Daily preparation guide

Study the material listed in the preparation section prior to attending class that day. Try to formulate precise questions concerning the parts you don’t understand or the importance of the material. If you come across some really difficult material, try searching the web for alternative explanations.

Thursday, August 24

Introduction:
- Classes begin
- Review of syllabus
- Introduction to Scheme and Scam

Tuesday, August 29

Preparation:
- Section 1.1, *The Elements of Programming*
- Example questions: [http://beastie.cs.ua.edu/proglan/1-1.html](http://beastie.cs.ua.edu/proglan/1-1.html)
- Section 1.2, *Procedures and the Processes They Generate*
- Example questions: [http://beastie.cs.ua.edu/proglan/1-2.html](http://beastie.cs.ua.edu/proglan/1-2.html)

Thursday, August 31

Preparation:
- Section 1.3, *Formulating Abstractions with Higher-Order Procedures*

Tuesday, September 5

Prerequisite exam

Thursday, September 7

Preparation:
- Section 3.2.1 The Rules for Evaluation
- Section 3.2.2 Applying Simple Procedures
- Section 3.2.3 Frames as the Repository of Local State
- Section 3.2.4 Internal Definitions

Programming assignment #1 due

Tuesday, September 12

Preparation:

Thursday, September 14

Exam: Chapter 1 and stuff

Programming assignment #1, resubmission 1 due
Tuesday, September 19
Preparation:

Thursday, September 21
Preparation:
- Section 2.1, *Introduction to Data Abstraction*
- Church numerals, http://beastie.cs.ua.edu/proglan/readings/church.html

Programming assignment #1, resubmission 2 due

Tuesday, September 26
Preparation:
- Section 2.2 (skip 2.2.4), *Hierarchical Data and the Closure Property*
- Example questions: http://beastie.cs.ua.edu/proglan/2-2.html

Thursday, September 28
Programming assignment #1, final resubmission due

Tuesday, October 3
Preparation:
- Section 2.3, *Symbolic Data*

Thursday, October 5
Preparation:
- Section 2.4, *Multiple Representations for Abstract Data*

Programming assignment #1, final resubmission due

Tuesday, October 10
Preparation:
- Section 2.5, *Systems with Generic Operations*

Thursday, October 12
Preparation:
- Section 3.1.1 Local State Variables

Programming assignment #2 due

Tuesday, October 17
Preparation:
- Section 3.1.2 The Benefits of Introducing Assignment
- Section 3.1.3 The Costs of Introducing Assignment
- Section 3.3.1 Mutable List Structure

Thursday, October 19
Exam: Chapter 2 and stuff

Programming assignment #2, resubmission 1 due
Tuesday, October 24
Preparation:

• Section 3.3.2 Representing Queues
• Section 3.3.3 Representing Tables
• Section 3.3.4 A Simulator for Digital Circuits

Thursday, October 26
Class does not meet (Fall Break)

Programming assignment #2, resubmission 2 due

Tuesday, October 31
Preparation:

• Section 3.4.1 The Nature of Time in Concurrent Systems
• Section 3.4.2 Mechanisms for Controlling Concurrency

Thursday, November 2
Preparation:

• Section 3.5.1 Streams Are Delayed Lists
• Section 3.5.2 Infinite Streams

Programming assignment #2, final resubmission due

Tuesday, November 7
Preparation:

• Section 3.5.3 Exploiting the Stream Paradigm
• Section 3.5.4 Streams and Delayed Evaluation

Thursday, November 9
Programming assignment #3 due

Tuesday, November 14
Preparation:


Thursday, November 16
Programming assignment #3, resubmission 1 due
Designer programming language due

Tuesday, November 21
Preparation:

• Parameter passing

Thursday, November 23
Thanksgiving

Friday, November 24
Programming assignment #3, resubmission 2 due
Designer programming language, resubmission 1 due
Tuesday, November 28
Preparation:
- invariants
- axiomatic semantics

Thursday, November 30
Preparation:
- more axiomatic semantics
- still more axiomatic semantics

Programming assignment #3, final resubmission due
Designer programming language, resubmission 2 due

Tuesday, December 5
Dead week, optional class

Thursday, December 7
Dead week, optional class

Designer programming language, final resubmission due

Friday, December 8
Last day to withdraw from term

Tuesday, December 12
Final exam, 11:30am-2:00pm