

UNIVERSITY OF DELHI

DEPARTMENT Economics

COURSE NAME: B.A. Economics (Honours)

(SEMESTER - 1)

based on

Undergraduate Curriculum Framework 2022 (UGCF)

(Effective from Academic Year 2022-23)



University of Delhi

Course name: B.A. Economics (Honours)

Course Title	Nature of the Course	Total Credits	Components			Eligibility Criteria/ Prerequisite	Contents of the course and reference is in
			Lecture	Tutorial	Practical		
Introductory Microeconomics	DSC -1	4	3	1	0	NIL	Annexure-1
Introductory Mathematical Methods for Economics	DSC -2	4	3	1	0	NIL	Annexure-2
Introductory Statistics for Economics	DSC -3	4	3	1	0	NIL	Annexure-3

UNIVERSITY OF DELHI

DEPARTMENT Economics

COURSE NAME: B.A. Economics (Major)

(SEMESTER - 1)

based on

Undergraduate Curriculum Framework 2022 (UGCF)

(Effective from Academic Year 2022-23)



University of Delhi

Course name: B.A. Economics (Major)

Course Title	Nature of the Course	Total Credits	Components			Eligibility Criteria/ Prerequisite	Contents of the course and reference is in
			Lecture	Tutorial	Practical		
Introductory Microeconomics	DSC -1	4	3	1	0	NIL	Annexure-1
Basic Mathematics for Economic Analysis	DSC -2	4	3	1	0	NIL	Annexure-4

UNIVERSITY OF DELHI

DEPARTMENT Economics

COURSE NAME: B.A. Economics (Minor)

(SEMESTER - 1)

based on

Undergraduate Curriculum Framework 2022 (UGCF)

(Effective from Academic Year 2022-23)



University of Delhi

Course name: B.A. Economics (Minor)

Course Title	Nature of the Course	Total Credits	Components			Eligibility Criteria/ Prerequisite	Contents of the course and reference is in
			Lecture	Tutorial	Practical		
Principle of Microeconomics - I	DSC -1	4	3	1	0	NIL	Annexure-5

UNIVERSITY OF DELHI

DEPARTMENT __Economics_____

COURSE NAME: __B.A. Economics (Honours and Multidisciplinary)_____

(SEMESTER - 1)

based on

Undergraduate Curriculum Framework 2022 (UGCF)

(Effective from Academic Year 2022-23)



University of Delhi

Course name: _ **B.A. Economics (Honours and Multidisciplinary)**_____

Course Title	Nature of the Course	Total Credits	Components			Eligibility Criteria/ Prerequisite	Contents of the course and reference is in
			Lecture	Tutorial	Practical		
Principle of Microeconomics - I	GE -1	4	3	1	0	NIL	Annexure-5
Basic Development Economics	GE -2	4	3	1	0	NIL	Annexure-6
Essentials of Economics	GE -3	4	3	1	0	NIL	Annexure-7

