

Resources:

- **Course Site:** ucsb-cs16.github.io/f22/
- **Piazza:** piazza.com/class/l8dc72uzoa52u/
- **ZyBooks:** learn.zybooks.com/library
- **Gauchospace:** gauchospace.ucsb.edu/courses/course/view.php?id=31878
- **My Notes:** cs.ucsb.edu/~alexmei/notes.html
cs.ucsb.edu/~alexmei/cs16.html
- **My Office Hours:** Tuesday 9:30 - 10:30 AM, Henley 2002 or [Zoom](#)

Key Concepts:

Warning: this list is not comprehensive!

- **Comments:** `//, /* */`
- **Syntax vs Semantics:** Compile-Time vs Logic Errors
- **Programs:** Application, High-Level Language, Assembly Language, Machine Instruction, Compiler
- **Parts of a Computer:** I/O Devices, Storage, Memory, Processor, Clock
- **Basic Input and Output:** `<iostream>`, `cin`, `cout`
- **Valid Identifiers & Reserved Words**
- **Data Types:** `int`, `double`, `char`, `string`, `auto`
- **Type Casting:** `static_cast<int>`, `static_cast<double>`
- **Constants**
- **Arithmetic Operators:** `+`, `-`, `*`, `/`, `%`
- **Integer vs Floating-Point Division**
- **Order of Precedence:** `()`, unary `-`, `*` / `%`, `+` `-`, `=`
- **Math Functions:** `sqrt()`, `pow()`, `fabs()`
- **Binary vs Base 10**
- **Random Numbers:** `rand()`