## C. U. SHAH UNIVERSITY WADHWANCITY



**Faculty** : Arts & Humanities

**Department**: Economics

Branch : B.A. Economics

Semester : V

Name of Subject: Introductory Econometrics

**Subject Code** : 4AH05IES1

#### **TEACHING & EVALUATION SCHEME:**

	Subject Code	Name of the Subject	Teaching Scheme (Hours)				Evaluation Scheme								
s			T h	T u	P	Tot al	Theory					Practical (Marks)			
								ional am	University Exam		Total	Pr/ Viv	T W	To tal	Total
							Mar ks	Hrs	Ma rks	Hrs		a	**	tai	
4A	H05IES1	Introductory Econometrics	3	0	0	3	30	1.5	70	3	100	-	-	1	100

# **Objectives:**

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of violations of assumptions and their detection/treatment.

### **Course Outline:-**

- Basic idea about data collection through primary survey
- How to apply Ordinary least square technique for
- estimation of regression coefficients
- How to judge the statistical significance of an estimated coefficient
- How a hypothesis can be generated
- Formulation and estimation of a multiple regression model
- assumptions for application of OLS regression



- explanatory variable and also over all model
- Impacts for the violation of one of the important
- Hypothesis testing Level of significance z test, t test, f test

Unit	Content	Maximu	
No.		m Hours	
0	Prerequisites	02	
1	Introduction to Econometrics  Nature meaning and scope of Econometrics ,difference between economics and econometrics ,econometrics model ,estimation of	10	
2	econometrics  Hypothesis testing and correlation	10	
	Type - I Type II error, one tail and two tailed test, level of significance z test, t test f test X2 (chi) Square test  Correlation - Meaning types with sactered diagram Karl Pearson's coefficient of correlation Rank correlation.		
3	Regression Analysis - I Introduction random variable assumption of simple regression model ordinary least square properties of OLS estimation , Goodnesses fit r2.	10	
4	Regression Analysis - II Concept of multiple regression violation of the OLS assumption and problem of Heteroscedasticity, Autocorrelation and multicollinearity	13	
Total Hours			

### Reference:

- 1. Damodar Gujarati Essentials of Econometrics
- 2. Neeraj R. Hatekar Principles of Econometrics
- 3. D.M.Madnani Theory' of Econometrics
- 4. G.S.Maddala Introductory Econometrics.
- 5. Basic Econometrics- (Gujarati Medium ) Kirit Joshi