

Fall 2024
MA115: Pre-Calculus
Jamrich 3309
MTWR 1-1:50PM

Instructor: Kayla Bittenbinder

Instructor Email: kbittenb@nmu.edu

Office Hours: Jamrich 2227

Monday and Wednesday 2:00pm-4:00pm

Other times upon request if these do not work for you.

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!

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

COURSE DESCRIPTION: The study of exponential, logarithmic, and trigonometric equations and functions. Includes a review of higher degree polynomial and rational functions.

Course Learning Outcomes

1. Manipulate and interpret functions, including absolute values, polynomials (including polynomials of degree greater than 2 and the fundamental theorem of algebra), rational functions, logarithms, exponential functions, and inverse functions.
2. Apply algebraic techniques in solving linear, quadratic, logarithmic, exponential, and trigonometric equations. Determine when the use of the Law of Sines is appropriate, vs the Law of Cosines.
3. Recall, define, and apply basic identities involving sine, cosine, tangent, secant, cosecant, cotangent, and their inverse functions. Apply angle sum and difference formulas, including half-angle and double angle formulas.
4. Recognize graphs of the trigonometric functions and their inverses. Identify amplitude, period, vertical shift, and phase shift

Homework: Assignments will be completed online through Achieve

You can create an account here at <https://achieve.macmillanlearning.com> , or follow the link on EduCat. **Course code:** ftboja

Assignments will be due at 11:59 each Sunday. I highly recommend you start the assignments before Sunday, as there will be more than one assignment due each week. All assignments will be made available from the first day of the semester so you may work ahead if you choose to do so. Extensions may be granted at the discretion of the instructor on an individual basis.

Exams: YOU ARE NOT ALLOWED TO USE A GRAPHING CALCULATOR!!!

Graphing or programmable calculators are not permitted during exams. Appropriate scientific calculators can be provided for exams if they will be necessary. On some exams, calculators may not be permitted.

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

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

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:

- 1. Repeatedly skipping class and expecting me to 'lecture' in office hours.** I don't mind covering material with you in my office, but there is only so much that we can cover in one sitting. Office hours are not a replacement for class time.
- 2. 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.
- 3. 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.

Disability Accommodations

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

Veterans Services Statement

If you are a veteran and need assistance with your benefits or are experiencing complications with your education due to military service connected issues, contact the Veteran Resource Representative in 2101 Hedgcock (227-1402 or mrutledg@nmu.edu). The Veteran Resource Representative can advocate for you before the Veterans Administration and can also help you solve any veteran specific issues you may have.

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 religious or spiritual obligation, 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.