

Algorithmic Problem Solving (CS 4/510)

Ref. No: 63654/63655

Spring 2026

Course Objective

- To master the solutions to a list of most common programming interview problems.

Class Homepage

- <http://www.cs.pdx.edu/~xie/aps-s26/aps-s26.htm>

Instructor

- Prof. [Fei Xie](#)
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Office Hours

- By appointment

Prerequisites:

- Interests in software development and validation.

Meeting Time and Location

- F 9AM-12:40PM, Cramer Hall 101

Textbooks

- There is no textbook for this class and reading materials will be provided for each topic.

Grading

- There will be 20 in-class programming assignments.
 - For each assignment successfully completed **in-class**, it is scored 2 points
 - For each assignment successfully completed **after class**, it is scored 1 point.
 - Partially credits may be given, but is not guaranteed.
 - Final grade is assigned based on total score from 20 assignments
 - A: ≥ 26
 - A-: ≥ 24
 - B+: ≥ 22
 - B: ≥ 20
 - C: < 20
- Class participation is required.
 - For each missing class, 1 point is deducted.

Academic Integrity

- Academic misconducts will be handled according to the rules of the Department of Computer Science, Maseeh College of Engineering and Computer Science, and Portland State University.

Class Schedules

Week	Date	Topic
Week 1	April 3	Arrays & Strings
Week 2	April 10	Hashing
Week 3	April 17	Two Pointers / Sliding Window
Week 4	April 24	Stack / Monotonic Stack
Week 5	May 1	Binary Search
Week 6	May 8	Linked Lists
Week 7	May 15	Trees
Week 8	May 22	Graphs / Search
Week 9	May 29	Dynamic Programming
Week 10	June 8	Backtracking

(This schedule is subject to changes according to the need of the class.)