

ECE 15

```
#include <stdio.h>
```

```
int main() {
```

```
    char word1[10] = "energy";
```

```
    char word2[10];
```

```
    int i=0, j=0;
```

```
    while (word1[i] != '\0') {
```

```
        if (word1[i] != 'e')
```

```
            word2[j++] = word1[i];
```

```
        i++;
```

```
    }
```

```
    word2[j] = '\0';
```

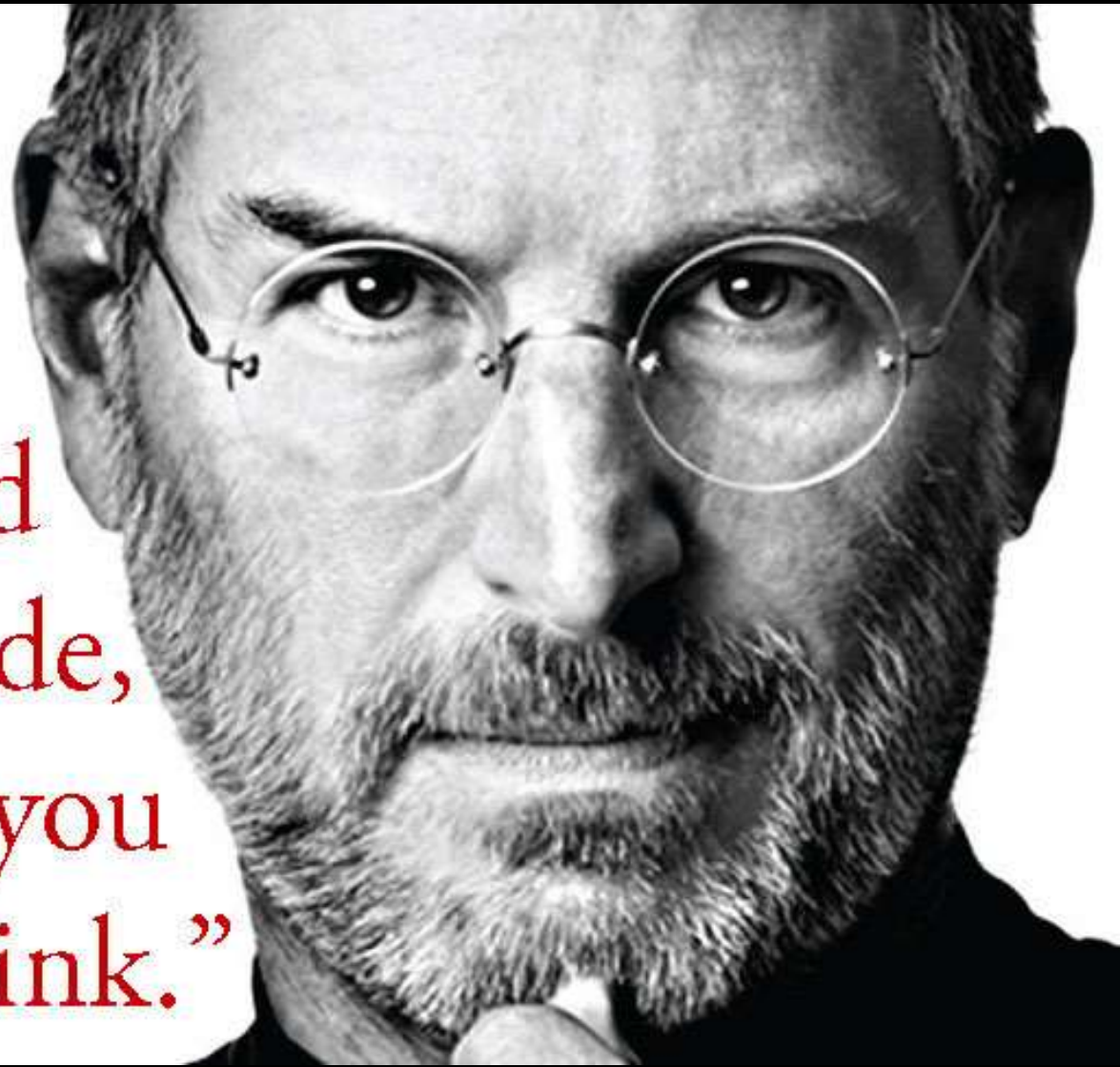
```
    printf("%s \n", word2);
```

```
}
```

# Steve Jobs

1955-2011

“Everyone should  
learn how to code,  
it teaches you  
how to think.”





