

## Probability and Statistics I (SM239) Fall 2012 Syllabus

TEXT: *A FIRST COURSE IN PROBABILITY (8th ed.)* by Sheldon Ross

COURSE COORDINATOR: CDR David Ruth, C-359, x3-6781

Day	Date	Ch.	Topic	Homework Problems (*)	NOTES
Mon	20-Aug	2	Introduction; Axioms of Probability	Install R/Rstudio, Ch. 2 #1, 3, 5, 8	
Wed	22-Aug	2	Axioms of Probability	Ch. 2 #11, 12, 13, 16afg	
Fri	24-Aug	2		Ch. 2 #19, 23, 28b, 33	
Mon	27-Aug	1	Combinatorial Analysis	Ch. 1 #1, 3, 7, 9, 10	
Wed	29-Aug	1		Ch. 1 #13, 15, 21, 22	
Fri	31-Aug	3	Cond. Prob. and Independence	Ch. 3 #1, 5, 8, 9	
Mon	3-Sep		NO CLASS	--	Labor Day
Tue	4-Sep	3	Conditional Probability and Independence	Ch. 3 #10, 13, 18, 21	Monday class schedule
Wed	5-Sep	3		Ch. 3 #28, 33, 42, 43	
Fri	7-Sep	3		Ch. 3 #49, 64, 71	
Mon	10-Sep	4	Random Variables (Discrete)	Ch. 4 #1, 5, 6, 7, 8	
Wed	12-Sep	4		Ch. 4 #13, 18, 19, 21, 25	
Fri	14-Sep	4		Ch. 4 #28, 35, 40, 41, 48	
Mon	17-Sep	4	Random Variables (Discrete)	Ch. 4 #49, 52, 55, 58, 61	
Wed	19-Sep	4		Ch. 4 #66, 69, 73, 74	
Fri	21-Sep	--	<i>Review</i>	--	
Mon	24-Sep	--	<b>TEST: Chapters 1-4</b>	--	
Wed	26-Sep	5	Random Variables (Continuous)	Ch. 5 #1, 3, 4, 6	
Fri	28-Sep	5		Ch. 5 #7, 10, 13, 15	
Mon	1-Oct	5	Random Variables (Continuous)	Ch. 5 #17, 18, 19, 20	
Wed	3-Oct	5		Ch. 5 #23,24, 26, 28	
Fri	5-Oct	5		Ch. 5 #29, 32, 33, 34	
Mon	8-Oct	--	NO CLASS		Columbus Day
Wed	10-Oct	6	Jointly Distributed Random	Ch. 6 #1a, 1b , 8, 18, 22	
Fri	12-Oct	6	Variables	Ch. 6 #23, 27, 33, 39	

\* Unless otherwise noted, all homework assignments are from the 'PROBLEMS' section at the end of the chapter. Homework problems are subject to change at the instructor's discretion.

Day	Date	Ch.	Topic	Homework Problems (*)	NOTES	
Mon	15-Oct	6	Jointly Distributed Random	Ch. 6 #40, 41, 42, 45		
Wed	17-Oct	6	Variables	Ch. 6 #48, 55, 56		
Fri	19-Oct	7	Properties of Expectation	Ch. 7 #1, 3, 6, 13		
Mon	22-Oct	7	Properties of Expectation	Ch. 7 #16, 22, 30, 31		
Wed	24-Oct	7		Ch. 7 #33, 36, 38, 48		
Fri	26-Oct	7		Ch. 7 #49, 50, 53, 65		
Mon	29-Oct	--	<i>Review</i>	--		
Wed	31-Oct	--	<b>TEST: Chapters 5-7</b>	--		
Fri	2-Nov	8	Limit Theorems	Ch. 8 #1, 5, 6, 7		
Mon	5-Nov	8	Limit Theorems	Ch. 8 #9, 13, 14, 15		
Wed	7-Nov	9	The Poisson Process	Ch. 9 #1, 2, 3; Self-Test #1, 2		
Fri	9-Nov	9		Additional problems as provided		
Mon	12-Nov		NO CLASS	--	Veterans Day	
Wed	14-Nov	10	Simulation	Handout		
Fri	16-Nov	10				
Mon	19-Nov	10	Simulation	Handout		
Wed	21-Nov	--	Activity	--		
Fri	23-Nov		NO CLASS	--	Thanksgiving holiday	
Mon	26-Nov	--	Additional topic(s) as directed	Handout(s)		
Wed	28-Nov	--				
Fri	30-Nov	--				
Mon	3-Dec		<i>Review</i>			
Wed	5-Dec		<b>TEST: Chapters 8-10 and additional topics</b>			
Fri	7-Dec		<i>Final Review</i>		<i>BEAT ARMY!</i>	
TBD			<b>FINAL EXAMINATION</b>			

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