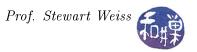# CSci 235 Syllabus

Topics Covered and Their *Approximate* Schedule

My lecture notes, posted on the course website, should be your guide to this course. You must read them completely, in the order listed in the table below. The textbook serves as a more expansive treatment of the topics from my lecture notes. It has many examples, exercises, helpful "interludes", and visual resources to clarify the concepts. The book covers more than we can cover in our course and is a good book to own and to refer back to in your future courses.

The following table outlines the topics that we will cover during the semester and the order in which we will cover them. You should read the material in my notes and as much of the relevant chapter of the book *before the class in which the topics will be covered.*

Some topics listed in the CSci 235 curriculum document (CSci 235 Curriculum: v.6.0), such as information security, secure programming, and exception handling, are interspersed throughout the chapters. There are topics not explicitly listed in that curriculum document that are integrated into this class because I consider them to be inseparable from the fundamental process of software development. These include version control, software testing and quality, and soft skills important to *free and open source software* (FOSS) development. They are not explicitly listed below but will be part of the course, either as independent learning modules, homework assignments, or lab exercises.

The schedule outlined in the following table is only an approximation because we are using a new edition of the book, and because of changes in technology. Every class has a different make-up and learns different things at a different pace. All of this implies that the exact timing of topics may be different than what is listed below, but I have built in extra time to allow for variation.

Class	Date	Lecture Note Chapter Covered	Textbook Chapters
1	8/25	1 Administrative business/ Software Development	§1, Appendix B
2	8/29	1 Software Development	§1, Appendix B
3	9/1	3 Data Abstraction and C++ Classes	§1, Appendix A
	9/5	**No class**	
4	9/8	2 Recursion	§2
5	9/12	2 Recursion	§2
6	9/15	5 Backtracking and Divide & Conquer	§5 (excludes 5.4)
7	9/19	8 Advanced Class Relationships	Interlude 1, Appendix A
8	9/22	8 Advanced Class Relationships	Interlude 1, Appendix A
9	9/26	**Exam 1**	
10	9/29	4 Lists	§8
	10/3	**No class**	
11	10/6	4 List Implementations	§9, Interlude 2
	10/10	**No class**	
12	10/13	4 Lists	§9
13	10/17	4 Lists	§9
14	10/20	6 Stacks	§6
15	10/23	6 Stacks	§6 (excludes 6.4,5)
16	10/27	7 Queues	§13.1,2
17	10/31	7 Queues	§14.1
18	11/3	9 Algorithm Efficiency/Sorting	§10
19	11/7	**Exam 2**	
20	11/10	9 Algorithm Efficiency/Sorting	§10
21	11/14	9 Algorithm Efficiency/Sorting	§11
22	11/17	9 Algorithm Efficiency/Sorting	§11
23	11/21	TBD	
	11/24	**No class**	
24	11/28	10 Trees	§15
25	12/1	10 Trees	§15
26	12/5	10 Trees	§16
27	12/8	10 Trees	§16
28	12/12	TBD	