Week	Date	Unit	Lecture	Mandatory Reading	Suggested Reading	Problem set due	Stata and R
1	13-mar	**Classical OLS**	*Introduction-Assumptions and Finite Properties*	Class Notes: 1.1, 1.2	Hayashi-Sections 1.1, 1.2, and 1.3		
	15-mar		*Classical OLS: Assumptions and Finite Properties*	Class Notes: 1.3 MM-Chapter 1 and 2			
2	20-mar		*Classical OLS: Hypoteses testing under normality*	Class Notes: 1.4 and 1.5. MHE-Chapter 1, 2 and 3	Hayashi-Sections 1.4		Lab 1
	22-mar		*Classical OLS: Hypoteses testing under normality*	Class notes: 1.6			Lab 2
3	27-mar		*Classical OLS: GLS*	Class notes 1.7 Solon, G., Haider, S. J., & Wooldridge, J. M. (2015). What are we weighting for?. Journal of Human resources, 50(2), 301-316.	Hayashi-Section 1.6 Pischke, J. S. (2007). The Impact of Length of the School Year on Student Performance and Earnings: Evidence From the German Short School Years. The Economic Journal, 117(523), 1216-1242.	**Problem set 1 due**	
	29-mar		*Example: You must read mandatory reading.*	Acemoglu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. The Quarterly journal of economics, 117(4), 1231-1294.	Miller, J. E., & Rodgers, Y. V. D. M. (2008). Economic importance and statistical significance: Guidelines for communicating empirical research. Feminist Economics, 14(2), 117-149. Kennedy, P. E. (2002). Sinning in the basement: What are the rules? The ten commandments of applied econometrics. Journal of Economic Surveys, 16(4), 569-589. Kennedy, P. E. (2005). Oh no! I got the wrong sign! What should I do?. The Journal of Economic Education, 36(1), 77-92.		
4	03-abr	**Large Sample Theory**	*Large Sample Theory: Concepts, convergence in probability, LLN, CLT*	Class Notes: 2.1 -2.7	Chapter 5, Mathematical Statistics Hayashi-Sections 2.1, 2.2		
	05-abr						
5	10-abr		*Large Sample Theory: OLS estimator*	Class Notes: 2.8	Hayashi-Section 2.3-2.7	**Problem set 2 due**	
	12-abr		*Large Sample Theory: OLS estimator*				
6	17-abr		*Large Sample: Hypothesis Testing*	Class Notes: 2.9			
	19-abr		*Testing*	MHE- Section 8.1			
7	24-abr		*Large Sample: Robust Standard Errors in R*	Class Notes: 2.10-2.11			Lab 3
	26-abr	**Single Equation GMM**	*Endogeneity and Instrument*	Class Notes: 3.1-3.2	Hayashi-Section 3.1 and 3.2 and 3.3	**Problem set 3 due**	
8	01-may		*NO-Class*				
	03-may		*Assumptions and GMM estimator*	Class notes: 3.3-3.4	Hayashi-Sections 3.4		
9	08-may		*Large Sample properties of GMM*	Class notes 3.5 MHE-Chapter 3	Hayashi-Sections 3.5		
	10-may		*Testing Overidentifying Restrictions*	Class notes 3.6 MM-Chapter 4	Hayashi-Section 3.6-3.7		
10	15-may		*Conditional Homoskedasticity: Efficient GMM, 2SLS, IV*	Class notes: 3.7 Angrist, J. D., Imbens, G. W., & Rubin, D. B. (1996). Identification of causal effects using instrumental variables. Journal of the American statistical Association, 91(434), 444-455.	Hayashi-Sections 3.8 Angrist, J. D., & Krueger, A. B. (2001). Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments. Journal of Economic Perspectives, 15(4), 69-85.		
	17-may		*Things to Consider in*	Class Notes 3.8	Stock, J. H., Wright, J. H., & Yogo, M. (2002). A survey of weak instruments and weak identification in generalized method of moments. Journal of Business & Economic Statistics, 20(4), 518-529.	**Problem set 4 due**	

	[illegible]		*Applied Work*	Bound, J., Jaeger, D. A., & Baker, R. M. (1995). Problems with instrumental variables estimation when the correlation between the instruments and the endogenous explanatory variable is weak. Journal of the American statistical association, [illegible]	Rosenzweig, M. R., & Wolpin, K. I. (2000). Natural" natural experiments" in economics. Journal of Economic Literature, 38(4), 827-874.	[illegible]	
11	22-may		*Applications*	Class Note 3.9-3.10 Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, *21*(6), 1086-1120. Blackburn, M. L., & Neumark, D. (1992). Unobserved Ability, Efficiency Wages, and Interindustry Wage Differentials. Quarterly Journal of Economics, 107(4), 1421-1435.	Angrist, J. D., & Krueger, A. B. (1991). Does Compulsory School Attendance Affect Schooling and Earnings?. Quarterly Journal of Economics, 106(4), 979-1014.		Lab 4
	24-may	**Multiple Equations GMM**	*ME Equation: Assumptions and Large Sample Theory*	Class Notes	Hayashi-Section 4.1, 4.2 and 4.3		
12	29-may		*Midterm*				
	31-may		*ME Equation and Special Cases: FIVE and 3SLS Estimator*	Class Notes	Hayashi-Section 4.4 and 4.5		
13	05-jun		*ME Equation and Special Cases: SUR and Common Coefficients*	Class Notes	Hayashi-Section 4.6	**Problem set 5 due**	
	07-jun		*NO-Class*				
14	12-jun		*Applications*		Hayashi-Section 4.7		Lab 5
	14-jun	**Panel Data**	*Effects*	Class Notes	Hayashi-Section 5.1		
13	19-jun		*Panel Data: Fixed Effects*	Class Notes	Hayashi-Section 5.2		
	21-jun		*Applications*		Hayashi-Section 5.4		
14	26-jun	**Additional Topics**	*Bootstraping*	Class Notes			
	28-jun		*Bootstraping Applications*	Class Notes		**Problem set 6 due**	Lab 6