Programme Structure for Bachelor of Economics (Hons.) as a Core Discipline

Year	Semester	Core (DSC)	Elective (DSE)	Generic Elective (GE)	Ability Enhancement Course (AEC)	Skill Enhancement Course (SEC)	Internship/ Apprenticeship/ Project/ Community Outreach (IAPC)	Value addition Course (VAC)	Total Credit
First	I	DSC-1 (4) DSC-2 (4) DSC-3 (4)		GE-1 (4)	AEC-1 (2)	SEC-1 (2)		VAC-1 (2)	22
	II	DSC-4 (4) DSC-5 (4) DSC-6 (4)		GE-2 (4)	AEC-2 (2)	SEC-2 (2)		VAC-2 (2)	22
Students on exit shall be awarded Undergraduate Certificate (in the Field of Study/ Discipline)									44
Second	III	DSC-7 (4) DSC-8 (4) DSC-9 (4)	DSE-1/ GE-3 (4)		AEC-3 (2)	SEC-3 (2)/ IAPC-1 (2)		VAC-1 (2)	22
	IV	DSC-10 (4) DSC-11 (4) DSC-12 (4)	DSE-2/ GE-4 (4)		AEC-4 (2)	SEC-4 (2)/ IAPC-2 (2)		VAC-2 (2)	22
Students on exit shall be awarded Undergraduate Diploma (in the Field of Study/ Discipline)									88
Third	V	DSC-13 (4) DSC-14 (4) DSC-15 (4)	DSE-3 (4)	GE-5 (4)		SEC-5 (2)/ IAPC-3 (2)			22
	VI	DSC-16 (4) DSC-17 (4) DSC-18 (4)	DSE-4 (4)	GE-6 (4)		SEC-6 (2)/ IAPC-4 (2)			22
Students on exit shall be awarded Bachelor of (in the Field of Study/Discipline) Honours (3 years)									132
Fourth		DSC-19	3 x DSE (DSE-5, DSE-6, DSE-7) Or, 2 x DSE and 1 x GE Or, 1 x DSE and 2 x GE (GE-7, GE-8)				Dissertation/ Project (6)		
		DSC-20	3 x DSE (DSE-8, DSE-9, DSE-10) Or, 2 x DSE and 1 x GE Or, 1 x DSE and 2 x GE (GE-9, GE-10)				Dissertation/ Project (6)		
Students on exit shall be awarded Bachelor of (in the Field of Study/Discipline) (Honours with Research/Academic Projects/Entrepreneurship)									176

Semester-wise Core courses (DSC) for Bachelor of Economics (Hons.)

Year	Semester	Serial No.	Course Code	Course Name	No. of Credits	Components of the course		
						Lecture	Tutorial	Practical
First	I	DSC_HON01	ECON001	Introductory Microeconomics	4	3	1	0
		DSC_HON02	ECON002	Introductory Mathematical Methods for Economics	4	3	1	0
		DSC_HON03	ECON003	Introductory Statistics for Economics	4	3	1	0
	II	DSC_HON04	ECON004	Introductory Macroeconomics	4	3	1	0
		DSC_HON05	ECON005	Intermediate Mathematical Methods for Economics	4	3	1	0
		DSC_HON06	ECON006	Intermediate Statistics for Economics	4	3	1	0
Second	III	DSC_HON07	ECON007	Intermediate Microeconomics I: Behavioural Foundations of Market Interactions	4	3	1	0
		DSC_HON08	ECON008	Intermediate Macroeconomics I: Foundations of Aggregate Income Determination	4	3	1	0
		DSC_HON09	ECON009	Advanced Mathematical Methods for Economics	4	3	1	0
	IV	DSC_HON10	ECON010	Intermediate Microeconomics II: Market, Government and Welfare	4	3	1	0
		DSC_HON11	ECON011	Intermediate Macroeconomics II: Policy Issues	4	3	1	0
		DSC_HON12	ECON012	Introductory Econometrics	4	3	0	2
Third	V	DSC_HON13	ECON013	Game Theory and Strategic Interactions	4	3	1	0
		DSC_HON14	ECON014	Economic Growth and Business Cycles	4	3	1	0
		DSC_HON15	ECON015	Introductory Development Economics	4	3	1	0
	VI	DSC_HON16	ECON016	International Trade	4	3	1	0
		DSC_HON17	ECON017	Development Theory and Experience	4	3	1	0
		DSC_HON18	ECON018	Indian Growth and Development	4	3	1	0
Fourth	VII	DSC_HON19	ECON019	Economic Development and Policy in India	4	3	1	0
	VIII	DSC_HON20	ECON020	Topics in Development and Policy	4	3	1	0

Semester-wise Elective courses (DSE) for Bachelor of Economics (Hons.)

