**Course Name:** Data Structures  
**Course Number:** CS 261 (Online)  
**Credits:** 4  
**Instructor name:** Randy Scovil  
**Instructor email:** scovilr@oregonstate.edu  

**Course Schedule:**

<table>
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<tr>
<th>Week</th>
<th>Course Activities</th>
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| 1    | ● Module 1 - Overview  
      ● Syllabus Quiz *(Due: June 30, 2021)*  
      ● Assignment 0: Introduction Environment Setup *(Due: June 30, 2021)*  
      ● Exploration: Intro to Data Structures  
      ● Exploration: Some Opening Thoughts  
      ● Exploration: Big O Introduction  
      ● Exploration: Big O Examples  
      ● Assignment 1: Python Programming Practice *(Due: July 07, 2021)*  
      ● Review - Module 1 |
| 2    | ● Module 2 - Overview  
      ● Exploration: An Overview of ADTs  
      ● Exploration: Python’s List  
      ● Assignment 2: Implementation of Dynamic Array and ADTs using Dynamic Array and Amortized Analysis *(Due: July 14, 2021)*  
      ● Review - Module 2 |
| 3    | ● Module 3 - Overview  
      ● Exploration: Introduction to Linked Lists  
      ● Exploration: Stacks, Queues and Deques  
      ● Assignment 3: Implementation of Linked Lists and Various ADTs Using Linked Lists *(Due: July 21, 2021)*  
      ● Exploration: Encapsulation and Iterators  
      ● Exploration: Iterator Example  
      ● Exploration: Binary Search  
      ● Review - Module 3 |
| 4    | ● Module 4 - Overview  
      ● Exploration: Trees  
      ● Exploration: Binary Trees  
      ● Exploration: BST Operations  
      ● Assignment 4: Binary Search Tree Implementation *(Due: July 28, 2021)*  
      ● Quiz 1 (Available from July 15 to 19, 2021 and covers materials from Week 1 to Week 3)  
      ● Review - Module 4 |
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<tr>
<td>Module 5</td>
<td>Overview</td>
<td>Exploration: Introduction to Maps and Hash Tables</td>
<td>Exploration: Hash Table Collisions</td>
<td>Review - Module 6</td>
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<td>Module 6</td>
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<td>Exploration: Graphs</td>
<td>Exploration: Working with Graphs</td>
<td>Assignment 6: Graph and Graph Algorithms Implementation (Due: August 11, 2021)</td>
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<td>Review - Module 7</td>
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<td>Module 7</td>
<td>Quiz 2 (Available from August 08 to 12, 2021 and covers materials from Week 4 to Week 7)</td>
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