



Yogoda Satsanga Mahavidyalaya

JAGANNATHPUR, DHURWA, RANCHI – 834004

Email address: ysmranchi4@gmail.com

(NAAC Accredited, Grade: B++, CGPA: 2.89)

COURSE PLAN

NAME OF THE DEPARTMENT: ECONOMICS

NAME OF THE FACULTY: PRAGATI BAKSHI

APARNA PANDEY

ANUPAM MISHRA

ACADEMIC SESSION: March 2023

YEAR: 2023-24

PROGRAMME: B.A.

SEMESTER: 6

COURSE TYPE: Discipline Specific Elective

COURSE: ELEMENTARY ECONOMETRICS

COURSE CODE: DSE 3A

TOTAL CREDIT: 4

Submitted by

H.o.D



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PROGRAMME OUTCOME (POs)

Students should be able to,

PO1 Apply the comprehensive knowledge of economics and its branches to solve short term and long-term economic problem.

PO2 Identify, formulate, review, research and analyse complex economic problems reaching substantiated conclusions using first principles of mathematics, statistics, and developmental economics

PO3 Design practical applications/approaches that are sustainable and efficient and conducive for futuristic development and growth.

PO4 Apply disciplinary knowledge of economics and transferable skills to new and unexplored context rather than replicating traditional classroom knowledge, to identify and analyse problem and issues and solve complex problems with probable or explicit solutions

PO6 Apply basic mathematical and statistical skills necessary for analysis of a range of economic problems in broad spectrum of market, national economy and global economy, econometrics, and finance.

PO7 Develop scientific temperament and rationality to merge, interconnect and extrapolate the information and knowledge for dynamics of agriculture, industrial and service sector

PO8 Ability to decide appropriate tools to solve problems based on the understanding of the availability of resources, their judicious use, and the execution of the project in sustainable way.

PO9 Develop Team building and leadership skills, communicable, creative and critical thinking skills and innovative problem-solving skills

PO10 Use disciplinary knowledge and research-based methods and studies to understand the problem of local as well as global economy

PO11 Design solutions for complex economics and societal problems and design processes that meet the specified needs with appropriate consideration for public health, human resource and environmental considerations.

PO12 Apply academic learning to promote higher studies, sustainable living through employment, and initiation of entrepreneurial advent to create opportunities and wealth for self and society.

PO13 Value and foster Physical, Physiological and Psychological well-being through personal practice and conduct. Ability to apply the learnings for a lifelong commitment to ethics in fulfilment of professional and social obligations.

PO14 Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of economic and scientific developments, technological advancements and global and environmental changes



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PO15 Value and support social causes and rural development through service and philanthropic activities.

PROGRAMME SPECIFIC OUTCOMES (PSOs):

PSO 1: An ability to demonstrate in-depth knowledge and understanding of the fundamental concepts, theories, models and assumptions underlying the academic field of economics and its branches like micro, macro, growth and developmental, international, public finance, mathematical economics, statistics, econometrics, agriculture, labour economics, State Economy. health and education, and economic thoughts

PSO 2: Development of performance-based knowledge and merging it with the advanced analytical economics using applied micro and macroeconomics and software tools (SPSS, MS Excel Stata, MATLAB and Python) to create different types professionals in the Afield of economics and related fields such as economist, research analyst, data analyst, revenue inspector, statistical officer, and auditor.

PSO 3: Understand the complexities of different types of market, their fluctuations, business cycles, and their interrelationships with the economic factors

DSE 3A. ELEMENTARY ECONOMETRICS

CO1: Understand the nature and scope of econometrics and its importance in economic analysis.

CO2: Apply statistical concepts such as hypothesis testing, parameter estimation, and understanding various distributions in econometrics.

CO3: Estimate and interpret simple linear regression models, understanding the properties and assumptions underlying these models.

CO4: Estimate and interpret multiple linear regression models, including the use of qualitative variables and testing of hypotheses.

CO5: Identify and address violations of classical regression assumptions such as multicollinearity, heteroscedasticity, and serial correlation.

CO6: Conduct specification analysis to determine the impact of omitting or including relevant/irrelevant variables in econometric models.



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CORRELATION BETWEEN POs AND COs FOR

COs \ POs/PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PO1 3	PO1 4	PO1 5	PSO 1	PSO 2	PSO 3
CO1	3	3	-	2	-	-	2	-	-	2	2	1	-	2	-	3	3	2
CO2	3	3	2	2	-	3	2	2	-	2	-	1	-	3	-	3	3	3
CO3	3	3	2	2	-	3	2	2	-	2	2	-	-	3	-	3	3	3
CO4	3	3	2	2	-	3	2	2	-	2	2	-	-	3	-	3	3	3
CO5	3	3	2	2	-	3	2	2	-	2	2	-	-	3	-	3	3	3
CO6	3	3	2	2	-	3	2	2	-	2	2	-	-	3	-	3	3	3

PEDAGOGY

- i. Whiteboard
- ii. Flipped Class
- iii. PPT
- iv. Online classes

B. COURSE COMPLETION PLAN.

Unit	Lectures and Tutorials	Test	Quiz	Assignment
Nature and Scope of Econometrics	10	1	1	1
Statistical Concepts	15			
Simple Linear Regression Model: Two Variable Case	20			
Multiple Linear regression Model	20	1	1	1
Violation of Classical Assumptions; Consequences, Detection and Remedies	15			
Specification Analysis	10			



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B. COURSE DELIVERY PLAN:

UNIT	TOPIC/SUBTOPIC	LECTURE REQUIRED	Cos Addressed	Assignment/quiz/ test
1	Nature and Scope of Econometrics	10	C01	Assignment
2	Statistical Concepts	15	CO2	Test
3	Simple Linear Regression Model: Two Variable Case	20	CO3	Quiz
4	Multiple Linear regression Model	20	CO4	Test
5	Violation of Classical Assumptions; Consequences, Detection and Remedies	15	CO5	Quiz
6	Specification Analysis	10	CO6	Assignment

C. COURSE OUTCOME ASSESSMENT PLAN

a. DIRECT ASSESSMENT

(Please tick the appropriate column)

COURSE OUTCOME	Assessment			Remarks
	Quiz/ Test	Mid-sem	Term exam	
C01:	1	1	1	
C02:				
C03:	1			
C04				
C05	1			
C06				

D. REMEDIAL CLASSES

S.NO.	ROLL. NO.	MARKS OF MID SEM /CLASS TEST	REMEDIAL CLASSES HELD			TERM EXAM	IMPROVEMENT (Y/S)
			DATE	TIME	MODE		
1							
2							
3							
4							
5							
6							
7							
8							
9							



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E. SUGGESTED READINGS:

a. TEXT BOOKS

Jay L. Devore, probability and Statistics for Engineers. Cengage Learning, 2010.

John. E freund, Mathematical Statistics, Prentice Hall, 1992

D.N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill 4th edition, International Edition, 2009.

b. REFERENCE BOOKS:

Richard J. Larsen and Morris L. Marx, an Introduction to Mathematical Statistics and its Applications, Prentice Hall, 2011.

Christopher Dougherty, Introduction to Econometrics, Oxford University Press, 3rd edition, Indian edition, 2007

WEB RESOURCES:

<https://egyankosh.ac.in/handle/123456789/78494>

<https://archive.nptel.ac.in/courses/130/106/130106001/>