

# APPROXIMATE SCHEDULE – SUBJECT TO CHANGE

## MATH 452 – 01, Spring 2021

Num	Date	Day	Lecture Topics	Reading	HW	Due
1	Jan 28	R	Random Samples, Statistics, and Exponential Families	CB 5.1-5.2 (Leemis 1.2-1.4, pp 181 on exponential families)	QP1	Feb 4
2	Feb 2	T	Normal Statistics	CB 5.3 (Leemis 1.5)		
3	Feb 4	R	Sufficiency	CB 6.1-6.2.1 (Leemis pp166-174)	QP2	Feb 11
4	Feb 9	T	Exponential families and sufficiency, minimal sufficiency,	CB 6.2.2 (Leemis pp 181 on minimal sufficiency)		
5	Feb 11	R	Ancillary and complete statistics	CB 6.2.3 – 6.2.4	QP3	Feb 18
6	Feb 16	T	Point Estimation and MoMs	CB 7.1-7.2.1 (Leemis 2.1-2.2)		
7	Feb 18	R	Maximum Likelihood Estimators (MLEs)	CB 7.2.2 (Leemis 2.3)	QP4	Feb 25
8	Feb 23	T	More MLEs	CB 7.2.2 (Leemis 2.3)		
9	Feb 25	R	Evaluating Estimators	CB 7.3.1 (ignore Bayes' and equivariant estimators) (Leemis 2.4 pp 142-146)	QP5	Mar 5
10	Mar 2	T	Score and Fisher Information	CB 7.3.2		
	Mar 4	R	Spring Break Day			
11	Mar 9	T	Midterm 1 (Lectures 1-9)			
12	Mar 11	R	Fisher info examples, CRLB	CB 7.3.2	QP6	Mar 18
13	Mar 16	T	CRLB and transformations	CB 7.3.2		
14	Mar 18	R	Attainment of the CRLB	CB 7.3.2	QP7	Mar 25
15	Mar 23	T	Iterated expectation, Rao-Blackwell, UMVUE uniqueness,	CB 7.3.3		
16	Mar	R	Lehmann Scheffe	CB 7.5.3	QP8	Apr 1

	25					
17	Mar 30	T	Convergence of RVs	CB 5.5-5.5.3		
18	Apr 1	R	Convergence in distribution and other properties	CB 5.5-5.5.3	QP 9	Apr 8
	Apr 6	T	Spring Break Day			
19	Apr 8	R	Large numbers, CLT	CB 5.5-5.5.3		
20	Apr 13	T	Midterm 2 (Lectures 10-18)			
21	Apr 15	R	Delta Method	5.5.4	QP 10	Apr 22
22	Apr 20	T	MLE Asymptotics	10.1 – 10.1.2		
23	Apr 22	R	Hypothesis Testing	CB 8.1	QP 11	Apr 29
24	Apr 27	T	Evaluating tests and the LRT	CB 8.2.1 and 8.3.1		
25	Apr 29	R	Most Powerful Tests and Neyman Pearson, Karlin Rubin	CB 8.3.2	QP12	May 6
26	May 4	T	Neyman Pearson, Karlin Rubin	CB 8.3.2		
27	May 6	R	P-values and final review	CB 8.3.4		
	May 18	T	Final Exam 7-10 PM EST			