Course Objective

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

Class Homepage


Instructor

- Prof. [Fei Xie](mailto:xie@cs.pdx.edu)
  - Office: FAB 120-10
  - Phone: (503) 725-2403
  - Homepage: [http://www.cs.pdx.edu/~xie](http://www.cs.pdx.edu/~xie)

Office Hours

- By appointment

Prerequisites:

- Interests in software development and validation.

Meeting Time and Location

- F 9AM-12:25PM, FAB 10

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 points.
  - Partially credits may be given, but is not guaranteed.
  - Final grade is assigned based on total score from 20 assignments
    - A: >= 28
    - A-: >= 26
    - B+: >= 23
    - 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

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Apr. 3</td>
<td>Bit Manipulation</td>
</tr>
<tr>
<td>Week 2</td>
<td>Apr. 10</td>
<td>String</td>
</tr>
<tr>
<td>Week 3</td>
<td>Apr. 17</td>
<td>Array</td>
</tr>
<tr>
<td>Week 4</td>
<td>Apr. 24</td>
<td>Tree</td>
</tr>
<tr>
<td>Week 5</td>
<td>May 1</td>
<td>Hash Table</td>
</tr>
<tr>
<td>Week 6</td>
<td>May 8</td>
<td>Sort</td>
</tr>
<tr>
<td>Week 7</td>
<td>May 15</td>
<td>Binary Search</td>
</tr>
<tr>
<td>Week 8</td>
<td>May 22</td>
<td>Depth-first Search/Breadth-first Search</td>
</tr>
<tr>
<td>Week 9</td>
<td>May 29</td>
<td>Two Pointers</td>
</tr>
<tr>
<td>Week 10</td>
<td>June 5</td>
<td>Dynamic Programming</td>
</tr>
</tbody>
</table>

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