Serial No.	Course Code	Course Name	Year	Semester	Credits	Components of the course			Pre-requisite
						Lecture	Tutorial	Practical	
DSE_HON01	ECON031	Economic History of India	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_HON02	ECON032	Economics of Climate Change and Natural Resources	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON001
DSE_HON03	ECON033	Economy, State and Society	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_HON04	ECON034	Fiscal Policy and Public Finance in India	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON004
DSE_HON05	ECON035	Digital Economics	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON001
DSE_HON06	ECON036	Advanced Econometrics	3rd/ 4th	V/VII	4	3	0	2	ECON012
DSE_HON07	ECON037	Economics of Discrimination	3rd/ 4th	V/VII	4	3	1	0	ECON012
DSE_HON08	ECON038	Economics of Health	3rd/ 4th	V/VII	4	3	1	0	ECON001
DSE_HON09	ECON039	Environmental Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_HON10	ECON040	Gender and Development	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_HON11	ECON041	Law and Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_HON12	ECON042	Open Economy Macroeconomics	3rd/ 4th	V/VII	4	3	1	0	ECON011
DSE_HON13	ECON043	Modern Political Economy	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_HON14	ECON044	Research Methodology for Economics	3rd/ 4th	V/VII	4	3	1	0	Nil
DSE_HON15	ECON045	Public Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_HON16	ECON046	Financial Economics	2nd/3rd/ 4th	IV/VI/VIII	4	3	1	0	ECON007
DSE_HON17	ECON047	Money and Financial Markets	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON008
DSE_HON18	ECON048	Production Relations and Globalisation	2nd/3rd/ 4th	IV/VI/VIII	4	3	1	0	Nil
DSE_HON19	ECON049	Behavioural Economics	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_HON20	ECON050	Comparative Economic Development	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_HON21	ECON051	Corporate Finance and Governance	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_HON22	ECON052	Economics of Education	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_HON23	ECON053	Forecasting Methods for Economics	3rd/ 4th	VI/VIII	4	3	0	2	ECON012
DSE_HON24	ECON054	History of Economic Thought	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_HON25	ECON055	Industrial Organisation	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_HON26	ECON056	Introduction to Causal Inference	3rd/ 4th	VI/VIII	4	3	0	2	ECON012
DSE_HON27	ECON057	Introduction to Macroeconomic Dynamics	3rd/ 4th	VI/VIII	4	3	1	0	ECON009
DSE_HON28	ECON058	Labour Economics	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_HON29	ECON059	Sectoral Issues in Indian Economy	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_HON30	ECON060	Topics in Game Theory	3rd/ 4th	VI/VIII	4	3	1	0	ECON013

Semester-wise Generic Electives (GE) offered by the Economics Department

Serial No.	Course Code	Course Name	Year	Semester	No. of Credits	Components of the course			Pre-requisites
						Lecture	Tutorial	Practical	
GE01	ECON025	Principles of Microeconomics I	1st/2nd/3rd/4th	I/III/V/VII	4	3	1	0	Nil
GE02	ECON029	Basic Development Economics	1st/2nd/3rd/4th	I/III/V/VII	4	3	1	0	Nil
GE03	ECON076	Essentials of Economics	1st/2nd/3rd/4th	I/III/V/VII	4	3	1	0	Nil
GE04	ECON061	Theory of Public Finance	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON025
GE05	ECON062	Money and Banking	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
GE06	ECON063	Digitalisation and Development	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
GE07	ECON064	Introduction to Comparative Economic Development	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
GE08	ECON065	Education and Development	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
GE09	ECON066	Basic Resource and Energy Economics	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON025
GE10	ECON026	Principles of Macroeconomics I	1st/2nd/3rd/4th	II/IV/VI/VIII	4	3	1	0	Nil
GE11	ECON022	Basic Statistics for Economics	1st/2nd/3rd/4th	II/IV/VI/VIII	4	3	1	0	Maths in Class XII
GE12	ECON024	Basic Econometrics	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON022
GE13	ECON030	Indian Economy	2nd/3rd/4th	II/IV/VI/VIII	4	3	1	0	Nil
GE14	ECON059	Sectoral Issues in Indian Economy	3rd/ 4th	IV/VI/VIII	4	3	1	0	Nil
GE15	ECON067	Game Theory and Social Sciences	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Maths in Class XII
GE16	ECON068	Corporate Finance, Governance and Development	3rd/4th	V/VII	4	3	1	0	Nil
GE17	ECON069	Economy of Colonial India	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Nil
GE18	ECON070	Basic Environmental Economics	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON025
GE19	ECON071	Law and Economic Development	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON025
GE20	ECON072	Public Finance in India	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Nil
GE21	ECON073	Health and Development	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Nil
GE22	ECON074	Global Political Economy	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Nil
GE23	ECON075	History of Indian Economic Thought	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	Nil
GE24	ECON027	Principles of Microeconomics II	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON025
GE25	ECON028	Principles of Macroeconomics II	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON026

