Course Objective

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

Class Homepage

▪ [http://www.cs.pdx.edu/~xie/sit-s22/sit-w22.htm](http://www.cs.pdx.edu/~xie/sit-s22/sit-w22.htm)

Instructor

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

Office Hours

▪ By appointment

Prerequisites:

▪ Interests in software development and validation.

Meeting Time and Location

▪ F 9AM-12:25PM, Remote on Zoom

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.
  o For each assignment successfully completed **in-class**, it is scored 2 points
  o For each assignment successfully completed **after class**, it is scored 1 point.
  o Partially credits may be given, but is not guaranteed.
  o 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.
    o 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>Jan. 7</td>
<td>Bit Manipulation</td>
</tr>
<tr>
<td>Week 2</td>
<td>Jan. 14</td>
<td>String</td>
</tr>
<tr>
<td>Week 3</td>
<td>Jan. 21</td>
<td>Array</td>
</tr>
<tr>
<td>Week 4</td>
<td>Jan. 28</td>
<td>Tree</td>
</tr>
<tr>
<td>Week 5</td>
<td>Feb. 4</td>
<td>Hash Table</td>
</tr>
<tr>
<td>Week 6</td>
<td>Feb. 11</td>
<td>Sort</td>
</tr>
<tr>
<td>Week 7</td>
<td>Feb. 18</td>
<td>Binary Search</td>
</tr>
<tr>
<td>Week 8</td>
<td>Feb. 25</td>
<td>Depth-first Search/Breadth-first Search</td>
</tr>
<tr>
<td>Week 9</td>
<td>Mar. 4</td>
<td>Two Pointers</td>
</tr>
<tr>
<td>Week 10</td>
<td>Mar. 11</td>
<td>Dynamic Programming</td>
</tr>
</tbody>
</table>

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