MATH 1034 C: Pre-Calculus

Fall 2023

Instructor:	Jesse Franklin	**Time:**	TR $4:25$ pm $--5:40$ pm
Email:	jesse.franklin@uvm.edu	**Place:**	Waterman 427

1. Course number, Title, Credit hours

Math 1034 C, Pre-Calculus, 3.00.

2. Meeting time, Meeting patern, Location

$4:25$ pm $--5:40$ pm, Tuesday/Thursday, Waterman 427

3. Instructor name, Contact information, Office Hours

Jesse Franklin
jesse.franklin@uvm.edu
Office: Innovation E324
Office Hours: Tuesday/Thursday $3-4$pm, or by appointment
Help Sessions: Monday-Thursday $5-7$pm Votey 303

4. Course Coordinator name, Contact information, Office Hours

Course Coordinator: Joan Marie Rosebush, jrosebus@uvm.edu, N/A

5. Tutors and Support Information

Math Help Sessions: $5-7$pm, Sep $5-$Dec 7, Monday-Thursday, Location: Votey 303

6. Technical Support for Students

Students, please read this technology check list to make sure you are ready for classes. `https://www.uvm.edu/it/kb/student-technology-resources/` Students should contact the Helpline (802-656-2604) for support with technical issues.

7. Pre-requisites and/or co-requisites

Some background in secondary school algebra and geometry; Open to Degree and PACE students.

8. General education (e.g., D1) or other requirements satisfied

Quantitative Reasoning;
For new students or new transfer students our new Catamount Core requirements: a MATHEMATICS and a QUANTITATIVE AND DATA LITERACY. MATH 1034 fulfills neither.

MATH 1034 sets you up for success in our theoretical calculus track: MATH 1234, 1248, and 2248.

9. Notes on courses that may duplicate credit

If you intend to take MATH 1212 possibly followed by MATH 1224, then you should be in MATH 1012.

10. Course Description

An overview of the course:

10.1. **Purpose of the Course.**
(1) Practice mathematical reasoning for given informational needs and use it correctly and accurately.
(2) Develop an understanding of the polynomial, rational, inverse, trigonometric, exponential and logarithmic functions.

10.2. **main concepts, knowledge areas, topics covered and/or questions explored in the class.**
The main objects of study in this course are functions. We will learn what a function is, and then see that many of the familiar kinds of numbers such as fractions (rationals) have a counterpart in functions. Functions are fascinating objects of study in their own right, but we will also use functions to solve various problems.

10.3. **how the course topics relate to each other.**
We alternate between introducing new functions, techniques for analyzing functions, and using functions to solve problems. As the library of functions we are familiar with grows, we can compare and contrast functions, developing a program for solving real problems by finding the right function for the job.

10.4. **how the course will be structured (e.g., lectures, labs, group work, etc.)**
There will be two lectures a week, with weekly in-class, collaborative activities on as many Thursdays as possible.

11. Course Learning Objectives

(1) Determine the appropriate mathematical approach for a given informational need and use it correctly and accurately.
(2) Demonstrate an understanding of the fundamental aspects of the theory of functions including polynomial, rational, inverse, trigonometric, exponential and logarithmic functions.
(3) Recognize and apply the ideas of algebra in economics, business, physics, natural resources and other areas of study.

12. Modality description/Outline

This class is held in person.

13. Required Course Materials

Students struggling to pay for or obtain course materials are encouraged to contact KC Williams, Assistant Dean of Equity, Belonging, and Student Engagement (kc.williams@uvm.edu) and/or UVM Student Financial Services.

Textbook: *PreCalculus J. Douglas Faires & James DeFranza, 5th edition, with WebAssign access code;*
The book can be purchased as a textbook bundle, **as a standalone access code**, *or as part of Cengage Unlimited.* You do not need a paper copy of the book if you do not want it.
The class will follow the text closely.