Semester-wise Core courses (DSC) for Multi-disciplinary Programme with Economics as Major

Year	Semester	Serial No.	Course Code	Course Name	Credit	Components of the course		
						Lecture	Tutorial	Practical
First	I	DSC_MAJ01	ECON001	Introductory Microeconomics	4	3	1	0
		DSC_MAJ02	ECON021	Basic Mathematics for Economic Analysis	4	3	1	0
	II	DSC_MAJ03	ECON004	Introductory Macroeconomics	4	3	1	0
		DSC_MAJ04	ECON022	Basic Statistics for Economics	4	3	0	2
Second	III	DSC_MAJ05	ECON007	Intermediate Microeconomics I: Behavioural Foundations of Market Interactions	4	3	1	0
		DSC_MAJ06	ECON023	Optimisation Methods for Economic Analysis	4	3	1	0
	IV	DSC_MAJ07	ECON008	Intermediate Macroeconomics I: Foundations of Aggregate Income Determination	4	3	1	0
		DSC_MAJ08	ECON024	Basic Econometrics	4	3	0	2
Third	V	DSC_MAJ09	ECON010	Intermediate Microeconomics II: Market, Government and Welfare	4	3	1	0
		DSC_MAJ10	ECON015	Introductory Development Economics	4	3	1	0
	VI	DSC_MAJ11	ECON011	Intermediate Macroeconomics II: Policy Issues	4	3	1	0
		DSC_MAJ12	ECON018	Indian Economy: Growth and Development	4	3	1	0
Fourth	VII	DSC_MAJ13	ECON013	Game Theory and Strategic Interactions	4	3	1	0
	VIII	DSC_MAJ14	ECON014	Economic Growth and Business Cycles	4	3	1	0

Semester-wise Elective courses (DSE) for Multi-disciplinary Program with Economics as Major

