

CS46K Programming Languages

Structure and Interpretation of Computer Programs

Syllabus

WELCOME TO CPSC 46K COURSE

DR. ERIC CHOU

IEEE SENIOR MEMBER

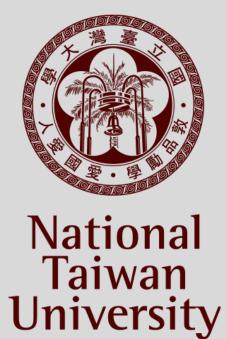
Eric Chou, Ph.D.

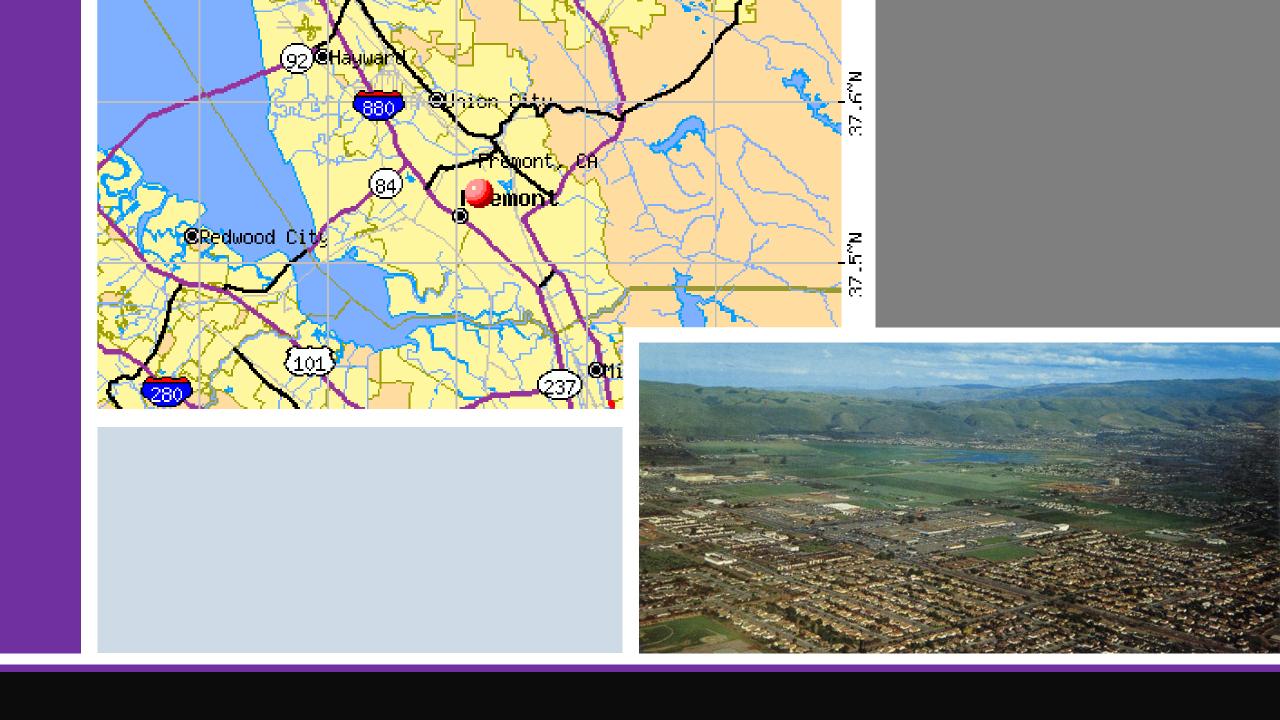


IEEE Senior Member CSTA Member USAT/AAU Coach







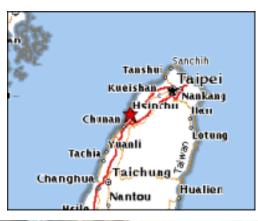




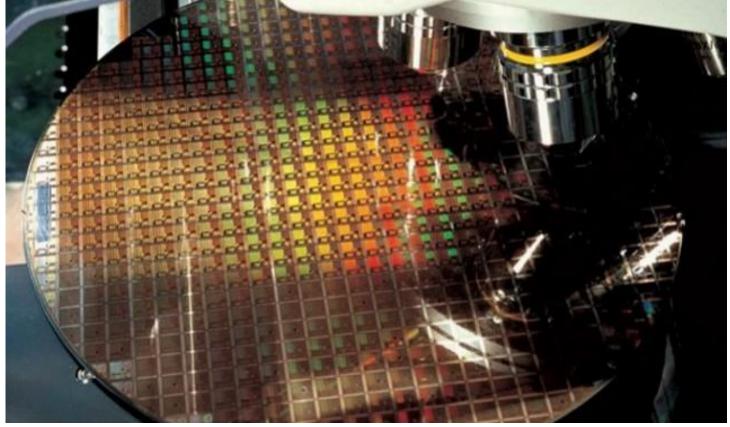












How Programming Languages course is connected to other courses (Core CS)?

