

ICS 211

Introduction to Computer Science II

Department of Information and Computer Sciences

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ICS 211: Today's plan

- **Introductions**
- **Course overview**

Introductions

ICS 211 Course Overview:

Overall Contents

- data types and algorithms
- software engineering
- Java and programming

ICS 211 Course Contents (1/2): Data Types and Algorithms

- linked lists, stacks, and queues
- binary trees and tree traversal
- sorting and searching
- algorithm analysis

ICS 211 Course Contents (2/2): Software Engineering and Java

- **software engineering**
 - specification of desired behavior before design and implementation
 - design as separate from implementation
 - using existing libraries, re-using code
- **Java and programming**
 - recursion
 - object-oriented programming: objects, interfaces, inheritance
 - iterators
 - programming experience

ICS 211 Course Overview: Structure (1/2)

- **instructor: Edo Biagioni**
esb@hawaii.edu, 956-3891
- **TAs give labs and grade homeworks**
 - Feimei Chen is TA for all sections
 - Assistant TAs and Learning Assistants help in the labs and office hours
- **Labs start today/tomorrow**
- **Labs are for homework and questions and answers**

ICS 211 Course Overview: Structure (2/2)

- labs are for homework and questions and answers
- lectures are to introduce and explain the material
- most of the learning occurs as students do the assignments
- there is to be absolutely no collaboration with others on assignments
- more details at the course webpage:

<http://www2.hawaii.edu/~esb/2025spring.ics211/>

Doing well in ICS 211

- **in short:**
 - (1) be enthusiastic, or
 - (2) learn to
 - (a) program, and
 - (b) master the conceptual material
- **exams may ask you to write code you've never written before**
 - learn to program and internalize programming so you can write new code fluidly under pressure
- **read textbook before coming to class**

Doing well in ICS 211 – the obvious

- **attend lectures (on time!)**
- **attend labs at least once a week**
 - twice a week if you need to
- **do all the assignments**
 - start early
- **follow the class materials in the textbook**
 - maybe even read the textbook and the presentation before class!
- **review class material before exams**
- **interact with TAs, ATAs, LAs, and the instructor**

Doing well in ICS 211 – attitude

- programming is a creative activity
- you are learning to program – expect to make mistakes
- for some mistakes, the IDE(Eclipse) or compiler(javac) will complain
- for other mistakes, the program simply doesn't do what you want
- attitude: this is all part of learning. It means you are pushing yourselves to learn something new. It may be frustrating, but it does not imply anything bad about you as a student, it just means you are trying to learn. Take a break and come back later!
- you are learning a set of skills, which takes practice

ICS 211 and AI

- this class has weekly assignments
- assignments require you to write code
- Large Language Models/AI are good at writing
- you are allowed to get help on your assignment from AI systems, and from the web
- but the answers must be your own

otherwise,

1. you won't learn as much, and
2. there is no point in having assignments!