Serial No.	Course Code	Course Name	Year	Semester	Credits	Components of the course			Pre-requisite
						Lecture	Tutorial	Practical	
DSE_MAJ01	ECON019	Economic Development and Policy in India	3rd/ 4th	V/VII	4	3	1	0	Nil
DSE_MAJ02	ECON031	Economic History of India	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_MAJ03	ECON032	Economics of Climate Change and Natural Resources	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON001
DSE_MAJ04	ECON033	Economy, State and Society	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_MAJ05	ECON034	Fiscal Policy and Public Finance in India	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON004
DSE_MAJ06	ECON035	Digital Economics	2nd/3rd/4th	III/V/VII	4	3	1	0	ECON001
DSE_MAJ07	ECON036	Advanced Econometrics	3rd/ 4th	V/VII	4	3	0	2	ECON024
DSE_MAJ08	ECON037	Economics of Discrimination	3rd/ 4th	V/VII	4	3	1	0	ECON024
DSE_MAJ09	ECON038	Economics of Health	3rd/ 4th	V/VII	4	3	1	0	ECON001
DSE_MAJ10	ECON039	Environmental Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_MAJ11	ECON040	Gender and Development	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_MAJ12	ECON041	Law and Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_MAJ13	ECON042	Open Economy Macroeconomics	3rd/ 4th	V/VII	4	3	1	0	ECON011
DSE_MAJ14	ECON043	Modern Political Economy	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_MAJ15	ECON044	Research Methodology for Economics	3rd/ 4th	V/VII	4	3	1	0	Nil
DSE_MAJ16	ECON045	Public Economics	3rd/ 4th	V/VII	4	3	1	0	ECON010
DSE_MAJ17	ECON016	International Trade	3rd/ 4th	VI/VIII	4	3	1	0	ECON007
DSE_MAJ18	ECON017	Development Theory and Experience	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_MAJ19	ECON020	Topics in Development and Policy	3rd/ 4th	VI/VIII	4	3	1	0	ECON017
DSE_MAJ20	ECON046	Financial Economics	2nd/3rd/ 4th	IV/VI/VIII	4	3	1	0	ECON007
DSE_MAJ21	ECON047	Money and Financial Markets	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON008
DSE_MAJ22	ECON048	Production Relations and Globalisation	2nd/3rd/ 4th	IV/VI/VIII	4	3	1	0	Nil
DSE_MAJ23	ECON049	Behavioural Economics	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_MAJ24	ECON050	Comparative Economic Development	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_MAJ25	ECON051	Corporate Finance and Governance	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_MAJ26	ECON052	Economics of Education	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_MAJ27	ECON053	Forecasting Methods for Economics	3rd/ 4th	VI/VIII	4	3	0	2	ECON024
DSE_MAJ28	ECON054	History of Economic Thought	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_MAJ29	ECON055	Industrial Organisation	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_MAJ30	ECON056	Introduction to Causal Inference	3rd/ 4th	VI/VIII	4	3	0	2	ECON024
DSE_MAJ31	ECON057	Introduction to Macroeconomic Dynamics	3rd/ 4th	VI/VIII	4	3	1	0	ECON009
DSE_MAJ32	ECON058	Labour Economics	3rd/ 4th	VI/VIII	4	3	1	0	ECON013
DSE_MAJ33	ECON059	Sectoral Issues in Indian Economy	3rd/ 4th	VI/VIII	4	3	1	0	Nil
DSE_MAJ34	ECON060	Topics in Game Theory	3rd/ 4th	VI/VIII	4	3	1	0	ECON013

Semester-wise Core courses (DSC) for Multi-disciplinary Programme with Economics as Minor

Year	Semester	Serial No.	Course Code	Course Name	Credit	Components of the course		
						Lecture	Tutorial	Practical
First	I	DSC_MIN01	ECON025	Principles of Microeconomics I	4	3	1	0
	II	DSC_MIN02	ECON026	Principles of Macroeconomics I	4	3	1	0
Second	III	DSC_MIN03	ECON027	Principles of Microeconomics II	4	3	1	0
	IV	DSC_MIN04	ECON028	Principles of Macroeconomics II	4	3	1	0
Third	V	DSC_MIN05	ECON029	Basic Development Economics	4	3	1	0
	VI	DSC_MIN06	ECON030	Indian Economy	4	3	1	0
Fourth	VII	DSC_MIN07	ECON013	Game Theory and Strategic Interactions	4	3	1	0
	VIII	DSC_MIN08	ECON014	Economic Growth and Business Cycles	4	3	1	0

Semester-wise Elective courses (DSE) available for Multi-disciplinary Programme with Economics as Minor

Serial No.	Course Code	Course Name	Year	Semester	Credits	Components of the course			Pre-requisite
						Lecture	Tutorial	Practical	
DSE_MIN01	ECON010	Intermediate Microeconomics II: Market, Government and Welfare	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_MIN02	ECON021	Basic Mathematics for Economic Analysis	2nd/3rd/4th	III/V/VII	4	3	1	0	Nil
DSE_MIN03	ECON023	Optimisation Methods for Economic Analysis	3rd/ 4th	V/VII	4	3	1	0	ECON023
DSE_MIN04	ECON036	Advanced Econometrics	3rd/ 4th	V/VII	4	3	0	2	ECON024
DSE_MIN05	ECON044	Research Methodology for Economics	3rd/ 4th	V/VII	4	3	1	0	Nil
DSE_MIN06	ECON045	Public Economics	3rd/ 4th	V/VII	4	3	1	0	ECON025
DSE_MIN07	ECON046	Financial Economics	3rd/4th	VI/VIII	4	3	1	0	ECON025
DSE_MIN08	ECON047	Money and Financial Markets	3rd/4th	VI/VIII	4	3	1	0	ECON028
DSE_MIN09	ECON053	Forecasting Methods for Economics	3rd/ 4th	VI/VIII	4	3	0	2	ECON024
DSE_MIN10	ECON011	Intermediate Macroeconomics II: Policy Issues	2nd/3rd/4th	IV/VI/VIII	4	3	1	0	ECON028
DSE_MIN11	ECON016	International Trade	3rd/ 4th	VI/VIII	4	3	1	0	ECON025
DSE_MIN12	ECON017	Development Theory and Experience	3rd/ 4th	VI/VIII	4	3	1	0	ECON025
DSE_MIN13	ECON022	Basic Statistics for Economics	3rd/ 4th	VI/VIII	4	3	1	0	ECON023/Maths (Class XII)
DSE_MIN14	ECON024	Basic Econometrics	3rd/ 4th	VI/VIII	4	3	0	2	ECON022