ChatGPT



# **Generative AI**





# Learning the language to talk to a computer

Vocabulary



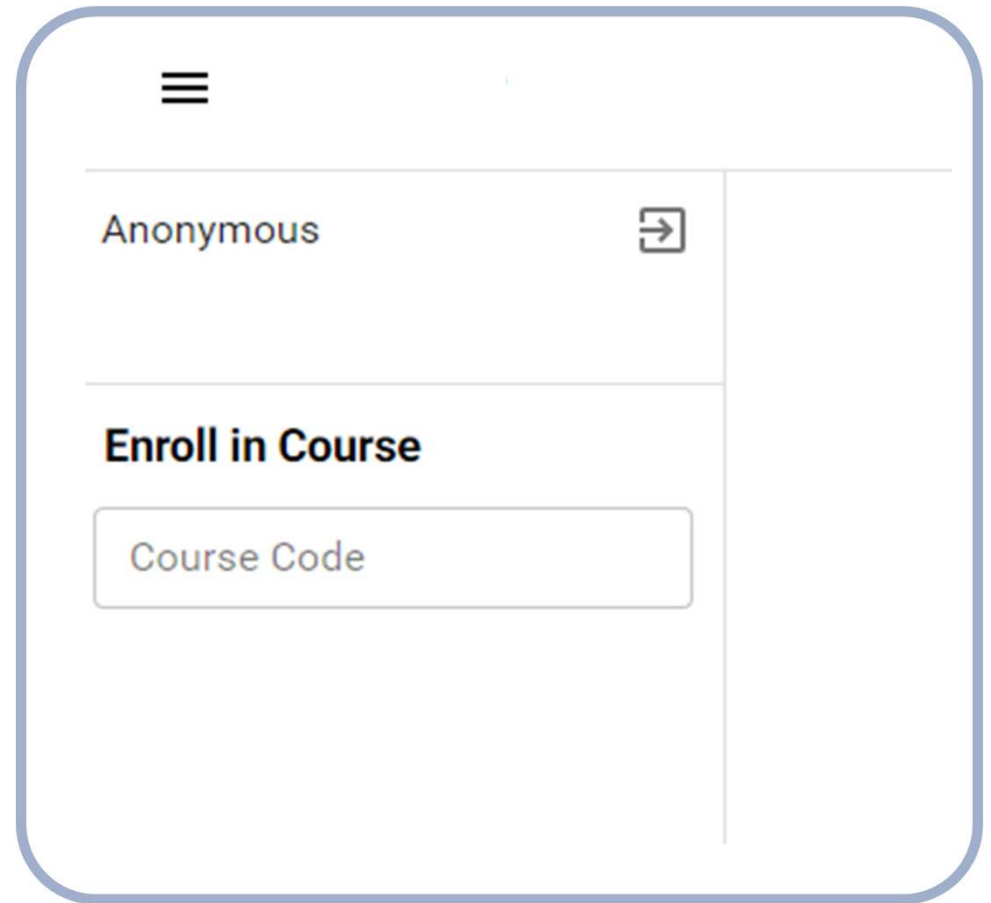
Syntax: C language

Grammar



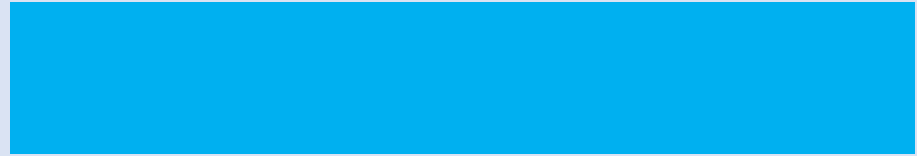
Thinking as a programmer

webclicker.web.app



HBOPYX





What describes you best (before you started with this class)?

- [A] Computers are not my thing at all.
- [B] I use computers to go online, but that is about it.
- [C] I don't really know programming, but I know my way around a computer.
- [D] I have done some programming and feel pretty comfortable with things computer related.
- [E] I'm an expert programmer and a total computer wiz.

