# **CSSE220 Fall 2023-24: Topic Summaries and Additional Resources**

Week	Monday	Tuesday	Thursday
0			<ul> <li>Java Cheat Sheet</li> <li>Casting</li> <li>Returning Values</li> <li>Methods</li> </ul>
1	<ul> <li>Arrays &amp; ArrayLists</li> <li>Variable Scope</li> <li>Variable Types and assignment</li> <li>For Loops and Enhanced For Loops</li> </ul>	<ul> <li>HashMaps</li> <li>2DArrays</li> <li>Academic Integrity</li> </ul>	<ul> <li>Constructors</li> <li>Introduction to Classes in Java</li> </ul>
2	<ul><li>The This Keyword</li><li>Static Methods &amp; Fields</li></ul>	<ul><li> UML to Code</li><li> PlantUML Cheat Sheet</li></ul>	Encapsulation
3	JUnit Tests	Swing Java Graphics	<ul> <li>Interfaces&amp;ImplementsKeyword</li> <li>Interfaces</li> </ul>
4	Exam1 - Non-Coding	Exam1 - Coding	• Recursion
5	Visibility	Recursive Helpers	FALL BREAK
6	EventBasedProgramming	• Inheritance	Polymorphism
7	• Timers	Exam2 - Non-Coding	• Exam2 - Coding
8	PairProgramming	<ul><li>OOAndExceptions</li><li><u>TryCatch</u></li></ul>	CollisionHandling
9	• <u>LinkedLists</u>	LinkedLists, First/Last	Sounds of Sorting
10	<ul><li>MergeSort</li><li>Selection Sort</li></ul>	<ul><li>Comparator</li><li>Comparable</li></ul>	Presentation Guide
Finals	Final Exam Prep		

## **Course Setup:**

- Clone the CSSE220 Repo
- How to import an Eclipse project
- CSSE220 Grading Guide
- Introductory Codingbat Java Practice Website

#### **Additional Resources:**

- CSSE220 Videos Panopto Folder
- Basic OO Principles for CSSE220
- <u>Drawing Box & Pointer Diagrams</u>
- UML Cheatsheet

### **Practice Design Problems:**

- ExampleDesignProblemsDP1andDP2.pdf
- SolutionsToExampleDesignProblemsDP1andDP2.pdf
- ExampleDesignProblemsForStudents.docx
- SolutionsForExampleDesignProblemsForStudents.docx

#### **Practice Recursion:**

- https://codingbat.com/java/Recursion-1
- https://codingbat.com/java/Recursion-2