of Sines.
3. Recall, define, and apply basic identities involving sine, cosine, tangent, secant, cosecant, cotangent. Use the trig identities in the context of the unit circle, including the distinction between radians and degrees and the common 45-45-90 and 30-60-90 triangles.
4. Recognize graphs of the trigonometric functions and their inverses. Identify amplitude, period, vertical shift, and phase shift
5. Provide geometric interpretations of basic trigonometric functions, with and without variables.
6. Apply angle sum and difference formulas, including half-angle and double angle formulas.

**Course Materials:**

1. Online Book, Algebra and Trigonometry, 11th Edition. Author: Ron Larson. 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) (please wait till the first day of class to purchase your book.)
2. A scientific calculator. You may not use a CAS graphing calculator.
3. Laptop (for homework and attendance)

**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 wish to work ahead. Go to our class Educat page you should see a link titled “Webassing - NMU MA 115, section 02”. Now finish setting up your webassign account. From here if you have not yet obtained the textbook you can buy an online copy.

**Course Grading:**

**Course Grade:**

Homework: 20%	90%-100% - A
Exams (4): 40%	80%-89% - B
Final Exam: 30%	70%-79% - C
Quizzes: 10%	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 let you make up quizzes.

**Attendance:** Attendance will be taken daily through out the sememester. There will be a few exeptions to this. Attendance will be taken primarily with Educat. Your attendance is factored into your grades for Quizzes. Attendance is important for your success in any class you are taking, so come to 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, **NO PHONES OR LAPTOPS IN 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. If I see you with your phone or laptop out in class. I will give you a warning, If I see it again I will ask you to leave for the day.

**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). 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.