We do not expect any prior knowledge

The course requires dedication and practice  
*start early, start often*

Absolute grading – you are not competing

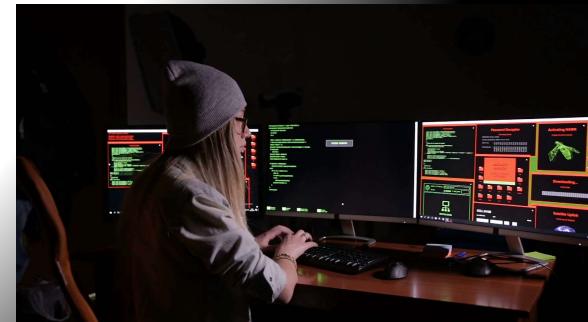
# The only way to learn to code is by actively doing it ...

## Active learning

Learn syntax before lecture

Practice during lecture

Programming assignments



# Our Team



Curt



Haochen



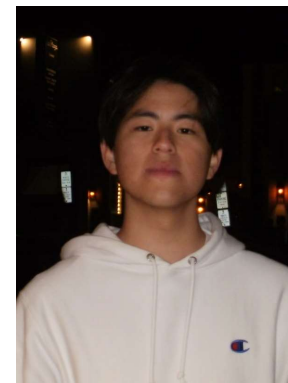
Giovanni



Rafaella



Mandy



Josh



Vivian



Tiffany



Sarayu



Andrew



Anthony



Henry



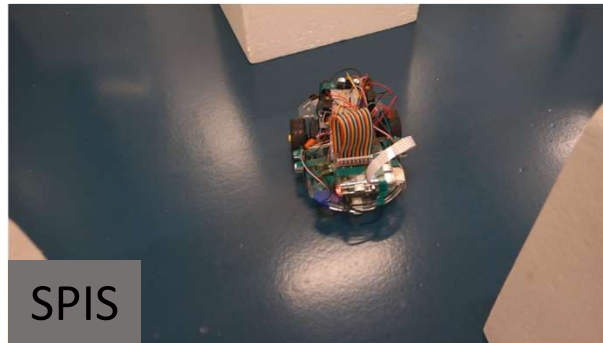
Alain



# Curt Schurgers

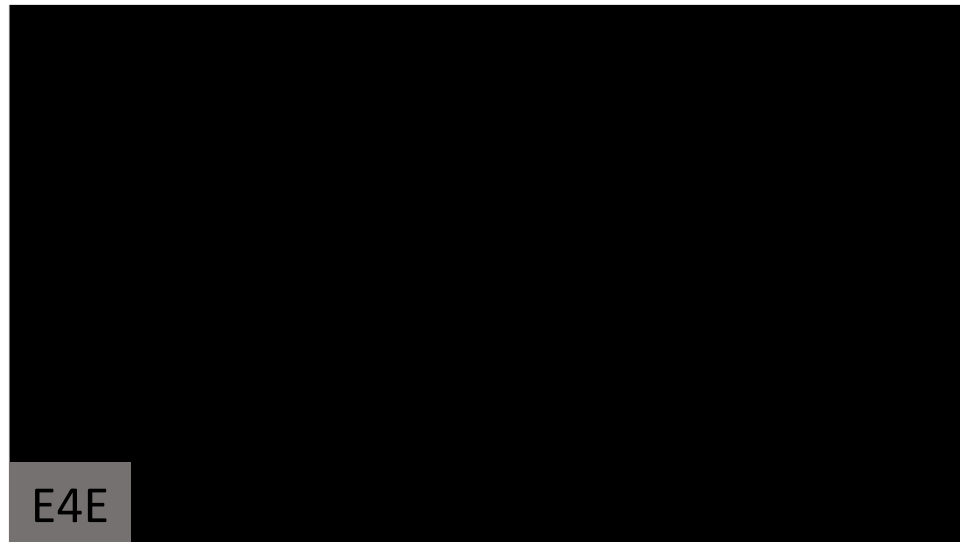
Teaching Professor, ECE Department

Hands-on  
experiences  
and teaching



Engineers for Exploration

[e4e.ucsd.edu](http://e4e.ucsd.edu)



Traveling,  
backpacking  
and exploring



# Logistics – Course Components

- Reading assignments
  - Custom chapters, available on Canvas
  - Reading quizzes before each lecture
  - Optional textbook: “Programming in C”, 4th Ed., Stephen G. Kochan
- Lectures
  - Active learning: Webclicker
- Discussion
  - Single section: **CENTR 212**
- Exams
  - Two midterms
  - Final