Introductory Microeconomics

- **Course Code :** ECON001
- **Course Abbreviation :** MICRO1
- **Credits:** 4
- **Duration (per week):** 4 hours (3 lectures+1 tutorial)

- **Course Objectives:**

This course is designed to expose students to the basic principles of microeconomic theory. The emphasis will be on teaching the fundamental economic trade-offs and allocation problems due to scarcity of resources. This course will use graphical methods to illustrate how microeconomic concepts can be applied to analyze real-life situations.

- **Course Learning Outcomes:**

Students will learn to think about economic trade-offs and opportunities. They will learn the fundamentals of market mechanisms and government interventions.

- **Content (Unit-wise):**

Unit 1 : Introduction to economic trade-offs

Resources and opportunities, Gains from trade, Individual and society Unit 2 :

How market works

Supply and demand, Price and resource allocation, Elasticity, Market, trade and welfare.

Unit 3 : Role of government

Taxation, Public good, Inequality and poverty Unit 4

: Individual decision and interactions

Decision versus strategic interaction, How to think about strategic interactions,
Real life Final Examinationples.

- **Suggested Readings**

- Mankiw, N. G. (2018). *Principles of Microeconomics* 8th ed.
- Frank, R. H., & Cartwright, E. (2010). *Microeconomics and behavior*. New York: McGraw-Hill.
- Dixit, A. K., & Skeath, S. (2015). *Games of strategy*: Fourth international student edition. WW Norton & Company.
- Acemoglu, D., Laibson, D., & List, J. (2017). *Microeconomics*. Pearson.

- **Course Assessment:** Internal Assessment - 25, Final Examination - 75

Introductory Mathematical Methods for Economics

- **Course Code :** ECON002
- **Course Abbreviation :** MME1
- **Credits:** 4
- **Duration** (per week): 4 hours (3 Lectures + 1 tutorial)
- **Course Objectives:**

This is the first of a compulsory three-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The sophistication would be maintained at a standard level to grow in the profession.

- **Course Learning Outcomes:**

The course hones and upgrades the mathematical skills acquired in school and paves the way for the second semester course Intermediate Mathematical Methods. The analytical tools introduced in this course have applications wherever unconstrained optimisation techniques are used in economics and business decision-making. These tools are necessary for anyone seeking employment as an analyst in the corporate world. The course additionally makes the student more logical in making or refuting arguments.

- **Content (Unit-wise):**

Unit 1 Preliminaries:

Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems.

Unit 2 Functions of one real variable:

Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; continuous functions: characterisation, properties with respect to various operations and applications; differentiable functions: characterisation, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.

Unit 3 Single-variable optimization

Geometric properties of functions: convex functions, their characterisation and applications; local and global optima: geometric and calculus-based characterisation, applications.

- **Suggested Readings:**

- Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*. Pearson Education.
- Hoy, M., Livernois, J., McKenna, C., Rees, R., Stengos, T. (2001). *Mathematics for Economics*, Prentice-Hall India.

