

Agenda for CSCE 590 class meeting of 2020-11-10, Class 25: 1 of Week 13; Online)

1. Remember to record the session!

WEEK	TOPIC	SOURCE
1 (8/20, 8/25)	Introduction and the GHC Compiler and Haskell Platform	Chs. 1 & 2 [H]
2 (8/27, 9/1)	Types and Classes	Ch.3 [H]
3 (9/3, 9/8)	Defining Functions and List Comprehensions	Chs. 4 & 5 [H]
4 (9/10, 9/15)	Recursive Functions	Ch. 6 [H]
5 (9/17, 9/22)	Higher-Order Functions	[B] & Ch.7 [H]
6 (9/23, 9/29)	Declaring Types and Classes and the Countdown Problem	Chs. 8 and 9 [H]
7 (10/01, 10/6)	Review and the Countdown Problem (was: Review and Midterm)	Chs. 8 and 9 [H]
8 (10/08, 10/13)	<i>Midterm</i> and a Simple Sudoku Solver	Ch. 5 [TFWH]
9 (10/15, 10/20)	The Countdown Problem; Denotational Semantics	Ch.9 [H], Notes
10 (10.22, 10/27)	Interactive Programming and Two-person Games	Chs. 10 & 11 [H]
11(10.29, 11/3)	Two-person Games; Functors, Applicatives, and Monads	Chs 11 & 12 [H]
12(11/5, 11/10)	Functors, Applicatives, and Monads; Monadic Parsing	Ch. 13 [H]
13 (11/12, 11/17)	Functors, Applicatives, and Monads; Monadic Parsing Foldables and Lazy Evaluation	Chs. 13, 14 & 15 [H]
14	Reasoning about Programs	Chs. 16 & 17 [H]
15	Functional (Persistent) Data Structures	Notes
	Final Exam: December 10, 9 a.m.	

2. Check email to see whether students are emailing reports of trouble.
3. Ask student to use chat for questions and mute audio and video on their side, to limit clutter and bandwidth.
4. Virtual Office Hours. I expect to have virtual office hours on Blackboard Collaborate Ultra from 1500-1800 on Mondays. Office hours are canceled until further notice. Please email me for meetings.
5. HW11: Exercises 1-3 Ch.11 [H], due on **Thursday**, November 5. (This is a **change**.)
6. HW12: Exercises 1-5 Ch.12 [H], due on Thursday, November 19. (I plan to assign exercises 6-8 later.)
7. Ch.12 [H]: Monads and More: Functors and Applicatives.
8. Video by Graham Hutton, with an introduction to Monads.
9. Chapter 30 (“Understanding Monads”) of the Haskell Wikibook (https://cse.sc.edu/~mgv/csce590f20/haskell/Haskell_wiki.pdf; linked to course website).
10. Formal semantics: Axiomatic Semantics. A presentation based on Ch.9 (“An Introduction to Formal Semantics”) of: Carlo Ghezzi and Mehdi Jazayeri. *Programming Language Concepts*, 2nd ed. Wiley, 1987.
11. Ask students to have the required textbook [H] with them during class.
12. Make sure that the students are fine and wait for questions before ending the session.