UNH Manchester

COMP 500.M1: Discrete Structures

Fall 2023 Course Syllabus

General Course Information

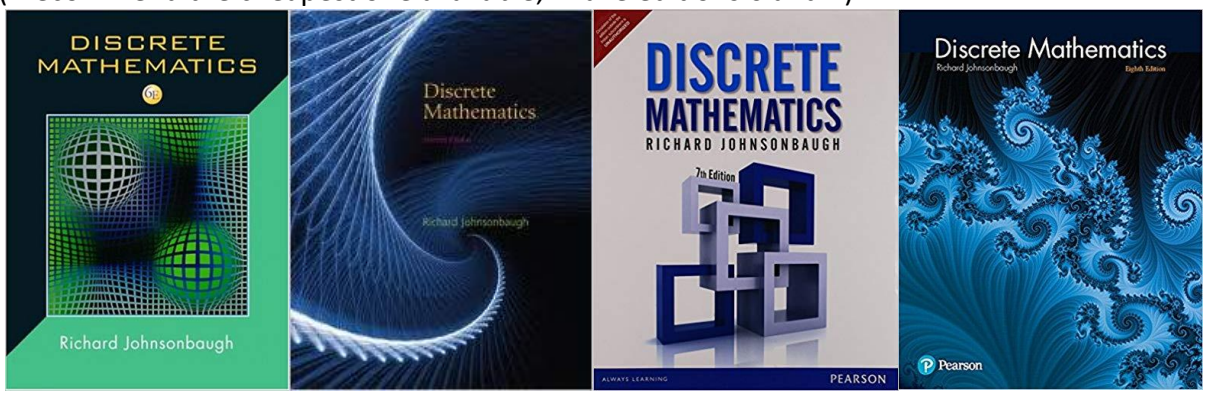
Instructor: Mateusz (Matt) Pacha-Sucharzewski

Email: Mateusz.Pacha-Sucharzewski@unh.edu

Class Time & Location: Mondays 5:40 PM – 8:30 PM, in-person in Pandora P146 and also streaming live via Zoom meetings scheduled through the Zoom section of UNH's MyCourses portal for the course. (This course is not a hybrid, so I (Matt) will be teaching from the classroom but, due to COVID-19, I wanted to give you an option of attending remotely.)

Office Hours: Right after class or by appointment via MyCourses Zoom

Textbook: *Discrete Mathematics*, 6th ed. or newer, by Richard Johnsonbaugh, published by Pearson
(I recommend the cheapest one available; I have editions 6 and 7)



Course CRN: 12081

Credits: 4.0

Term: Fall 2023 - Full Term (08/28/2023 - 12/11/2023)

Course Description

This course prepares students for understanding computational complexity; i.e., what makes a given task/problem hard and how hardness is measured. It accomplishes this through the study of algorithms, permutations, combinations, probability, graph theory, and trees.

COVID-19

The course follows the university's guidelines on COVID-19, as outlined for the Manchester campus, available here:

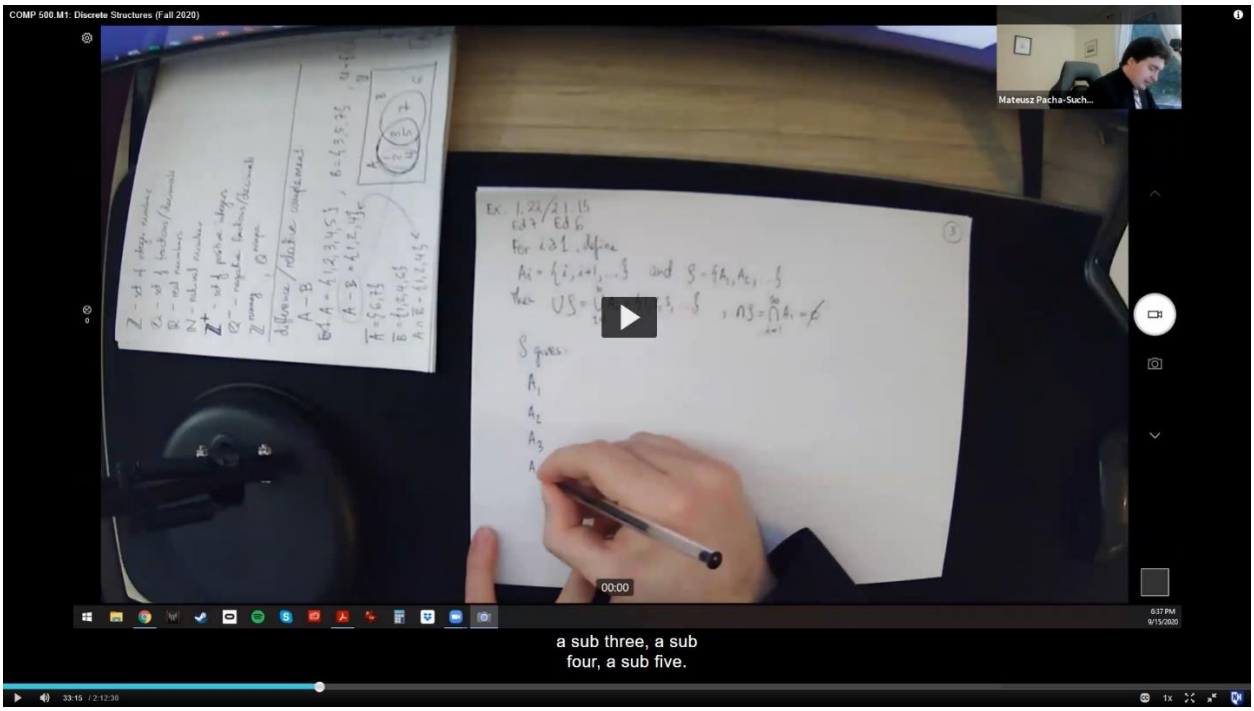
https://manchester.unh.edu/coronavirus-covid-19-updates