- **Course Assessment:** Internal Assessment - 25, Final Examination - 75

Introductory Statistics for Economics

- **Course Code** : ECON003
- **Course Abbreviation** : STAT1
- **Credits**: 4
- **Duration (per week)**: 4 hours (3 Lectures + 1 Tutorial)

- **Course Objectives:**

The course familiarizes students with methods of summarizing and describing important features of data. The course teaches students the basics of probability theory and sets a necessary foundation for Inferential Statistical Theory and the Econometrics courses. The familiarity with probability theory will also be valuable for courses in economic theory.

- **Course Learning Outcomes:**

The student would understand the concept of probability, random variables and their distributions and become familiar with some commonly used discrete and continuous distributions of random variables so that they would be able to analyse various real-life data.

- **Content (Unit-wise):**

Unit 1 : Introduction and overview

The distinction between populations and samples and, between population parameters and sample statistics; Pictorial Methods in Descriptive Statistics; Measures of Location and Variability.

Unit 2 : Elementary probability theory

Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Bayes' rule; independence.

Unit 3 : Random variables and probability distributions

Defining random variables; discrete and continuous random variables, probability distributions; expected values and functions of random variables.

Unit 4 : Sample Distributions

Properties of commonly used discrete and continuous distributions (uniform, binomial, exponential, Poisson, hypergeometric and Normal random variables).

Unit 5 : Random sampling and jointly distributed random variables

Density and distribution functions for jointly distributed random variables; computing expected values of jointly distributed random variables; conditional distributions and expectations, covariance and correlation.

- **Suggested Readings:**

- Devore, J. (2012). *Probability and Statistics for Engineers*, 8th ed. Cengage Learning.
 - John A. Rice (2007). *Mathematical Statistics and Data Analysis*, 3rd ed. Thomson Brooks/Cole.
 - Miller, I., Miller, M. (2017). *J. Freund's Mathematical Statistics with Applications*, 8th ed. Pearson.
 - Hogg, R., Tanis, E., Zimmerman, D. (2021) *Probability and Statistical inference*, 10th Edition, Pearson
- **Course Assessment:** Internal assessment - 25, final Examination – 75

Basic Mathematics for Economic Analysis

- **Course Code :** ECON021
- **Course Abbreviation :** BMEA
- **Credits:** 4
- **Duration (per week):** 4 hours (3 Lectures + 1 tutorial)
- **Course Objectives:**

The objective of this course is to train basic algebras that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomics, macroeconomics, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. It contains understanding of basic functions, relations, real number systems, set operations, linear algebras and matrix operations used in economics.

- **Course Learning Outcomes:**

The course equips the students with exposition of economic problems with formal presentation algebraically and offers solution techniques to find equilibrium analysis. These tools are necessary for anyone seeking employment as an analyst in the corporate and policy framing world.

- **Content (Unit-wise):**

- **Unit 1 : Economic Models**

Ingredients of mathematical models - variables, constants, parameters, equations, and identities; Real number system; Sets and functions; relations and their properties; types of functions; functions of more than one variables; Limit, sequences and series: convergence, algebraic properties and applications; continuous functions: characterisation, properties with respect to various operations and applications; differentiable functions: characterisation, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.

Unit 2 Equilibrium Analysis in Economics

Meaning of equilibrium; partial market equilibrium - linear and non-linear models; General market equilibrium

Unit 3 : Linear Models and Matrix Algebras and their Applications in Economics Matrix

operations, Determinants and Cramer's Rule and their applications

- **Suggested Readings:**

- Chiang, A and Wainwright, K. (2005). Fundamental methods of mathematical economics. Boston, Mass. McGraw-Hill/Irwin.

- Sydsaeter, K., Hammond, P. (2002). *Mathematics for economic analysis*. Pearson Educational.
- Hoy, M., Livernois, J., McKenna, C., Rees, R., Stengos, T. (2001). *Mathematics for Economics*, Prentice-Hall India.
- **Course Assessment:** Internal Assessment - 25, Final Examination - 75

Principles of Microeconomics I

- **Course Code :** ECON025
- **Course Abbreviation :** PMIC1
- **Credits:** 4
- **Duration (per week):** 4 hours (3 lectures+1 tutorial)

- **Course Objectives:**

This course discusses the basic principles in Microeconomics and their applications. It includes consumer's problem, demand estimation, production function, cost functions and market analysis. It illustrates how the concepts of microeconomics can be applied to analyze real-life economic situations.

