Faculty	Management and Social Science
Department	Economics
Course Title	Introductory Econometrics
Year of Study	1
Course Code	ECN 307
Credit Hours	2
Contact Hours	30
Mode of Delivery	Classroom Lectures

Mode of Assessment	Weight
Continuous Assessment	30%
Final Examination	70%
Total	100%

Course Lecturer	Dr. O.J. Omokanmi	
Course Description	Introductory econometrics involves the understanding of basic econometric techniques to formulate economic models, estimate economic model and also make prediction where necessary. It involves the description of the Ordinary Least Squre method, the assumptions of the classical OLS and the breakdown of those assumptions.	
Course Objectives	This course would enable the understanding of the following: 1. The understanding of the relationship among economic theory, statistical economics and mathematical economics. Basic indices and logarithmic functions. 2. Description of the methodology of econometrics 3. Classical assumptions of the ordinary least squre method 4. Describe the BLUE properties of OLS 5. Formulate, estimate and interpret basic econometrics models.	
Learning Outcomes	By the end of the course, students will be able to: 1. Explain the meaning of econometrics 2. Explain the methodologies of econometrics	

	3. Describe the method of time series, cross-sectional and panel data 4. Describe the classical method of OLS 5. Formulate, estimate and interpret econometrics model 6. Explain econometrics problems such as autocorrelation, multicollinearity and heteroscedasticity	
Teaching and Learning	The class will meet for two hours every week for a combination of both the lecture hours and tutorials.	
Detailed Course Content	Definition and scope of econometrics, stages of econometric research, simple linear econometric model and regression, ordinary least square estimator, multicollianearity, autocorrelation, homoscedacity and heteroscedacity and simultaneous equation models and the two stage least square identification problem	
	Course Content Sequencing	
Weeks	Detailed Course Outline	Allocated Time
Week 1	1. Introduction to Econometrics • Define econometrics • Describe the role of econometrics in economics • Explain types of data in econometrics • Explain the methodologies of econometrics	
Week 2	2. Ordinary Least Squre (OLS) • Describe the method of OLS • Describe the classical assumptions of OLS	
Week 3	3. The BLUE properties of OLS • Explain with mathematical proof, each of the BLUE properties of OLS	
Week ,5	4. Simple Linear Regression • Estimation and analysis of data involving the simple linear regression analysis.	

	• Co-efficient of determination	
Week 6,7	5. Multiple Regression Analysis • Estimation of multiple regression analysis model • Interpretation of signs and magnitudes of the co-efficients • Estimation and interpretation of multiple co-efficient of determination (R-squre) • Estimation and interpretation of the adjusted R-squre	
Week 7, 8	6. The Normal Equations • The case of one independent variable • The case of two independent variables	
Weeks 9, 10	7. Econometrics Problems • Autocorelation • Multicollinearity	
Week 11, 12	Analysis of various computer generated econometrics models results.	
Week 13, 14	Examinations	

Recommended Reading Material

1. Koutsoyiannis, A.(2001). Theory of Econometrics. Palgrave.
2. Oyeniyi, T. A. (2012). Fundamental Principles of Econometrics. Ceders Publiches (Nig.)
   Limited