# Logistics – Course Components

- Programming assignments

- Main submission:  $x$  Fridays 7pm (with a 5h grace period)
- Resubmission:  $y$  Tuesdays 7pm (with a 5h grace period)

$$z = \max \left[ x, \frac{x + y}{2} \right]$$

If  $z \leq 75$

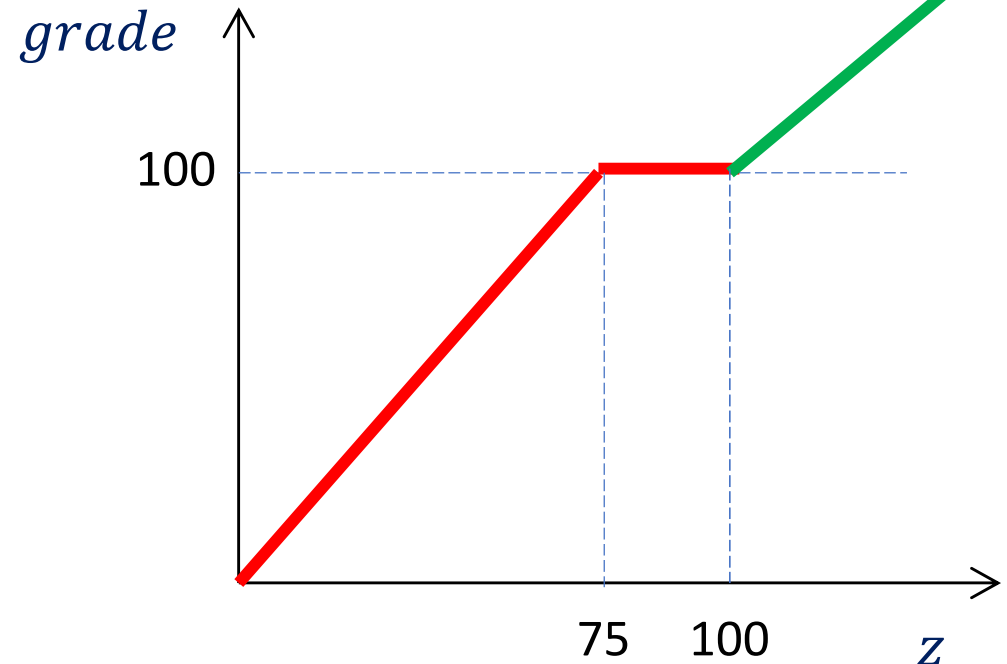
$$grade = z * 1.33$$

If  $75 \leq z \leq 100$

$$grade = 100$$

If  $100 \leq z$

$$grade = z$$



# Logistics - Grading

12%	programming assignments
1%	max [ final, class participation ]
1%	max [ final, reading quizzes ]
18%	max [ final, midterm1 ]
18%	max [ final, midterm2 ]
50%	final

*Class participation is measured with Webclicker. You get credit for a lecture if you answer at least 75% of the questions in that lecture. You can miss up to 6 lectures without penalty.*

There are no make-up exams

- There is no curve in this class

80 – 85%	A-	85 – 95%	A	95 – 100%	A+
65 – 70%	B-	70 – 75%	B	75 – 80%	B+
50 – 55%	C-	55 – 60%	C	60 – 65%	C+
0 – 40%	F	40 – 50%	D		

If your score in the final exam is below 35%, you can at most get a D.  
If your score in the final exam is below 25%, you will get an F.



# Logistics – Course Website on Canvas

**ECE15\_FA24\_A00** > Syllabus

Fall 2024

[Home](#)  
[Announcements](#)  
[Modules](#)  
[Podcasts](#)  
[Grades](#)  
[Academic Integrity](#)  
[Academic Support](#)  
[Library Resources](#)

## ECE 15 - Eng Computation: Prgrm in C - Schurgers [FA24]

[Jump to Today](#)

### Course Information:

<a href="#">Tutoring/OH Schedule</a>	<a href="#">How to Contact Us</a>	<a href="#">ECE15 Syllabus</a>
<a href="#">Reading Chapters</a>	<a href="#">Lecture Slides</a>	<a href="#">Discussion Slides</a>
<a href="#">Practice Exams</a>	<a href="#">This Quarter's Exams</a>	<a href="#">Support Videos</a>
<a href="#">Online C compiler</a>	<a href="#">Piazza</a>	<a href="#">PA Logistics</a>
	<a href="#">Webclicker</a>	<a href="#">Software Logistics Site</a>