Webassign: Use the webassign class key: **UVM**21657941 to register for this course specifically. Detailed instructions will be on Brightspace

14. Required platforms and software

Brightspace and Webassign

15. Brightspace, MS Teams, or other course sites

Brightspace

16. Attendance Policy and Classroom Environment Expectations

Attendance in this course is left to the discretion of the student, and will not be recorded nor penalized. During class, please treat your peers with the highest degree of respect and courtesy which you can. The classroom should be an environment where are all welcome, and furthermore one in which everyone is welcome to ask questions and participate in class as much as they would like.

17. Attendance and illness

If a student will not be able to attend in-person classes for qualifying health reasons, Student Health Services (SHS) will send a notification to the appropriate student services office or designated staff member informing them of this along with the dates the student is unable to attend. The SHS notification will specify whether the request for flexibility is only around in-person class attendance or includes additional flexibility for assignments and tests because the student is too ill to participate. Students are responsible for working with their faculty to make up class content and work they miss due to a documented illness.

18. Grading Criteria/Policies

18.1. **Grade components (percentages or point values for different types of graded work).**

- *Homework assignments* will make up 60% of the grade.
- *Quizzes* will be 10% of the final grade and will be held on Thursdays in the form of a collaborative in class activity.
- *Exams* will make up exactly 30% total of your final grade, each is worth 10%, and they will be based on the homework assignments and quizzes.
- *Final exam* is just the last exam.

18.2. **Late policy and any other grading policies (e.g., letter grade ranges; exam curving).** All in-class activity materials (i.e. quizzes) may be submitted up to the date of the nearest exam. Homework extensions past the assigned deadline will be determined on a case-by-case basis, but usually will not extend beyond the date of the relevant exam. Please speak with me about your grade if you are concerned about it.

18.3. **Grading schema (how numerical grade averages translate to letter grades).**

Letter		Grade Range	Letter		Grade Range	Letter		Grade Range	Letter		Grade Range
$A+$	$\cdots$	$\geq 98\%$	$B+$	$\cdots$	$[88, 90)$	$C+$	$\cdots$	$[78, 80)$	$D+$	$\cdots$	$[68, 70)$
A	$\cdots$	$[94, 98)\%$	B	$\cdots$	$[84, 88)$	C	$\cdots$	$[74, 78)$	D	$\cdots$	$[64, 68)$
$A-$	$\cdots$	$[90, 94)\%$	$B-$	$\cdots$	$[80, 84)$	$C-$	$\cdots$	$[70, 74)$	$D-$	$\cdots$	$[60, 64)$
									F	$\cdots$	$< 60\%$

19. Assessments (Graded Work)

- Homework will be online on Webassign. There will be one assignment per section of the textbook covered. Homework will be due before the relevant exams.
- Quizzes are my name for the in-class collaborative activities we will conduct on Thursdays. These will be submitted as .pdf files on Blackboard and are due before the relevant exams.
- Exams are standard closed book exams. You do not need a calculator to complete the exams but you are allowed to use one if you wish, so long as you still show your work.

19.1. **An explanation of the exam structure and policies.** There will be three exams. All exams are closed notebook. The dates and topics are in the calendar, in this syllabus, and will be announced in class. Students are required to take all quizzes and exams at the appointed times unless arrangements are made with the instructor prior to the exam.

19.2. **A summary of due dates for assignments and exam dates.** Homework assignments are due on the following dates:

assignment	due date
HW 1.1 − 1.3	9/5/2023
HW 1.4	9/7/2023
HW 1.6	9/12/2023
HW 1.7	9/14/2023
HW 1.8	9/19/2023
HW 2.1 − 2.2	9/21/2023
HW 2.3	9/26/2023
HW 2.4	2/28/2023
HW 2.5	10/3/2023
HW 3.1 − 3.2	10/5/2023
HW 3.3	10/10/2023
HW 3.4	10/12/2023
HW 3.5	10/12/2023
HW 4.1 − 4.2	10/24/2023
HW 4.3	10/26/2023
HW 4.4	10/31/2023
HW 4.5	11/2/2023
HW 4.6	11/7/2023
HW 4.7	11/9/2023
HW 4.8	11/14/2023
HW 4.9	11/16/2023
HW 5.1 − 5.2	12/5/2023
HW 5.3	12/7/2023
HW 5.4	12/7/2023

and the exam schedule is:

Exam 1 : Chapters 1 − 3 (algebraic functions) exam is on 10/12/2023

Exam 2 : Chapter 4 (trig) exam is on 11/16/2023

Final Exam : Chapter 5 (exponential/log) exam is on 12/7/2023

20. Recording Class Sessions

Our class sessions may/will be audio-visually recorded for students in the class to refer back to, and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you

are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the chat feature, which allows students to type questions and comments live.

21. Research and Citation Help

For help selecting research topics, finding information, citing sources, and more, ask a librarian. The UVM Libraries are eager to help. You may ask questions by phone, e-mail, chat, or text, or make an appointment for an individual consultation with a librarian.
Howe Library: `https://library.uvm.edu/askhowe`
Dana Medical Library: `https://dana.uvm.edu/help/ask`
Silver Special Collections Library: `https://specialcollections.uvm.edu/help/ask`

22. Course Evaluation

All students are welcome to complete an evaluation of the course at its conclusion. The evaluations will be anonymous and confidential, and the information gained, including constructive criticisms, will be used to improve the course.

23. General statement regarding potential changes during the semester

The University of Vermont reserves the right to make changes in the course offerings, mode of delivery, degree requirements, charges, regulations, and procedures contained herein as educational, financial, and health, safety, and welfare considerations require, or as necessary to be compliant with governmental, accreditation, or public health directives.

24. Intellectual Property Statement/Prohibition on Sharing Academic Materials

Students are prohibited from publicly sharing or selling academic materials that they did not author (for example: class syllabus, outlines or class presentations authored by the professor, practice questions, text from the textbook or other copyrighted class materials, etc.); and students are prohibited from sharing assessments (for example homework or a take-home examination). Violations will be handled under UVMs Intellectual Property policy and Code of Academic Integrity.

25. Student Learning Accommodations

In keeping with University policy, any student with a documented disability interested in utilizing ADA accommodations should contact Student Accessibility Services (SAS), the office of Disability Services on campus for students. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly recommended to discuss with their faculty the accommodations they plan to use in each course. Faculty who receive Letters of Accommodation with Disability Related Flexible accommodations will need to fill out the Disability Related Flexibility Agreement. Any questions from faculty or students on the agreement should be directed to the SAS specialist who is indicated on the letter.

Contact SAS:
A170 Living/Learning Center
802-656-7753
access@uvm.edu
`www.uvm.edu/access`

26. Religious Holidays

Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time. `https://www.uvm.edu/registrar/religious-holidays`

27. Academic Integrity

This policy addresses plagiarism, fabrication, collusion, and cheating: `https://www.uvm.edu/policies/student/acadintegrity.pdf`

28. Grade Appeals

If you would like to contest a grade, please follow the procedures outlined in this policy: `https://www.uvm.edu/policies/student/gradeappeals.pdf`

29. Grading

For information on grading and GPA calculation, go to `https://www.uvm.edu/registrar/grades`

30. Code of Student Conduct

`http://www.uvm.edu/policies/student/studentcode.pdf`
FERPA Rights Disclosure: The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. `http://catalogue.uvm.edu/undergraduate/academicinfo/ferparightsdisclosure/`

31. Promoting Health and Safety

The University of Vermont's number one priority is to support a healthy and safe community:
Center for Health and Wellbeing: `https://www.uvm.edu/health`
Counseling and Psychiatry Services (CAPS) Phone: (802) 656-3340
C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at `https://www.uvm.edu/studentaffairs`

Food Insecurity The UVM Center for Health and Wellbeing provides several on- and off-campus resources for students struggling with food insecurity: `https://www.uvm.edu/health/food-insecurity-uvm`

32. Final Exam Policy

The University final exam policy outlines expectations during final exams and explains timing and process of examination period. `https://www.uvm.edu/registrar/final-exams`