Fall 2013

電機資訊學院 EECS
Course number: 10210EECS111000
Course title: 計算機程式設計
Introduction to Programming

Course Instructor:	Prof. Hwann-Tzong Chen 陳煥宗 教授 625 台達館 31309 htchen@cs.nthu.edu.tw
Office hours:	To be determined
TA:	To be determined

Required Textbook

S. Prata, C PRIMER PLUS, Fifth Edition. SAMS, 2005.

Reference Textbook

B. W. Kernighan and D. M. Ritchie, THE C PROGRAMMING LANGUAGE, Second Edition. Prentice Hall, 1988.

Purpose of the Course

The goal of this course is to equip EECS students with essential coding skills for forthcoming courses that demand programming. The students are expected to acquire sufficient ability and experience in transforming ideas into computer programs. They will learn the C programming language in three months and use their coding skills to create a computer game as the final project.

Grading Criteria

The grade is based on the scores of fifteen homework assignments plus labs, two midterm exams, one final exam, and the final project, with the following percentages:

1. Homework and labs (30%) — An additional task for each of the fifteen homework assignments has to be done in PC lab every Thursday evening.
2. Two midterm exams (30%)
3. One final exam (20%)
4. Final project (20%)

Lectures:	M3M4W2, 107 台達館
Labs:	Thursday Evening, 8pm–9pm, 資電館
Midterm Exams:	Monday, October 28, 2013, 資電館
	Monday, December 9, 2013, 資電館
Final Exam:	Monday, January 13, 2014, 資電館

Fall 2012 EECS INTRODUCTION TO PROGRAMMING COURSE SCHEDULE AND OUTLINE		
Week	**Topics**	**Labs and Exams**
1	**CH. 1 Getting Ready** **CH. 2 Introducing C**	Lab #0
2	**CH. 3 Data and C** **CH. 4 Formatted Input/Output**	Lab #1
3	**CH. 5 Operators, Expressions, and Statements**	Lab #2
4	**CH. 6 Control Statements: Looping**	Lab #3
5	**CH. 7 Control Statements: Branching**	Lab #4
6	**CH. 8 Character I/O and Redirection**	Lab #5
7	**CH. 9 Functions**	Midterm Exam I
8	**CH. 9 Functions** *Recursion*	Lab #6
9	**CH. 10 Arrays and Pointers** *Arrays*	Lab #7
10	**CH. 10 Arrays and Pointers** *Pointers*	Lab #8
11	**CH. 11 String Functions** **CH. 13 File Input/Output** **CH. 15 Bit Manipulation**	Lab #9
12	**CH. 12 Memory Management** **CH. 14 Structures**	Lab #10
13	**CH. 16 The C Preprocessor and the C Library**	Midterm Exam II
14	**CH. 17 Advanced Data Representations** *Linked Lists* *Trees*	Lab #11
15	**Examples of Final Project**	Lab #12
16	**Examples of Final Project**	Lab #13
17	**Examples of Final Project**	Lab #14
18	**Final Project Demo**	Final Exam