

Northern Michigan University

(Marquette Co, MI)

CS 422-01-25W Algorithms Design And Analysis

4 credits

Monday Wednesday Friday 9:00 A.M. – 9:50 A.M.

Monday 13 January 2025 through Friday 25 April 2025

except Monday 20 January 2025 and Monday 3 March 2025 through Friday 7 March 2025

Final Exam: Tuesday 29 April 2025 8:00 A.M. – 9:50 A.M.

3317 John X. Jamrich Hall

Instructor: Andy Poe, 2230 John X. Jamrich Hall

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This course is required for the Computer Science major. This course covers techniques for analyzing the efficiency of algorithms and strategies for designing algorithms to solve a variety of problems.

Text: *Algorithms*, Fourth Edition, Robert Sedgewick, Kevin Wayne. This is the book I am using. You are not required to purchase it yourself. It is, however, relatively inexpensive, especially if acquired on Kindle.

Courseload: There will be frequent programming assignments. These will comprise 20% of your final grade. There will be weekly quizzes comprising a total of 25%. There will be two in-class exams each comprising 15%, and a final exam comprising 25%. Attendance will be worth 10%. (Since this adds up to 110%, your grade will then be divided by 1.1.)

Laptop Policy: Although this is a Computer Science course, the use of a laptop in class is forbidden in class and on exams. There will be exceptions to this policy, such as when we install software or when we have lab days. But, in general, if I'm lecturing, no laptops, or any other distracting electronic equipment such as Walkmans, iPods, cell phones, etc.

Late Policy: Late programming assignments lose 10% per day (Monday, Wednesday, and Friday) until they are submitted.

Office Hours: My official office hours are 1:00 P.M. - 4:00 P.M. MWRF.

Statement on Plagiarism: Plagiarism is the submission of someone else's work as your own. It applies just as strongly when the work is to be written in a computer language as when it is written in a human language. All of the work you submit must be entirely your own. All of it. Your friends may not write code for you, nor may your classmates, nor tutors, nor professors. You may not use code found in books or online. All of your code must come from you. Period. Academic fraud is very serious and will be dealt with according to NMU policy. I reserve the right not to accept work that I do not believe comes from you, and I reserve the right to question you about your submitted work. If one student does the work assigned to another student, both students have committed academic fraud and will be dealt with as such.

Course Objectives: Upon completion of the course, the student should be able to design an efficient strategy to solve a given problem and to be able to analyze the efficiency of that strategy.

Disability: If you have a need for disability-related accommodations or services, please inform the Coordinators of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (906-227-1737 or disability@nmu.edu). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and university guidelines.

Right of Alteration: I have no idea what this semester will bring. I reserve the right to make changes to the syllabus at any time including major changes involving course content, delivery, and grading rubrics.