

Syllabus

Course Description

Introduction: Structure and Interpretation of Computer Programs (SICP) is the introductory computer science class taught at the Massachusetts Institute of Technology. SICP has much to offer for students of any level in any discipline as it teaches students a different approach of thinking about problems. This course is a condensed version of what is taught at MIT. We hope you enjoy it!

Class Arrangement: We will have lectures on Mondays, Wednesdays, and Fridays from 9 to 12. The first hour will be an introduction to a topic. The second hour and part of the third hour will be time for students to do some practice programming problems. If we have extra time at the end, we will have an English discussion on a topic related to American culture and Chinese culture.

Useful Resources

The following web sites provide information that you may find useful:

<http://www.myoops.org/cocw/mit/index.htm> is the MIT Open Courseware (OCW) website in Chinese. Here, you will find lectures notes and videos, practice problems, exams, and other information for many classes taught at MIT.

<http://www.core.org.cn/OcwWeb/Electrical-Engineering-and-Computer-Science/6-001Structure-and-Interpretation-of-Computer-ProgramsFall2002/CourseHome/index.htm> is the website for the fall 2002 version of SICP translated into Chinese.

<http://www.core.org.cn/OcwWeb/Global/all-courses.htm> has a list of all the courses available in Chinese.

<http://cts.cs.cuhk.edu.hk/> is a nice Chinese-English/English-Chinese dictionary for computer science words.

Course Schedule (may be changed)

Week 1:

Wednesday 7/18 Introduction to Scheme
Friday 7/20 Recursion

Week 2:

Monday 7/23 Abstraction
Wednesday 7/25 Higher Order Procedures
Friday 7/27 Symbols and Quotes

Week 3:

Monday 7/30 Mutation
Wednesday 8/1 Computers and Biology
Friday 8/3 Search Algorithms