Math 5020 Spring 2023
Mathematical Logic and Set Theory
Monday and Wednesday 3:30-4:50, GAB 473

Course Information

Instructor
John Krueger
408 General Academic Building
john.krueger@unt.edu

Office Hours
Tuesdays 3-5.

Textbook
A Concise Introduction to Mathematical Logic, Wolfgang Rautenberg, Third Edition.

Course Content
Propositional Logic, First-Order Logic, Introduction to Model Theory, Incompleteness.

Course Website
All assignments and other course information will be posted on Canvas.

Grading
20% Homework, 40% Midterm 1, 40% Midterm 2.
[90,100] = A, [80,89] = B, [70,79] = C, [60,69] = D, [0, 59] = F.
Your lowest homework grade will be dropped. A small grade curve is possible, but students who routinely skip class or violate class policies such as using cell phones during class will not receive any curve on their final grade.

Exam Dates
Midterm Exam 1: Wednesday, March 22
Midterm Exam 2: Wednesday, May 3.

Class Policies and Procedures

Communication
Students who need to contact me outside of class should send an email to john.krueger@unt.edu. Under ordinary circumstances, emails will be responded to within one business day. If you send me questions about homework right before the homework is due, or right before an exam takes place, I will probably not have enough time to respond. I do not read or communicate with students via Canvas email; if you send me a message on Canvas, I will probably not see it.

Homework
Homework is due at the beginning of class on the due date. Students who do not attend class the day a homework is due must turn in the homework under my office door by the beginning of class on the due date. I do not accept homework electronically except in the case of an emergency. Students who cannot turn in homework on time due to exceptional circumstances are encouraged to discuss their options with me.

Since homework is part of your final grade, it is not allowed for students to access homework solutions online, through solution manuals, or elsewhere. If you use some source other than the lecture to complete the homework, you are required to provide a reference to that resource on your work.

You are expected to solve homework problems using the material that was presented in lecture up to the time the homework was assigned, and not use additional material not covered in class up to that point.

Grading
In order to get full credit on a particular problem, you need to have a correct answer and also to justify your answer with clearly written work. You will not get any credit if you simply write down the final answer and not provide any justifications. If you have difficulty completing a step of the solution, you should explain that on your solution in order to get partial credit. It is not appropriate to use vague arguments or other tricks in an attempt to trick the grader into thinking you know how to solve the problem when you actually do not.

Your final grade is a reflection of your performance on the work assigned to you during the semester. It is not possible to improve your grade through doing additional work.

Cell phones, computers, multitasking
The use of cell phones during class is distracting not only for the person doing it, but also for students around them and for the instructor. For this reason, students are prohibited from using cell phones during class time. This includes during the lecture as well as when work is being returned. Cell phones should be put away in your bag or pocket during lecture. Students are prohibited from using cell phones in their laps or making attempts to use phones hidden from the instructor's view.

Students who plan to use a computer or tablet to take notes must request permission from the instructor. Students are prohibited from using such devices during class for any purpose other than note taking. It is also prohibited to do work for other classes during class time.

Attendance
Attendance is required since the course is based on the lectures. Occasionally missing class due to unavoidable circumstances is acceptable and does not need any explanation, but students who routinely do not come to class will not receive any curve on their final grade. Important information and announcements are oftentimes made during class time, and students are responsible for that information. Students who miss class have the responsibility to ask another student to copy their lecture notes and learn about any class announcements.

UNT Policies and Information

Academic Integrity Policy
According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Policy

UNT 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 a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students 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 ODA website (https://disability.unt.edu/).

Emergency Notification and Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.