

Econometrics I

CREDIT	3	INSTRUCTOR	Seokjoo Andrew Chang
OFFICE		OFFICE HOURS	
TIME	Period 2: 11:00 ~ 12:40	CLASSROOM LOCATION	TBA
E-MAIL	schang@albany.edu		

[COURSE INFORMATION]

COURSE DESCRIPTION & GOALS	Econometrics is the science and art of using economic theory and statistical techniques to analyze economic data. This course introduces the core methods in econometrics, which can be applied to answer a variety of quantitative questions from the real world of business and government policy. We will discuss the fundamentals of least square models, linear and nonlinear regression with multiple regressors, fixed effect models, longitudinal/panel data models, instrumental variable methods, analysis of random experiments and time series data regression. Applications of Software such as <i>STATA</i> and <i>R</i> will be demonstrated.
PREREQUISITE	Introduction to Statistics or equivalent
COURSE REQUIREMENTS	
GRADING POLICY	Your grade is based on the following components: Attendance & Assignments: 10% Midterm Exam: 40% Final Exam: 50%
TEXTS & NOTES	Introduction to Econometrics, 3 rd <u>or</u> 4 th Edition by James H. Stock and Mark W. Watson, Prentice Hall 3 rd edition ISBN-10: 0138009007 ISBN-13: 9780138009007 4 th edition ISBN-10: 0134461991 ISBN-13: 978-0134461991 Note: Due to limited availability of textbooks at Yonsei Bookstore, it is strongly encouraged to purchase/rent your textbook from online resources before you arrive at YISS.
INSTRUCTOR'S PROFILE	<i>Seokjoo Andrew Chang</i> is an Associate Professor of School of Business at State University of New York at Albany. He received his MS in Economic Systems and Operations Research from <i>Stanford University</i> and Ph.D. in Operations and Information Management from <i>University of Connecticut</i> . His teaching/research interests include Economics of Information Systems, Stochastic Decision Processes, Operations Research and Forensic Data Analysis. His research papers have been published in journals such as <i>Management Information Systems Quarterly (MISQ)</i> , <i>Decision Support Systems(DSS)</i> and <i>Information Systems Frontiers (ISF)</i> . https://www.albany.edu/~sc736999/

[WEEKLY SCHEDULE]

WEEK (PERIOD)	WEEKLY TOPIC & CONTENTS	COURSE MATERIAL & ASSIGNMENTS	NOTES
1	<p><u>Part I. Introduction and Review</u> Economic Questions and Data Review of Probability</p>	<p>Chapter 1. Chapter 2. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	
2	<p>Review of Statistics <u>Part II. Fundamentals of Regression Analysis</u> Linear Regression with One Regressor</p>	<p>Chapter 3. Chapter 4. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	
3	<p>Regression with a Single Regressor: Hypothesis Tests and Confidence Intervals Linear Regression with Multiple Regressors Midterm Exam</p>	<p>Chapter 5. Chapter 6. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	
4	<p>Hypothesis Tests and Confidence Intervals in Multiple Regression Nonlinear Regression Functions Assessing Studies Based on Multiple Regression</p>	<p>Chapter 7. Chapter 8. Chapter 9. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	
5	<p><u>Part III. Further Topics in Regression Analysis</u> Regression with Panel Data Regression with a Binary Dependent Variable</p>	<p>Chapter 10. Chapter 11. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	
6	<p>Instrumental Variables Regression <u>Part IV. Regression Analysis of Economic Time Series Data</u> Introduction to Time Series Regression and Forecasting Final Exam</p>	<p>Chapter 12. Chapter 14. Please refer to <i>Blackboard</i> for lecture notes and assignments</p>	