CSE 6331
Algorithms
Autumn, 2024

Instructor: R. Wenger
Office: Dreese 485
Telephone: 292-6253
e-mail: wenger.4@osu.edu
url: http://www.cse.ohio-state.edu/~wenger

COURSE SUMMARY: Algorithm design paradigms, mathematical analysis of algorithms.

TEXT: Introduction to Algorithms by Cormen, Leiserson, Rivest and Stein (3rd or 4th edition)

COURSE SLIDES: Course slides (pdf) posted on carmen.

CARMEN: `https://carmen.osu.edu`.

EXAMS:
Midterm I: In class, To be decided.
Midterm II: In class, To be decided.
Final exam: Fri, Dec. 6, 4-5:45 pm. OSU scheduled date and time.

SEQUENCE OF TOPICS (tentative):

1. Review of mathematical foundations (asymptotic notation, analysis of for/while loops)
2. Recurrence relations
3. Divide and conquer
4. Dynamic programming
5. Greedy algorithms
6. Elementary graph algorithms
7. Maximum flow
8. Public-key cryptography.

GRADING:
Quizzes (on-line) 5%, Homeworks 15%, Midterm I 20%, Midterm II 20%, Final 40%.

About 50% of the questions in each homework will be graded.
(Solutions to all questions will be provided.)

Students are expected to attend class regularly. In the event that a student must miss a class, the student is responsible for finding out what assignments were made, what due dates were announced, and what material was covered. Unless otherwise specified, homework will be accepted up to 2 days late, with a penalty of up to 10% per day.