View Course Stream

View Course Calendar

View Course Notifications

#### To Do

[Welcome to ECE 15](#) ×  
ECE 15 - Eng Computation: Prgrm in C - Schurgers [FA24]  
Sep 25 at 11:10am

[Reading 01.1](#) ×  
ECE 15 - Eng Computation: Prgrm in C - Schurgers [FA24]  
2 points | Sep 30 at 2pm

[PA 0](#) ×

# Logistics – Course Website on Canvas

-  Home
-  Account
-  Dashboard
-  Courses
-  Calendar
-  Inbox
-  History
-  My Media
-  Help

Fall 2023

Home

Modules

Podcasts

Grades

Academic Integrity

Academic Support

Library Resources

▸ Getting Ready

Complete All Items

▸ Getting Started

Prerequisites: Getting Ready

Complete All Items



▸ Academic Integrity Agreement

Prerequisites: Getting Ready

Complete All Items



▸ Programming Assignment Logistics

Prerequisites: Getting Started

Complete All Items



▾ Reading and Reading Quizzes

Prerequisites: Getting Started, Academic Integrity Agreement



▸ Programming Assignments

Prerequisites: Getting Started, Programming Assignment Logistics, Academic Integrity Agreement



# Logistics – Asking for Help

- Piazza: Do not post your code (make it a private message)
- Tutoring hours in the computer lab (JH 4307)

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:30 - 9:00					
9:00 - 9:30					
9:30 - 10:00					
10:00 - 10:30	Tiffany				Henry, Anthony
10:30 - 11:00	Tiffany, Anthony				Henry, Anthony
11:00 - 11:30	Tiffany, Anthony	Rafaella		Rafaella	Henry, Anthony
11:30 - 12:00		Rafaella		Rafaella	Henry
12:00 - 12:30	Sarayu	Rafaella	Vivian	Rafaella	Henry
12:30 - 13:00	Sarayu, Anthony	Rafaella	Vivian	Rafaella	Henry
13:00 - 13:30	Sarayu, Anthony	Haochen	Anthony, Vivian	Haochen	Alain, Anthony
13:30 - 14:00	Sarayu, Anthony	Haochen	Anthony, Vivian	Haochen	Alain, Anthony
14:00 - 14:30	Lecture	Joshua, Haochen	Lecture	Joshua, Haochen	Lecture
14:30 - 15:00		Joshua, Haochen		Joshua, Haochen	
15:00 - 15:30	OH Curt	Joshua, Haochen	Alain, Tiffany	Joshua, Haochen	
15:30 - 16:00		Joshua	Alain, Tiffany	Joshua, Andrew	
16:00 - 16:30	Discussion	Mandy, Giovanni	Alain, Tiffany	Mandy, Giovanni, Andrew	Mandy, Giovanni, Alain, A
16:30 - 17:00		Mandy, Giovanni	Alain	Mandy, Giovanni, Andrew	Mandy, Giovanni, Alain, A
17:00 - 17:30	Anthony	Giovanni, Henry, Sarayu	Alain	Anthony, Andrew	Vivian, Mandy, Giovanni,
17:30 - 18:00	Anthony	Giovanni, Henry, Sarayu		Anthony	Vivian, Mandy, Giovanni,
18:00 - 18:30	Anthony	Giovanni, Henry, Sarayu			Vivian, Giovanni, Alain, A
18:30 - 19:00	Anthony	Henry, Sarayu			Vivian, Giovanni, Andrew

	Lecture
	Discussion
	Lab tutoring hours
	Curt's office hours

# Academic Integrity

- Do not share your code
- Do not copy code from others
- Do not claim work to be yours (even implicitly) when it is not
- Provide help by explaining principles and concepts
- Do not post your code online

Do not self-plagiarize (i.e., reuse your own code). You can potentially transfer some the PA grades (see form on Canvas).

The expectations are different in a course compared to jobs/internships ...



# Week 1 – PA0

- Log into your class account
  - Need to use this account as it has the needed software
- Access the computing resources
  - Use the Jacobs Hall computer lab, room 4307
  - Using remote desktop or ssh
- Submit a simple assignment (20 points)
  - Download starter code, write simple program, submit code

Deadline:	Friday of week 1
Resubmit:	Friday of week 3 (for full credit)

Come to discussion and office/tutoring hours  
Tutoring will start at 4pm today!