# IT2015: Introduction to Computer Science / 計算機概論

## CJ Wu/吳齊人

### Fall 2021 Syllabus

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This is an introductory computer science course for CS undergraduate students. The students will get a big picture of computer science. The essential and fundamental technical principles in computer science including, basic knowledge about computer, data manipulation & abstraction, computer architecture, organization, software, operating system, database, network will be introduced. And the students will also gain the ability to solve problems with C & C++.

### Topics

Course description This course is an introduction to computer science, with the emphasis on programming in the high level programming language C/C++. Topics include:

- Foundations of Computer Science:
- The Shapes of Computers Today
- Computer Organization
- Operating system
- Networking & The Internet
- Software Engineering
- Database Systems
- Artificial Intelligence
- Theory of Computation
- Google Cloud Platform/Cloud Shell Editor (gcc/g++/Makefile)
- Google Cloud Platform/Cloud Source Repositories (git)
- C/C++ Programming

### Textbook

1. J. Glenn Brookshear, Computer Science: An Overview 13/e
2. Walter Savitch, "Absolute C++, Global Edition" Sixth Edition

Take care of yourself.

## Reference Book

1. Behrouz A. Forouzan, "Foundations of Computer Science," 4/e, 2018
2. Deitel & Deitel, C How to Program 8th Ed., Prentice Hall

## Grading

Your course grade will be determined approximately as follows:
- 25%: Mid-term exam
- 25%: On-line programming exam (Final exam)
- 20%: Group Score + Quizzes
- 30%: Exercises + Lab Time

Take care of yourself.