

CPSC 1050 – Introduction to Computer Science

Outline

Details:

Course Number:	CPSC 1050
Course Name:	Introduction to Computer Science
Instructor:	Dr Mingwu Chen
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Textbooks:

- Computer Science Illuminated, Third Edition, by Nell Dale and John Lewis
- Explorations in Computer Science, Second Edition (Lab Manual), by Mark Meyer

Course Description:

Offers a broad overview of the computer science discipline. Provides students with an appreciation for and an understanding of the many different aspects of the discipline. Topics include: information and data representation; computer hardware and architecture; algorithmic problem solving; an introduction to programming (e.g., XHTML, JavaScript); operating systems; networks; applications; artificial intelligence and robotics; social implications; ethics; and history. Intended for both students expecting to continue in computer science as well as for those taking it for general interest.

Learning Outcomes:

Upon successful completion of CPSC1050, the student will be able to:

- explain information encoding and data representation
- explain the basic operation of a computer's hardware architecture
- describe the components of a computer
- explain different features of Human-Computer Interaction and User Interfaces
- describe the role of local network, internet, and WWW.
- describe and use spread sheet (Excel) and database.
- create several web pages using HTML

- describe algorithm
- explain artificial intelligence and intractability
- examples of computer arts

Prerequisites:

None

Topics:

- Introduction, Course Objectives, Big Picture, History
- Binary Values, Data Representation
- Gates and Circuits
- Computing Components
- Problem Solving, Algorithm Design
- World Wide Web and HTML
- Low Level Programming
- High Level Programming
- Operating Systems, File Systems
- Information Systems
- Spreadsheet Design
- Networks

Assessment:

Labs	25%
Exercises	15%
Midterms	15% x 2
Final	30%
Participation	+/-3%

Notes:

- You may be given an automatic fail if you miss more than 20% of classes without an acceptable reason.
- In order to get a C or higher grade in a computer science course, a student MUST achieve at least 50% of average in the exam components of the course.

The grade will be determined as follows:

Letter Grade	Overall Average
A+	90 - 100
A	85 - 89

A-	80 - 84
B+	76 - 79
B	72 - 75
B-	68 - 71
C+	64 - 67
C	60 - 63
C-	55 - 59
D	50 - 54
F	below 50

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Plagiarism consists of falsely presenting another person's work as your own. This includes copying another student's work (with or without her/his permission) or copying material from a book, the Internet or elsewhere without acknowledging the source of the material. It is not an offense to use another person's work, but you **MUST NOT** claim it as your own. You are encouraged to discuss the course material with your classmates and collaborate with each other during algorithm design, but the work you submit (including the program code) **MUST BE** your own. Any plagiarized work automatically receives a grade of zero. Furthermore, any guilty student may be expelled from the course, or even expelled from the college.