

MAD 2104 – 06H – 3 credits – Fall 2022
Honors Discrete Mathematics



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COURSE MEETINGS: IN-PERSON (MW 11:00AM-12:20PM) AD 206

COURSE DESCRIPTION: A proof-oriented approach to and applications of propositional logic, sets, functions, relations, combinatorics, graphs and trees.

PREREQUISITES: MAC 1105 or permission of instructor

GOALS. Some specific goals of the course are for you to:



- think critically (always a goal in mathematics classes);
- communicate effectively, especially by writing precisely about technical things;
- improve logical thinking and problem-solving skills.

TEXT: *Language Proof and Logic*, 2nd ed. Barwise-Plummer, Barwise, Etchemendy.

The text can be found at <https://www.gradgrinder.net/>. I suggest you get a paperless copy; \$55 paperless copy is the best option. You need a unique registration ID. You do need to pay and register for a new version of software. Please let me know if you need to place an order with the bookstore. If you do, do not buy a used copy. You will need a new version that has a unique registration id.

ATTENDANCE. You are responsible for all material covered in the lectures. Given the current state of affairs, I will not take attendance but I urge you to attend as often as possible. I, more importantly, urge you to cover your faces with a mask.

EVALUATION: The goal of the class is for the students to do all of the assigned problems from the LPL book and submit them to the Grade Grinder. (Don't forget to submit to instructor once you have completed and received feedback on a given assignment.) The list of HW problems can be found at <http://home.fau.edu/wmcgove1/web/Courses/MAD2104/HWMAD2104S21.html>

Please only do the HWs that are to be turned in via the grade-grinder. If the problem has only a pencil next to it, I do not expect you to submit it. However, please try these problems and make sure you understand them. Some problems have both an arrow  and a pencil . These problems are asking you to submit something while informally doing something else. I expect you to turn in the arrow part to the grade grinder.

Please be aware that there is a comment section with grade grinder. However, I **do not** look at these since there is no distinction between these and the regular emails that I receive from the grade grinder. If you have a comment or question on a problem please send me an email using your FAU address. You should also check the file called Notes.

The Grade Grinder HW will be worth 50% of the final grade. There are approximately 220 Grade Grinder HWs. Another 10% will be determined by Homework on graph theory and sets and functions. Problems must be completed by the deadline date. Late homework will only receive 50% credit. The remaining percentages will be by in-person exams (midterm final).

Regarding the Grade Grinder, I will record the completion percentage of problems turned in on time that are correct; illustrated by a green check. Incorrect problems will not count be counted as completed, illustrated by a red x. This completion percentage will count towards 50% of your final grade. Problems turned in after the deadline will only earn 50%.

	Exercise 7.8	Exercise 7.10	Exercise 7.11	Exercise 7.12	Exercise 7.14	Exercise 7.15	Exercise 7.16	Exercise 7.17	Exercise 7.25	Exercise 8.2
Name	✓	✓	✗	✗	✓	✗	✓	✓	✓	✗①

50%	Homework -- LPL
15%	Mid-term Exam
10%	Homework – Graphs, and sets and Functions
20%	Final Exam
5%	Participation

Final Grades are based on the following scale.

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0 – 59

TESTS AND MAKEUP POLICY. We will have one mid-term exam and a comprehensive final exam. If you are not able to take an exam, I and only I, will approve a makeup exam. There should be a good reason for you not taking an exam at its scheduled time. I also reserve the right to individually come up with a different plan versus providing a makeup exam.

Here is the list of deadlines for the chapters and the Grade Grinder. Notice that Chapter 4 and 5 are due at the same time. Also, Chapters 6 and 7 are due at the same time, and Chapters 12 and 13 are due at the same time.

Chapter	Deadline for HW	
Chapter 1	August 27th at 11:59pm	6 days for 11 problems
Chapter 2	September 4th at 11:59pm	8 days for 20 problems
Chapter 3	September 11th at 11:59pm	7 days for 22 problems
Chapter 4	September 21st at 11:59pm	10 days for 23 problems
Chapter 5	September 21st at 11:59pm	10 days for 1 problem
Chapter 6	October 12 th at 11:59pm	21 days for 39 problems
Chapter 7	October 12 th at 11:59pm	21 days for 20 problems
Mid-Term Exam	October 19th	
Chapter 8	October 26th at 11:59pm	14 days for 33 problems
Chapter 9	November 6th at 11:59pm	7 days for 18 problems
Chapter 10	November 7th at 11:59pm	5 days for 10 problems
Chapter 12	December 3rd at 11:59pm	26 days for 19 problems
Chapter 13	December 3rd at 11:59pm	26 days for 46 problems
Final Exam	December 12 th 10:30-1:00pm	

OTHER IMPORTANT DATES

Labor Day	September 5 th , No Class
September 26	FAU is open
October 5	FAU is open
Mid Term Grades Due	October 18th
Last Day to Drop	October 28th
Veteran's Day	November 11th
November 21	FAU is open
November 23	FAU is open
Thanksgiving Break	November 24-27
December 3	Classes End
December 5-7	Reading Days

TUTORING

If you plan on using the Math Learning Center (MLC) down in Boca please realize that the Boca sections do not use this book and you might not be able to get the help you need. Please come to or set up an office hour with me. Or use email for your questions.

Policy on Accommodations

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses -- Boca Raton, SU 131 (561-297-3880); in Davie, LA 131 (954-236-1222); in Jupiter and all Northern Campuses, SR 111F (561-799-8585). Disability services are available for students on all campuses. For more information, please visit SAS website at www.fau.edu/sas/.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau.edu/counseling/>

COLLABORATION AND THE HONOR CODE I expect you to abide by the Honors College Academic Honor Code. It is available at <http://www.fau.edu/honors/academics/honor-code.php>. You are allowed to collaborate on all HWs. You are asked not collaborate on exams and quizzes.

Academic Integrity Policy

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see [University Regulation 4.001](#).

Plagiarism

Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. This includes all discussion board posts, journal entries, wikis, and other written and oral presentation assignments. Plagiarism is unacceptable in the University community. Academic work must be an original work of your own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they must acknowledge that fact in an appropriate manner. If in doubt, cite your source.

Policy on the Recording of Lectures

Because of a recent Florida Statute in 2021, the following model language is suggested for inclusion in course syllabi, at the discretion of individual faculty: Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity. Recorded lectures used for other purposes may allow the faculty member to seek "damages plus court costs and reasonable attorney fees, with the total recovery not to exceed \$200,000."

Classroom Etiquette Policy

In order to enhance and maintain a productive atmosphere for education, I expect each individual to treat the others in the class with respect.

Disclaimer #1

Students are encouraged to employ critical thinking and to rely on data and verifiable sources to interrogate all assigned readings and subject matter in this course as a way of determining whether they agree with their classmates and/or their instructor. No lesson is intended to espouse, promote, advance, inculcate, or compel a particular feeling, perception, viewpoint or belief.

Disclaimer #2

The instructor reserves the right to change/alter/add/delete any statement from this syllabus in hopes of creating a more enjoyable/equitable course.