Software	Theory	Programming and Problem Solving	Hardware
Linux/Unix Lab.	Computational Theory	Compiler Design	Parallel Processing
Embedded Systems	Automata	Programming Languages	Computer Architecture ISA
Networking Operation	Formal		Micro Processor Lab
Systems Database	Language and Grammar (ReGex/FSM/CFG)	Data Structure Algorithms	Computer Organization (C/Assembly)
	Discrete Math	Java2 C++ Python 2	
Unix Scripting	Boolean Algebra	Java 1 C Python 1	Login Design

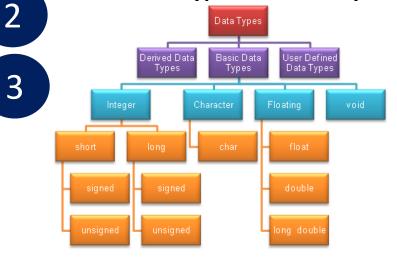


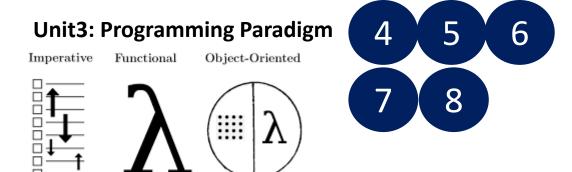
How is this course organized?

