

MATHEMATICS 2001-001: DISCRETE MATH
FALL 2017 SYLLABUS AND COURSE INFORMATION SHEET

Class Meetings. MWF 9:00-9:50, ECCR 108. Please arrive on time.

Instructor. Faan Tone Liu

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Office: MATH 322

Office Hours: Mon 11:00 am, Wednesday 10:00 am, Thursday 10:00 am (subject to change based on student input)

Prerequisites: Successful completion of first-semester calculus (grade C- or better)

Textbook: We will use the textbook “Book of Proof”, by Richard Hammack. This is an open-source textbook, which means that you can read it for no charge on-line, and you can download it and print it yourself. If you prefer a bound textbook, you can purchase it on-line or at the CU bookstore at a low cost. You can find the textbook on-line at <http://www.people.vcu.edu/~rhammack/BookOfProof/>

Course structure and content: The course basically has two components, which you can think of as Concepts & Skills, and Writing Proofs. The concepts & skills portion will cover the topics of sets, logic, techniques of proof (including proof by induction), counting techniques, equivalence relations, and functions. You will use these topics to practice reading and constructing basic mathematical proofs. Learning concepts & skills will probably feel similar to you to the kind of learning you’ve done in previous mathematics courses, and so you will often be asked to learn and preview this material before coming to class. On the other hand, for most of you, learning to write proofs may often feel unfamiliar. We will spend much of our class time working together, sharing solutions, and grappling with this creative thought process. You should expect on a daily basis to be actively engaged in class, and to participate productively in class discussions by sharing your ideas, solutions and mistakes, and by listening carefully and respectfully to all of your classmates to confirm their reasoning.

Classwork and homework: The assignments in the course are designed to give you sufficient opportunities both to work with the material and to progress in your mathematical communication skills. Your classwork and homework will include daily individual homework, weekly homework done in groups, reading assignments, a written project, weekly in-class quizzes, and daily in-class activities, including sharing your solutions with the class. Guidelines for allowed collaboration on assignments will be given with the assignments. Homework (individual homework as well as group homework) will contribute 20% to your course grade, in-class quizzes will contribute 15%, your written project will be worth 10%, and your participation (including activities and sharing of solutions) will be worth 15%.

Attendance: Consistent attendance in class is imperative to learning the material and being successful in this course. Please arrive on time, stay until the end, and be prepared to participate enthusiastically. To reward you for those efforts, part of your course grade will be based on your participation in class. If you miss class due to a religious observance, please let me know in advance.

Exams: There will be three in-class midterm exams, each worth 10% of your course grade. These are scheduled for **Monday, September 25, Friday, October 20**) and **Wednesday, November 15**. The final exam for the course is **cumulative** and will be worth 10% of your grade. It is scheduled by the registrar and takes place in our regular classroom on **Sunday, December 17, from 7:30 pm to 10:00 pm**. You may not take any of the exams early or late. Please notify me by September 5 if you have a final exam conflict. If a documented emergency ever occurs that interferes with you taking an exam, please contact me right away.

UNIVERSITY POLICIES AND STANDARDS

Accommodations for Disabilities: If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Injuries guidelines under the Quick Links at the Disability Services website and discuss your needs with your professor.

Religious Observances: Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please notify me within the first two weeks of the course if you must miss a class, exam, or assignment because of a religious observance, so that I may plan on how to accommodate you. See the campus policy regarding religious observances for full details.

Classroom Behavior Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the student code.

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation: The University of Colorado Boulder (CU Boulder) is committed to maintaining a positive learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct, discrimination, harassment or related retaliation against or by any employee or student. CU's Sexual Misconduct Policy prohibits sexual assault, sexual exploitation, sexual harassment, intimate partner abuse (dating or domestic violence), stalking or related retaliation. CU Boulder's Discrimination and Harassment Policy prohibits discrimination, harassment or related retaliation based on race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Individuals who believe they have been subject to misconduct under either policy should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127. Information about the OIEC, the above referenced policies, and the campus resources available to assist individuals regarding sexual misconduct, discrimination, harassment or related retaliation can be found at the OIEC website.

Honor Code: All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy of the institution. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at honorcode.colorado.edu.