NEW YORK CITY COLLEGE OF TECHNOLOGY
THE CITY UNIVERSITY OF NEW YORK
Department of Computer Engineering Technology
300 Jay Street, Brooklyn, NY 11201-1909

EMT1111: Logic and Problem Solving

Schedule

Lecture	Lesson Topics	Assignment/Lab
1	▪ Syllabus, objectives, and policies. ▪ The class website ▪ Blackboard ▪ Basic computer skills ▪ Get an OpenLab account ▪ Create your portfolio ▪ What is computer engineering technology?	SLIDES: ▪ EMT1111-Lecture-1 LAB: 1- Complete the following tutorials: ▪ Set up and OpenLab portofolio ▪ Set your portfolio in OpenLab ▪ Site on the OpenLab 2- Submit the URL of your portfolio HERE READING ASSIGNMENTS: ▪ Read the lesson: Introduction to Computer Systems ▪ Complete Quiz 1 on Blackboard
2	▪ What is a computer? ▪ Hardware ▪ Software ▪ Bits and Bytes ▪ Data (storing and transmitting)	SLIDES: ▪ Intro to Computer Systems

	▪ Programming Languages ▪ Computer Networks	VIDEO(S): ▪ What is a computer? LAB: ▪ Complete the remaining OpenLab tutorials in the Help page ▪ Create a tab in your portfolio and name it EMT 1111 Labs ▪ Create a Lab Report Example page similar to this one and call it Lab 0. READING ASSIGNMENTS: ▪ Think Python: Chapter 1, Chapter 2 ▪ Complete Quiz 2 on Blackboard
3	▪ What is a program? ▪ Algorithms ▪ The Programming Process ▪ Variables ▪ Statements and Expressions ▪ Data types ▪ Operators	SLIDES: ▪ Lecture 3 - Intro to Python VIDEO(S): ▪ Variables, statements, and expressions LAB: ▪ Lab 1 ▪ Post in your OpenLab portfolio: lab description, source code, screenshots ▪ Due the day before next class. READING ASSIGNMENTS: ▪ Think Python: Chapter 3, Chapter 4, ▪ Complete Quiz 3 on Blackboard
4	▪ How to be a Successful Programmer ▪ How to Avoid Debugging	SLIDES:

	▪ Beginning tips for Debugging ▪ Python Turtle Graphics ▪ The for Loop ▪ Flow of Execution of the for Loop	▪ Lecture 4: Debugging and Control Flow LAB: ▪ Lab2: Turtle party ▪ Post in your OpenLab portfolio: lab description, source code, screenshots ▪ Due the day before next class. READING ASSIGNMENTS: ▪ Think Python: Chapter 5, Chapter 6 ▪ Complete Quiz 4 on Blackboard
5	▪ Modules ▪ Functions ▪ User defined functions ▪ Abstraction. ▪ Reusability. ▪ Parameters and arguments. ▪ Returning values. ▪ Variables Scope	SLIDES: ▪ Lecture 5 - Python Functions VIDEO(S): ▪ Functions one LAB: ▪ Lab3 ▪ Post in your OpenLab portfolio: lab description, source code, screenshots ▪ Due the day before next class. READING ASSIGNMENTS: ▪ Think Python: Chapter 7, Chapter 8 ▪ Complete Quiz 5 on Blackboard
6	▪ Decision and Iteration ▪ Boolean Logic ▪ Boolean expressions ▪ Logical operators ▪ If and if/else statements ▪ Loops	SLIDES: ▪ Lecture 6: Decision and Iteration VIDEO(S):

		▪ Control Flow LAB: ▪ Lab4: Decide and repeat ▪ Post in your OpenLab portfolio: lab description, source code, screenshots READING ASSIGNMENTS: ▪ Think Python: Chapter 9, Chapter 10 ▪ Complete Quiz 6 on Blackboard
7	▪ A string is a sequence ▪ Traversing strings ▪ String slices ▪ A list is a sequence ▪ Traversing a list ▪ List operations ▪ Lists slices	SLIDES: ▪ Lecture 6 - Python Strings and Lists LAB: ▪ Lab5 ▪ Post in your OpenLab portfolio: lab description, source code, screenshots ▪ Due the day before next class. STUDY FOR MIDTERM EXAM
8	**MIDTERM EXAM**	READING ASSIGNMENTS: ▪ App Inventor Setup ▪ HelloPurr + Vibrate ▪ AppInventor CH14 (App Architecture) ▪ Complete Quiz 7 on Blackboard
9	▪ App Inventor Setup ▪ What is an App? ▪ What is event driven programming? ▪ Components and properties	SLIDES: ▪ Lecture 7 - Intro to AppInventor LAB:

	▪ Events and event handlers ▪ Calling built-in function blocks ▪ Reference Documentation site	1. Finish Lab 6: HelloPurr + Vibrate and post it into your OpenLab portfolio. 2. Include a short description of the app, a picture of the main screen, and a picture of the blocks diagram. READING ASSIGNMENTS: ▪ PaintPot ▪ AppInventor CH16 (Variables) ▪ Complete Quiz 8 on Blackboard
10	▪ Variables ▪ Parameters ▪ Operators ▪ Drawing Canvases ▪ Working with images and sound ▪ Intro to algorithms	SLIDES: ▪ Lecture 8 - AppInventor VIDEO(S): ▪ AppInventor: Variables, operators, and expressions LAB: ▪ Do Lab 7: PaintPot and post it in your OpenLab portfolio READING ASSIGNMENTS: ▪ AppInventor CH15 (Software Engineering and Debugging) ▪ AppInventor CH17 (Creating Animated Apps) ▪ Complete Quiz 9 on Blackboard
11	▪ Software engineering principles ▪ Comments and documentation ▪ Timer Events ▪ Canvases and Image Sprites ▪ Moving Objects over Time	SLIDES: ▪ Lecture 9 - AppInventor LAB: ▪ Do Lab 8: MoleMash and post it in your

	▪ Drag and Touch Events ▪ Boolean expressions ▪ Relational operators ▪ If and If/else statement	OpenLab portfolio READING ASSIGNMENTS: ▪ AppInventor CH18 (Conditional Blocks) ▪ AppInventor CH 19 (Programming Lists) ▪ AppInventor CH20 (Repeating Blocks) ▪ AppInventor CH22 (Working with Databases) ▪ Complete Quiz 10 on Blackboard
12	▪ Loops ▪ While, For Each, For Range ▪ Databases ▪ TinyDB ▪ TinyWebDB ▪ Procedures and functions ▪ Lists of data ▪ Iterating a list with an index ▪ Lists of lists	SLIDES: ▪ Lecture 10 - AppInventor LAB: ▪ Do Lab 9: QuizMe and post it in your OpenLab portfolio
13	▪ Work on your project ▪ Work on your presentation	ASSIGNMENTS: ▪ Finish your project ▪ Finish your presentation ▪ Finish quizzes ▪ Finish labs
14	▪ Finish your project ▪ Project presentation ▪ Project submission ▪ Final Exam review	SLIDES: ▪ Review for Final Exam ▪ Project Presentations LAB: ▪ Finish your project ▪ Submit your project

15	**FINAL EXAM**	**DECEMBER 16th WEEK FINAL COMPREHENSIVE EXAM**