

MATH052 – FUNDAMENTALS OF MATHEMATICS

Spring 2023

Instructor:	Taylor Dupuy	Time:	MWF: 2:20 – 3:10
Email:	taylor.dupuy@gmail.com	Place:	Perkins 200

Office hours: Innovation 439, Monday 3:20 – 4:00pm, Friday 12:10–1:00pm,

Course webpage: <https://tdupu.github.io>

Description and objectives: This course is an introduction to rigorous mathematical proofs. Topics include propositional logic, predicate logics, proof techniques, induction, and basic set theory. Prerequisites are Math 21 or Math 23 and some mathematical maturity. The goal of the course is to learn how to write rigorous proofs.

Book: *The Tools of Mathematical Reasoning* by Lakins.

Technology: No special technology is needed. No blackboard. No online homework. In the rare event that we move online due to an unforeseen COVID surge we will meet on MSTeams.

Grading Grading for the course will be based on quizzes.

- The problem pool for each quiz is posted under learning objectives.
- The Midterm and Final will be quiz-redo sessions where you can redo any quiz that you want, even the ones that you missed. This of course means if you are happy with your quiz scores you don't need to take the midterm or final.
- At the end of the semester your grade will be assigned using the top 80% of your quiz scores (so we for every five quizzes I will the drop lowest one).
- I reserve the right to change the grading scheme if I think you guys need some extra help. Also, I reserve the right to re-administer quizzes if I think you guys didn't understand something and I think everyone deserves a second chance.

Final letter grades are assigned according to the following table.

A+	97-100	A	93-96	A-	90-92
B+	87-89	B	83-86	B-	80-82
C+	77-79	C	73-76	C-	70-72
D+	67-69	D	63-66	D-	60-62
F	< 60				

ADHD statement I have combined type ADHD. This mostly manifests itself in typos, oversights, and forgetfulness. If you find any mistakes or I forget to respond to something give me a nudge. I thank you in advance for your patience.

Important dates:

Add/drop deadline	Jan 30
Last day to withdraw	April 3
Last day of class	May 5

Math help sessions UVM Mathematics PhD students hold math help sessions every weekday starting around 5PM and ending around 7PM. I would recommend visiting those help sessions for assistance as our graduate students are excellent. These are located on the 4th floor of the Innovation building every weekday. Please check the Mathematics and Statistics Department webpage for scheduling details.

Expectations: Students are expected to regularly attend class, complete any assigned work, and comply with UVM's *Code of Student Conduct*. Moreover, students are expected to act with *academic integrity*. That is, the student may not plagiarize or fabricate any work, nor may the student collude or cheat. See UVM's *Code of Academic Integrity*.

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

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. See www.uvm.edu/registrar/religious-holidays.

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. See [here](#) for the disclosure. Sensitive emails should be sent to tdupuy@uvm.edu.

Promoting health and safety:

Center for Health and Wellbeing: <https://www.uvm.edu/health>

Counseling & 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>