



# 南京航空航天大学

Nanjing University of Aeronautics and Astronautics

## Syllabus

<b>Course No.</b>	1900715W	<b>College</b>	College of Economics and Management	<b>Dept.</b>	Management Science and Engineering
<b>Teacher</b>	Waqas				
<b>Time</b>	2022.06.28-2022.07.15				
<b>Course Name</b>	<b>English</b>	Econometrics			
	<b>Chinese</b>	计量经济学			
<b>Course credits hours</b>	<b>Total</b>	<b>Theory</b>	<b>Office Hour or Practice</b>	<b>Credits</b>	
	70	60	10	12.0	
<b>Course description:</b> Describe the nature, academic status, and aims of the course (theory, ability and technique)					
1. Course nature and academic status					
Econometrics is a fundamental undergraduate course that employs mathematical/statistical and computational methods to study economic phenomena. It provides a solid foundation for further courses in advanced econometrics, statistical, and other related topics. Students can apply the econometric methods to carry out some empirical studies.					
2. Course aims (theory, ability and technique)					
Students are required to understand basic concepts and use them to analyze specific questions. The basic concepts in the course include:					
(1) Econometrics					
(2) Univariate linear regression model					
(3) Multivariate linear regression model					
(4) Dummy variable					
(5) Heteroscedasticity, Serial correlation, Multicollinearity,					
(6) Model Specification and Diagnostic Check					
(7) Nonlinear regression model					
<b>Requirements for courses; ability and knowledge in advance</b>					

Students are suggested to have the following skills before taking the course:

- (1) Basic knowledge in Calculus, Economics and Statistics Theory
- (2) Fluent English and presentation skills
- (3) Fast reading and the ability of academic writing

**Course structure explanation:**

Make clear the necessary parts, optional parts, distribution of hours. Courses with experiments or practice are expected to explain credit hours needed, content, scheme and functions.

The contents of the course are shown below:

- (1) Introduction to Econometrics (2 hour)
  
- (2) Univariate Linear Regression Model (8 hours)
  
- (3) Multivariate Linear Regression Model (8 hours)
  
- (4) Dummy Variable (3 hours)
  
- (5) Multicollinearity (2 hours)
  
- (6) Heteroscedasticity (3 hours)
  
- (7) Serial Correlation (2 hours)
  
- (8) Model Specification and Diagnostic Check (4 hours)
  
- (9) Nonlinear Regression Model (4 hours)

*Final Presentations: 4 hours*

**Teaching methods (Lectures, practice, etc)**

Various teaching methods will be applied, including Lectures, presentations on special topics, academic paper reading, group discussion on selected topics, and analysis on real cases.

**Forms of examination and requirements**

**Structure of the final grade(including presence, class performance, ), focus of exam, forms of exam(test, interview, final report, etc)**

The final grade is consisted of:

- (1) Presence: 30%
- (2) Class performance (Group Discussions): 10%
- (3) Presentations: 10%
- (4) Final exams: 50%

<b>Textbook</b>	<b>Name</b>	<b>Publisher</b>	<b>Author</b>	<b>Year</b>	<b>Price</b>
	Basic Econometrics 计量经济学基础（第五版）	中国人民大学出版社	Damodar N.Gujarati, Dawn C.Porter , and 费建平（译）	2010	¥59.4
<b>References</b>	<b>Name</b>	<b>Publisher</b>	<b>Author</b>	<b>Year</b>	<b>Price</b>
	《计量经济学》（第三版）	高等教育出版社	李子奈 潘文 卿	2010	
	《计量经济学基础》第4版	南开大学出版社	张晓峒	2014	
	《计量经济学简明教程》	高等教育出版社	刘思峰、朱建 军、耿修林等	2010	
<b>Website</b>					
<b>Course members</b>					
<b>College</b>					