## **CS330, Fall 2013**

## CS330 Outline & Topics

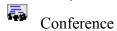
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Topics	<b>Lecture Notes</b>	Readings	Assignments & other events
1 Cou	ırse Overview		
		C++ text as needed	
		Horstmann 1 (skim)	Course orientation & introduction (08/26/2013, 19:30:00-20:30:00)
		Fowler 1	
2 Pre	-OO: ADTs & C++	I	
2.1 AI	<b>OTs</b>		
	ADTs	Horstmann 3	
2.2 Im	plementing ADTs with C+	+ classes	
	Implementing ADTs in C+ + Classes		
	Constructors and the Rule of the Big 3	(C++)	Asst: C++ ADTs (Due: 09/25/2013)
	A C++ Class Designer's Checklist		
3 00	Analysis & Design: Wo	orkflows, Models	& Classification
3.1 Pr	•		,
	<u>Workflows</u>	Horstmann: 2-2.2	
	Software Development Processes	Fowler 2	
3.2 Cla	assification		
	Discovering and Documenting Classes	Horstmann: 2.3-2.7	
	Example: Domain Model		

Using CRC Cards		
3.3 Relationships		
UML Class Diagrams  Example: Class Diagrams (Domain Model)	<ul><li>☐ Horstmann: 2.8,</li><li>2.12</li><li>☐ Fowler 4, 6</li></ul>	Asst: Early Elaboration (Due: 10/06/2013)  Net conference: solutions to the early elaboration assignment (10/16/2012, 19:30:00-20:30:00)
4 OOP		
4.1 Inheritance		
Inheritance: The is-a relation	(C++)	
4.2 Dynamic Binding		
Dynamic Binding: Class-Appropriate behavior  Making Inheritance Work:		Z A 4 OOD: CH 4D
C++ Issues  Inheritance and Dynamic Binding: idioms and common patterns	C++ text as needed	Asst: OOP in C++ (Due: 10/25/2013)
4.3 Sharing		
Sharing Pointers and Garbage Collection		
End of material to be covered on the midterm exam		
5 OOA&D: Use Cases		
Use Cases	Morstmann 2.9-2.12	Asst: Later Elaboration (Due: 11/15/2013)
Interaction Diagrams	Fowler 3, 5	
6 Java 6.1 Working in Java		

	£ 1. Getting Started	
Java - First Impressions for	2. Basics	
a C++ Programmer	₩ Horstmann: 1, 2.11	
	<ul><li>3. In the Java</li><li>Style</li></ul>	
6.2 OOP in Java		
Inheritance in Java	₩ Horstmann: 4, 6	Asst: OOP in Java (Due: 11/17/2013)
A Class Designer's Checklist for Java		
7 Applying OOP		
7.1 Graphic User Interfaces	-	
Functors - Objects That Act Like Functions	<u> </u>	Asst: Modifying a Java GUI (Due: 12/05/2013)
Example: Building a Java GUI	Horstmann: 5	12/03/2013)
7.2 Multi-Threading		
<b>2</b> 222		
Multi-Threading: Doing Things in Parallel	Java Tutorial: Concurrency	Asst: adding threads to a Java GUI (Due: 12/06/2013)
Case Study: threads in the spreadsheet	Morstmann: 9	
8 Exams and Special Events		
Classes start (08/26/2013)		
Labor Day holiday (09/02/2013)		
Fall holiday (10/12/2013 - 10/15/2013)		
Midterm Exam (10/18/2013		



## Symbol Key







Exam



Assignment

