## CS 161 - Introduction to Computer Science I

## Course Topics, Schedule, and Coursework checklist

Note: the school is closed November 22-23 to observe Thanksgiving Holiday Labs and assignments will generally be due by 23:59 of the day they are due.

Labs and Assignments will generally have two weeks to be worked on with one notable exceptions below

<u>~</u>	nts will generally have two weeks to be worked on with one notable exceptions below.
Unit	Course Topics
	Introduction to computers and programming I, 24 September – 30 September
#1	Lectures:
	<ul> <li>What is Programming (Readings: 1.1-1.3),</li> </ul>
	<ul> <li>What is Java (Readings: 1.4-1.6),</li> </ul>
	<ul> <li>Data Concepts, Variables, and Constants (Readings: 2.1-2.3, 4.1-4.2),</li> </ul>
	<ul> <li>Arithmetic Expressions and User Input (Readings: 4.3-4.6),</li> </ul>
	Assignment0 (TEACH access) assigned, due 30 September,
	Lab0 (Hello World), due 07 October,
	Assignment1 (Largest Values), due 07 October,
	Conditionals and Repetition, <b>01 October – 07 October</b>
#2	Lectures:
	<ul> <li>Conditional Execution (Readings: 5.1-5.2),</li> </ul>
	<ul> <li>More Conditional Execution (Readings: 5.3-5.4),</li> </ul>
	o Repetition (Readings: 6.1-6.4),
	<ul> <li>Common Mistakes using Loops,</li> </ul>
	Lab1 (Random Number), due 14 October,
	Assignment2 (Guess my Card), 14 October,
	<ul> <li>Quiz over week 1 and week 2, due 17 October,</li> </ul>
	Errors and Error handling, 08 October – 14 October
#3	• Lectures:
	<ul> <li>Types of Programming Errors (1.7),</li> </ul>
	<ul> <li>Handling Logic and Run-time errors (11.3-11.5),</li> </ul>
	• Program Errors,
	Program Errors Self-quiz,
	Lab2 (Error Handling and Debugging), due 21 October,
	<ul> <li>Quiz over week 3, due 24 October,</li> </ul>
	Methods, Parameters, Classes I, <b>15 October – 21 October</b>
#4	
<i>"</i> -	1. (0.4.0.5)
	11: 01 10 11: 01: 1 (0.0.0.7.0.40)
	Lab3 (Method Decomposition), due 28 October,  Code Pavious Project due 29 October.
	Code Review Project, due 28 October,  Ouis grant and A. due 24 October,
	Quiz over week 4, due 31 October,      October,
<b>л</b> ь	Midterm, 22 October – 28 October
#5	Study for midterm (listed below),
	The midterm will cover materials from week 1 through week 5 (you will
	not have to create your own class or do any serious manipulation with
	Strings on the exam),
	<ul><li>Strings on the exam),</li><li>Lab4 (Classes, Objects, and Methods), due 04 November,</li></ul>
	<ul> <li>Strings on the exam),</li> <li>Lab4 (Classes, Objects, and Methods), due 04 November,</li> <li>No Quiz due to midterm,</li> </ul>
Midterm	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November
	<ul> <li>Strings on the exam),</li> <li>Lab4 (Classes, Objects, and Methods), due 04 November,</li> <li>No Quiz due to midterm,</li> </ul>
Midterm #6	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November  Lectures:
	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November
	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November  Lectures:
	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November  Lectures:  Creating your own Classes (3.1),
	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November  Lectures:  Creating your own Classes (3.1),  Encapsulation and benefits (3.2-3.5),
	Strings on the exam),  Lab4 (Classes, Objects, and Methods), due 04 November,  No Quiz due to midterm,  Be sure to schedule your exam during 29 October and 04 November  Classes II and Encapsulation, 29 October – 04 November  Lectures:  Creating your own Classes (3.1), Encapsulation and benefits (3.2-3.5),  Assignment3 (Games Client), due 11 November,

	o Arrays (7.1),
	o More Arrays (7.4-7.6),
	<ul> <li>Lab5 (Arrays and Command Line Arguments), due 18 November,</li> </ul>
	Assignment4 (More Complex Games), due 18 November,
	Quiz over week 7, due 21 November,
#8	Multi-Dimensional Arrays and Arrays as Arguments, 12 November – 18 November
	Lectures:
	o Multidimensional Arrays (7.8),
	<ul> <li>Passing Arrays and Objects to Methods and Arrays of Objects,</li> </ul>
	<ul> <li>Lab6 (more Arrays and GUI Intro), due 25 November,</li> </ul>
	Quiz over week 8, due 28 November,
#9	Complexity, Data Structures I, 19 November – 25 November
	Lectures:
	o Intro to File IO I (11.1-11.2),
	o Intro to File IO II,
	Lab7 (File IO), due 02 December,
	Assignment5 (Golf Scores), due 02 December,
	Quiz over week 7, due 05 December,
#10	Data Structures II, 26 November – 02 December
	Study for final,
	The final will primarily cover materials from week 6 through week 10, but
	it is difficult to remove aspects from earlier weeks
	No quiz due to final,
Final	Final (covers weeks 6-10), 01 December – 07 December.