Econ 4130 Autumn 2016

## Revised lecture plan for the remaining semester

Week	Book sections In Rice	Topics	Seminar
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39	Mo 4.1 (Theorem A) 4.2 (Theorem C), Chap. 5 + Lecture notes to Rice chapter 5 on the net.	Limit theorems, Markov's and Chebysjev's inequalities. Weak law of large numbers. Consistency and its continuity property.	No seminar (exercises on the net)
	Tue Lecture notes to Rice chapter 5	More on limit theorems, central limit theorem (CLT),	
40 (Oct)		NO TEACHING (exercises for this week will be announced with solution at the end of the week)	
41	Mo Lecture notes to Rice chapter 5	More on limit theorems, central limit theorem (CLT), Slutsky's lemma. Application to confidence intervals.	To be announced
	<b>Tue</b> (Read 8.1-8.3 yourself) 8.4, 8.5, 8.7 (Theorem A)	Estimation: Moment method (MME), and maximum likelihood method (MLE) Efficiency, Cramer-Rao bounds.	
42	Mo .8.5  Tue Supplementary lecture notes	More on MLE and asymptotic properties. Asymptotic unbiasedness and efficiency. Interpretation of regression coefficients. Prediction. Confidence intervals, prediction intervals.	No seminar (exercises on the net)
43	Mo Supplementary lecture notes.	More on prediction and prediction intervals. The iid model.	To be announced
	Tue "Lecture notes to Rice chapter 8"	Review of simple matrix algebra. Random matrices. Multivariate normal distribution and its covariance matrix	
44 (Nov)	Mo "Lecture notes to Rice chapter 8"	Inference based on the multivariate normal distribution and its covariance matrix applied to multiparameter MLE.	No seminar (exercises on the net)
	Tue "Lecture notes to Rice chapter 8"	Multiparameter estimation continued. Inference based on the multivariate normal distribution and its covariance matrix.	

		Special case: OLS, multiple regression and a discussion of "the marginal propensity to consume".	
45	<b>Mo</b> 3.3, 8.2	Multinomial models. Pearson's chi-square tests.	
	<b>Tue</b> 9.4, 9.5 (Read 9.1, 9.3 yourself)	Testing independence and homogeneity in $r \times s$ frequency tables.	To be announced
46	Mo Chapter 6	Likelihood ratio (LR) testing	To be announced
	Tue Chapter 6 and Supplementary lecture note.	F-testing	