Attendance & Participation

Please attend every class, in-person or remotely via Zoom, and try to be actively involved. Classes will not be recorded, as this is not a hybrid course. If you need to miss a class, please review class notes, which I will be posting following each class, prior to the following class meeting.

How will this work? I will use hand-written notes, projecting them via the classroom's overhead projector(s) and streaming via Zoom. If you attend in person, you can also log into Zoom to see the notes right in front of you. On the next page, you will find a sample of projected notes (from the Fall of 2020 when I taught this course remotely); I now have a higher-quality webcam to be able to zoom in more and to improve the sharpness of the projected notes.

Please note: If you attend remotely via Zoom, you may choose to keep your webcam and microphone off at all times – it is completely up to you and your choice will be respected. If you prefer to keep your microphone muted, you may type questions into the chat feature of Zoom.



Grading Policy

Quizzes (best 5 of 6): 50% (10% each)

Midterm Exam: 20%

Final Exam: 30%

Final grade will be based on your overall percentage in the following way:

A: 93% – 100% A-: 90% – 92.99%

B+: 87% – 89.99% B: 83% – 86.99% B-: 80% – 82.99%

C+: 77% – 79.99% C: 73% – 76.99% C-: 70% – 72.99%

D+: 67% – 69.99% D: 63% – 66.99% D-: 60% – 62.99%

F: 0% – 59.99%

The instructor reserves the right to select the more appropriate final grade in any borderline case (up to +/- 1 %).

Quizzes and Exams

There will be six (6) take-home quizzes and two take-home exams (midterm and final) all of which you will have to submit online; one lowest quiz grade will be dropped at the end of the semester. You will receive a grade of 0 for any quiz or exam that you miss. You will not be able to make up a missed quiz or exam unless you prove a valid reason for having to miss it or make appropriate arrangements with the instructor prior to the quiz or exam that you have to miss.

Quizzes and exams will be assigned through the MyCourses portal, not timed, and you will have approximately one week to complete each (from the time of posting). Exams and quizzes will be open book, notes, and googling allowed; however, please work on these independently – you may not ask anyone besides the course instructor for help.

Homework

There will be no graded homework. However, there will be suggested practice problems.

Extra Credit

Occasionally, extra credit questions will appear on quizzes and/or exams.

MyCourses & Email

Please check your MyCourses portal and UNH student email regularly for announcements, class materials, etc.

Academic Honesty Policy & Disabilities Accommodations

The course follows the university's guidelines on academic honesty and accommodations for students with disabilities. For details please visit:

https://www.unh.edu/student-life/academic-honesty-policy

https://manchester.unh.edu/academics/academic-services/student-accessibility-services

Class Cancellations

The course follows UNH Manchester class schedule (holidays, etc.). If the instructor has to cancel a class (or switch a class to an online-only meeting) while the school is in session, an announcement will be made on UNH MyCourses and through UNH student email.

Changes to the Syllabus

Please treat the syllabus as a general guide. Any necessary changes or updates will be discussed in class.

Other

Please email me if you have any questions about the course structure, policies, etc. – Matt