Unit 1: Fundamentals

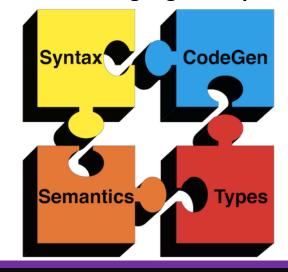


Unit 2:Data Type and Memory Model





Unit4: Language Interpretation



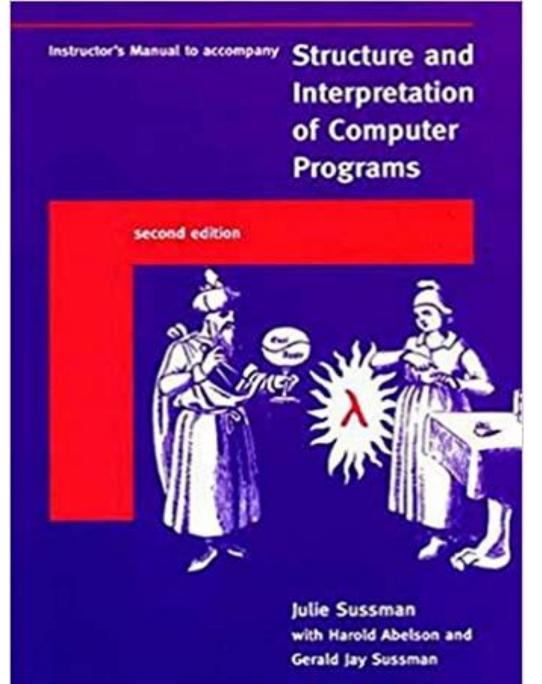




Structure and Interpretation of Computer Program 2nd Edition

By Harold Abelson, Gerald Jay Sussman, Julie Sussman



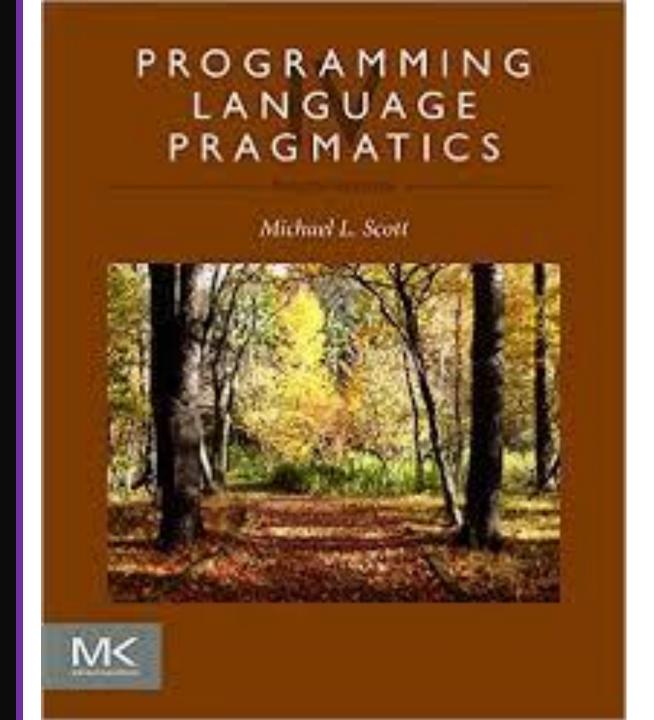


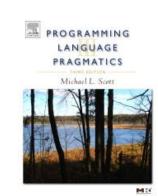


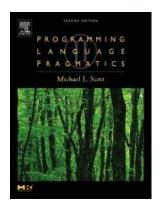
Programming Language Pragmatics 4th Edition

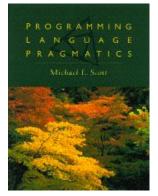
By Michael L. Scott











CPSC 46000 Course Schedule 2021 - Session 003						
Date	Topic	Quiz	Assignment	Discussion	Project	
W1-01/10-01/16	Chapter 1 Introduction	200 pts		DB1-40 pts		
			150	DB2-20 pts		
N2-01/17-01/23	Chapter 2 Data Types and Type Systems		150 pts	20 pts		
<i>N</i> 3-01/24-01.30	Chapter 3 Name, Scope, Binding and Environment	200 pts		20 pts		
N4-01/31-02/06	Chapter 4 Imperative Programming (Programming Paradigm)		150 pts	20 pts	Project 1 Due 200 pts	
W5-02/07-02/13	Chapter 5A Object-Oriented Programming - Class Design (Programming Paradigm)	200 pts		20 pts		
N6-02/14-02/20	Chapter 5B Object-Oriented Programming - Class to Class Relationship (Programming Paradigm)		150 pts	20 pts		
W7-02/21-02/27	Chapter 6A Functional Programming - Basic Theory (Programming Paradigm)	200 pts		20 pts		
N8-02/28-03/06	Chapter 6B Functional Programming — Recursion and Tree (Programming Paradigm)		150 pts	20 pts		
W9-03/07-03/13	Chapter 7: Functional Programming - Scheme Language (Programming Paradigm)	200 pts		20 pts	Project 2 Due 300 pts	
W10-03/14-03/20	Chapter 8A Lexical Analysis – Tokenization		150 pts	20 pts	Proposal 100 pts	
N11-03/21-03/27	Chapter 8B Lexical Analysis — Scanner Design	200 pts		20 pts		
N12-03/28-04/03	Chapter 9A Syntax Analysis – Context Free Grammar		150 pts	20 pts		
N13-04/04-04/10	Chapter 9B Syntax Analysis – Parser Design	200 pts		20 pts		
N14-04/11-04/17	Chapter 10A Interpreter Design - Calculator Design		150 pts	20 pts		
W15-04/18-04/24	Chapter 10B Interpreter Design — Read Evaluate Print Loop	200 pts		20 pts		
W16-04/25-04/29	Chapter 10C Scheme Interpreter Design		150 pts	DB1-20 pts DB2-40 pts	Final Term Project Report 700 pts	
Class Participation	500 pts (Professor will provide this grade based on your class at	tendance reco	rd, discussion invol	vement, and ma	ny other factors.	
Total	500 pts	1600 pts	1200 pts	400 pts	1300 pts	
Grand Total (Maximun Base Points)	5000 pts (May Change) All grade will be calculated based on th	e base points o	of 4500 pts			



Grading: Accumulated Point System

- We use an Accumulated Points System for grading.
- For example, quiz 1 is worth of 100 pts with 10 bonus pts. Quiz 2-1 is worth of 50 pts with 5 bonus pts. Term project is worth of 500 pts with 100 bonus pts, and something like that for all assignments.
- At the end of the semester, we sum up all your total points, including bonus points. We divide your total pts with the maximum base pts and get a percentage score. Use the percentage score to decide your course grade. Your total pts may be higher than the maximum base pts due to the bonus pts.



Score	Grade		
92.95% and above	Α		
89.95% to 92.94%	Α-		
86.95% to 89.94%	B+		
82.95% to 86.94'%	В		
79.95% to 82.94%	B-		
76.95% to 79.94%	C+		
72.95% to 76.94%	С		
69.95% to 72.94%	C-		
59.95% to 69.94%	D		
59.94% and below	F		