MATH 2000 Sec. 002 TR 12:30 - 1:50pm Room: `Remote - Zoom`
Discrete Mathematics - Spring 2021
Lectures: Zoom Meeting ID 869 4638 0944

Instructor: Steven Widmer
Office: GAB 423B, Email: steven.widmer@unt.edu

Office Hours: Monday, Wednesday from 1:30pm - 3:30pm; Tuesday from 10am - 12pm; and by appointment.

All office hour meetings will be held through Zoom, using the meeting ID: 229 534 1011. Office hours are for help with specific problems or for answering questions about the course, they are **NOT** for teaching the course material. I will have availability to meet at other times. Please send an email if you would like to schedule a time to meet outside of office hours.

Final Exam: Thursday, April 29, 10:30am - 12:30pm
`https://registrar.unt.edu/exams/final-exam-schedule/spring`

Textbook: *Discrete Mathematics: Introduction to Mathematical Reasoning, Brief Edition*; by Susanna S. Epp

Course Description : (3 hours) Introduction to proof-writing, logic, sets, relations and functions, induction and recursion, combinatorics and counting techniques, discrete probability, and graphs.

Grade Policy:

Exam Average	50%
Homework	20%
Final Exam	30%

The grade distributions will be 90% - 100% is an A, 80% - less than 90% is a B, 70% - less than 80% is a C, 60% - less than 70% is a D, less than 60% is an F. **There will be no curves.**

Attendance: Attendance is mandatory. The lectures for this course will be offered through Zoom. You can join the lecture meetings through Canvas (using the Zoom tab) or by using the meeting ID 869 4638 0944. In this class, attendance means joining the zoom meetings. The instructor will not repeat whole lectures or offer personal lessons in office hours or email. These venues are for specific questions / problems. Students are responsible for all information given in class, regardless of their attendance.

Homework: All homework will be submitted through Canvas. No late homework will be accepted for any reason. Homework will be due each Thursday by the start of class. Your homework assignment must be submitted as a single pdf file. There are many free scanning apps available for phones and tablets (Adobe Scan, Office Lens etc.). I will drop the lowest two (2) homework grades when completing the semester grades.

Exams: You will have three exams and a comprehensive final exam. The exams will all be administered through Canvas. I will make the exam available about 10 minutes before the exam is scheduled to begin (about 12:20pm on exam days). You will have until 2:30pm to submit your exams through Canvas (1 hour and 20 minutes to work, and 40 minutes to scan and submit your work). You will be required to complete the problems on your own paper and scan and upload your responses for specific problems into Canvas in pdf format. Late exams submissions will not be accepted.

You will be able to see feedback on the exam and your grade within Canvas about 1 week after the exam. You may ask me to go over exam problems with you. However, all decisions on partial credit are final and not open for discussion.

Actual exam dates and content will be announced in class, usually at least two weeks before the exam date. The tentative exam dates are

Exam 1 ..... Feb. 16
Exam 2 ..... Mar. 18
Exam 3 ..... Apr. 20

NO MAKE-UP EXAMS WILL BE GIVEN. An exam may be taken prior to the scheduled date. You must request for this accommodation via email at least one week prior to day you wish to take the early exam.

You may replace your lowest exam score with the final exam score if the latter is higher. If you miss an exam, you will receive a 0 for that exam, and the final exam score will replace the 0 for this exam. You may not use calculators on quizzes, exams, and the final exam. If you receive a zero for cheating on an exam, the final exam score will NOT replace that zero. Again, NO MAKE-UP EXAMS WILL BE GIVEN FOR ANY REASON.

Academic Dishonesty: Cooperation is encouraged in doing the homework assignments but not allowed on the quizzes/tests/exams. If you are caught cheating, you will be subject to any penalty the instructor deems appropriate, up to and including an automatic F for the course. Furthermore, a letter will be sent to the appropriate dean. Refer to the following university site for the official policy with regards to academic dishonesty. The website is: `https://policy.unt.edu/policy/06-003`.

Written Work: Show all your work in clear steps on exams and homework. No (or little) work shown usually earns no credit - even if the answer is correct. Your proofs and solutions will be graded on four "C's": solutions must be clear, concise, complete, and correct. Your audience should an average student in this course, someone who has read the problem but does not know a solution. Rule of thumb: If a fact is "obvious," then it can be proved in one or two lines, so you might as well include those lines. The back of the book contains hints, not solutions, to odd numbered problems: your solution must contain more detail than in the back of the book or any solution guide. Copying the hint from the back of the book will earn little or no credit. In general, proofs without enough detail or with confused steps will earn little or no credit.

Disability Accommodations: The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at `http://www.unt.edu/oda`. You may also contact them by phone at 940-565-4323.

Class Recordings: Synchronous (live) sessions in this course will be recorded for students enrolled in this class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

Important Dates: Students are responsible for meeting all university deadlines (registration, fee payment, prerequisite verification, drop deadlines, etc).

Math is not a spectator sport. You will not learn mathematics from watching your instructor or friends or a screen display ideas and solve problems. You must try the problems, finish problems, ask questions, make mistakes, correct mistakes, put concepts into your own words, and practice, practice, practice.

Note: This syllabus is subject to change as the instructor deems necessary. Any/all changes will be announced during regular class time. It is the responsibility of the student to attend each scheduled class to be informed of these changes.

Course Calendar - Math 2000 - Spring 2021

This is a tentative calendar and may be changed at any time

Tuesday	Thursday
1/12 Sec 2.1 : Propositional Logic	1/14 Sec 2.1/2.2 : Propositional Logic
1/19 Sec 2.2 : Propositional Logic	1/21 Sec 3.1 : Predicate Logic
1/26 Labor Day - University Closed	1/28 Sec 3.2 : Predicate Logic
2/2 Sec 3.3 : Predicate Logic	2/4 Ch 4 - Direct Proofs
2/9 Ch 4 - Constructive Proofs	2/11 Review for Exam 1
2/16 **Exam 1**	2/18 Ch 4 - Indirect Proofs
2/23 Ch 4 - Other Proofs	2/25 Sec 5.1 : Series and Products
3/2 Sec 5.2 : Mathematical Induction	3/4 Sec 5.3, 5.4: Mathematical Induction
3/9 Sec 1.2, 6.1 : Sets and Set Operations	3/11 Sec 6.2 : Proofs About Sets
3/16 Review for Exam 2	3/18 **Exam 2**
3/23 Sec 6.2, 7.1 : Sets, Then Functions	3/25 Sec 7.1 : Functions
3/30 Sec 7.2, 7.3 : One-To-One, Onto	4/1 Sec 9.2 : Combinatorics
4/6 Sec 9.3 : Combinatorics	4/8 Sec 9.3, 9.4 : Incl/Exclusion; Pigeonhole
4/13 Sec 9.5, 9.6 : Combinatorics, Binomial Thm	4/15 Review for Exam 3
4/20 **Exam 3**	4/22 Review for Final Exam
4/27	4/29 Final Exam at 10:30am