

Intro to Programming II

Introduction

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1-2: Syllabus

- Office Hours
- Course Text
- Prerequisites
- Grading Policies

1-3: Topics

- This class is designed to give you more familiarity and skill in Java Programming.
 - OO design
 - Basic Software Engineering skills
 - Abstraction
 - Practice, practice, practice!
- You'll also get an introduction to programming in C.

1-4: Grading

- You'll have a series of *lab assignments* to do
 - Done in-class
 - Satisfactory/unsatisfactory grade
- You'll also have four programming projects
 - Larger; 2 weeks apiece
- Plus two midterms and a final
 - In class, closed notes
- I believe that the best way to learn a topic like programming is to *do* it.

1-5: How to Succeed

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 - If you’re confused, *at least* half the class is also.
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 - Waiting until the last minute to start projects is a bad idea.

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- Start the homework assignments and projects early
 - Waiting until the last minute to start projects is a bad idea.
- Read the textbook.
 - Ask Questions! Come to Class!

1-10: Words of Wisdom

- “90% of life is showing up.” – Woody Allen
- “Just keep swimming.” – Finding Nemo
- “Never mistake activity for achievement.” – John Wooden
- “Teachers open the door. You must step through on your own.”
– Chinese Proverb.

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- “Do I contradict myself? Very well, then. I contradict myself. I am large; I contain multitudes.” - Walt Whitman

1-12: Lab 1: Java Practice

- Write a program that converts from Fahrenheit to Celsius. It should prompt the user for a temperature, and then ask whether the input is in Fahrenheit or Celsius. It should then calculate the temperature for the other scale. The relevant formulae are:
 - $F = \frac{9}{5} * C + 32$
 - $C = \frac{5}{9}(F - 32)$
- You should have a main method that prompts the user for a temperature and asks whether it's Fahrenheit or Celsius
- You should have static methods called FtoC and CtoF.

1-13: Lab 1: Java Practice

- (L & L 2.13) - Write a Java applet that draws the Olympic Logo. The circles in the logo should be colored (L to R): blue, yellow, black, green, red.

1-14: Lab 1: Java Practice

- Write a program that creates an array of 50 integers. Use a for loop and an if statement to place a 1 in all cells where the index is even, and a 0 in all cells where the index is odd. (the first index is 0.) For example, `a[3]` should contain a 0, and `a[2]` should contain a 1. Print out the array after filling it in.