

PSI(10th): Chapter I-III vs. Casella & Berger(2nd) and DeGroot & Schervish(3rd)

— PSI (10 th) —			— Reference Sections —	
Topic I: Probability				
Week	Section	Topic	Casella & Berger(2 nd)	DeGroot & Schervish(3 rd)
1	1.1	Axioms of probability	1.1 – 1.2	1.5 – 1.6
2	1.2	Counting (perm., comb.)	1.3	1.7 – 1.9
3	1.3	Conditional probability	1.4	2.1
	1.4	Independence	1.5	2.2
4	1.5	Bayes' Theorem	1.6	2.3
Topic II: Discrete Distributions				
Week	Section	Topic	Casella & Berger(2 nd)	DeGroot & Schervish(3 rd)
5	2.1	Discrete r.v.'s (pmf, cdf)	2.1	3.1
	2.2	Expectation	2.2 – 2.4	4.1 – 4.4
6	2.3	Mean, variance, MGF	2.4, 3.1	4.4 – 4.7
7	2.4	Binomial	2.3	5.2
	2.5	Hypergeometric	2.3	5.3
8	2.6	Negative binomial	2.3	5.5
	2.7	Poisson	2.3	5.4
Topic III: Continuous Distributions				
Week	Section	Topic	Casella & Berger(2 nd)	DeGroot & Schervish(3 rd)
9	3.1	Continuous r.v.'s (pdf, cdf)	3.1	3.2 – 3.3
	3.2	Exponential, Gamma, χ^2	3.3	5.6 – 5.7
10	3.3	Normal distribution	3.2	5.6
	3.4	Beta, Uniform, etc.	3.4 – 3.6	5.8 – 5.9

PSI (10 th)				Casella & Berger (2 nd)		DeGroot & Schervish (3 rd)	
Topic I: Probability							
Week	Topic	Sec.	Ex.	Sec.	Ex.	Sec.	Ex.
1	Probability axioms	1.1	1,3,5,9	1.1	1,3,6	1.5	1,3
2	Counting methods	1.2	11,13,17,19	1.3	1,4,8	1.7 1.9	5 9
3	Conditional probability	1.3	1,5,9,13	1.4	1,4	2.1	3,6
	Independence	1.4	3,7,11	1.5	2,5,6	2.2	1,4
4	Bayes' theorem	1.5	1,5,9,15	1.6	1,3	2.3	2,6
Topic II: Discrete Distributions							
Week	Topic	Sec.	Ex.	Sec.	Ex.	Sec.	Ex.
5	Discrete r.v.'s (pmf, cdf)	2.1	1,3,7,9	2.1	1,2	3.1	1,5
	Expectation	2.2	9,13,15	2.2	3,5	4.1	1,3
6	MGF, mean, variance	2.3	1,5,11,17	2.4	1,4	4.4	2,6
7	Binomial	2.4	1,7,9	2.3	2,6	5.2	1,5
	Hypergeometric	2.5	3,5,7	2.3	10	5.3	2,6
8	Negative binomial	2.6	9,13	2.3	12	5.5	1,3
	Poisson	2.7	1,5,11	2.3	14	5.4	2,4
Topic III: Continuous Distributions							
Week	Topic	Sec.	Ex.	Sec.	Ex.	Sec.	Ex.
9	Continuous r.v.'s (pdf, cdf)	3.1	2,6,10	3.1	1,3	3.3	1,4
	Exp, Gamma, χ^2	3.2	5,7,9	3.3	2,6	5.6	1,5
10	Normal distribution	3.3	1,5,13	3.2	2,8	5.6	6,10
	Beta, Uniform, etc.	3.4	3,7,11	3.4	4,7	5.8	1,4