

## Agenda for CSCE 590 class meeting of 2020-11-10, Class 24: 2 of Week 12; 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]
<b>12(11/5, 11/10)</b>	<b>Functors, Applicatives, and Monads; Monadic Parsing</b>	<b>Ch. 13 [H]</b>
13	Foldables and Lazy Evaluation	Chs. 14 & 15 [H]
14	Reasoning about Programs	Chs. 16 & 17 [H]
<del>15</del>	<del>Functional (Persistent) Data Structures</del>	<del>Notes</del>
	Final Exam: December 10, 9 a.m.	

- Check email to see whether students are emailing reports of trouble.
- Ask student to use chat for questions and mute audio and video on their side, to limit clutter and bandwidth.
- 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.
- HW11: Exercises 1-3 Ch.11 [H], due on **Thursday**, November 5. (This is a **change**.)
- Ch.12 [H]: Monads and More: Functors and Applicatives.
- Video by Graham Hutton, with an introduction to Monads.
- Chapter 30 (“Understanding Monads”) of the Haskell Wikibook ([https://cse.sc.edu/~mgv/csce590f20/haskell/Haskell\\_wiki.pdf](https://cse.sc.edu/~mgv/csce590f20/haskell/Haskell_wiki.pdf); linked to course website).
- Formal semantics: Axiomatic Semantics. A presentation based on Ch.9 (“An Introduction to Formal Semantics”) of: Carlo Ghezzi and Mehdi Jazayeri. *Programming Language Concepts*, 2<sup>nd</sup> ed. Wiley, 1987.
- Ask students to have the required textbook [H] with them during class.
- Make sure that the students are fine and wait for questions before ending the session.