- **Course Learning Outcomes:**

The students learn some basic principles of microeconomics of consumer and producers, and interactions of supply and demand, characteristics of perfect competition, efficiency and welfare outcomes.

- **Content (Unit-wise):**

Unit 1: Introduction

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities

Unit 2: Consumer Theory

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

Unit 3: Production and Costs

Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition

Costs: costs in the short run, costs in the long run, revenue and profit maximization, minimizing losses, short run industry supply curve, economies and dis-economies of scale, long run adjustments

Unit 4: Perfect Competition

Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium

of the firm in the short run and long run; Long run industry supply curve: increasing, decreasing and constant cost industries.

Welfare: allocative efficiency under perfect competition.

- **Suggested Readings**

- Mankiw, N. G. (2018). *Principles of Microeconomics* 8th ed.
- Frank, R. H., & Cartwright, E. (2010). *Microeconomics and behavior*. New York: McGraw-Hill.
- Bernheim, B., Whinston, M. (2009). *Microeconomics*. Tata McGraw-Hill.
- *Course Assessment*: Internal Assessment - 25, Final Examination - 75

Basic Development Economics

- **Course Code :** ECON029
- **Course Abbreviation :** BASDEV
- **Credits:** 4
- **Duration (per week):** 4 hours (3 lectures + 1 Tutorial)
- **Course Objectives:**

This course exposes students to some of the key ideas and concepts in the areas of economic growth, human development and globalisation building on the concept of growth and further links it up with alternative conceptions of development.

- **Course Learning Outcomes:**

Students will develop a critical understanding of the contemporary issues in economic growth and development and their paths. Students will thus be better prepared to face the professional world and can use this knowledge base in a variety of jobs, including in the corporate, civil service and NGO sectors.

- **Content (Unit-wise):**

Unit 1 : Development and underdevelopment

Growth vs Development; Classic Approaches of Development; Contemporary theories of Development and Underdevelopment

Unit 2 : Development goals and indicators, measures of underdevelopment

Various concepts and measures of poverty and inequality, poverty lines using various national and international criteria.

Unit 3 : Capabilities, human development and sustainable development

Unit 4 : Globalisation and development

- **Suggested Readings:**

- Debraj Ray, *Development Economics*, (DE), Princeton University Press, 1998.
- Robinson, J. A., & Acemoglu, D. (2012). *Why nations fail: The origins of power, prosperity and poverty* (pp. 45-47). London: Profile.
- Abhijit Banerjee, Roland Benabou and Dilip Mookerjee (eds), *Understanding Poverty* (UP), Oxford University Press, 2006.
- Angus Deaton, *The Great Escape: Health, Wealth and the Origins of Inequality*, Princeton University Press, 2013.

- Gustav Ranis et.al, Economic Growth and Human Development, *World Development* Vol. 28, No. 2, Elsevier Science Ltd., 2000
 - Amartya Sen, *Development as Freedom*, OUP, 2000
 - Thomas Piketty and Emmanuel Saez, 'Inequality in the Long Run', *Science*, 344 (838), 2014
 - Piketty, Thomas, 2019, *Capital and Ideology*, Harvard University Press,
 - Séverine Deneulin with Lila Shahani (ed.), *An Introduction to the Human Development and Capability Approach: Freedom and Agency*, Routledge, 2009
- **Course Assessment:** Internal Assessment - 25, Final Examination – 75

Essentials of Economics

- **Course Code :** ECON076
- **Course Abbreviation :** ECO
- **Credits:** 4
- **Duration (per week):** 4 hours (3 lectures+1 tutorial)
- **Prerequisite:** No prior knowledge of economics is needed for this course.
- **Course Objectives:**

This course will introduce the fundamental concepts of economics, the study of how people manage resources. It contains basic principles of microeconomics (the behaviour of consumers, firms and companies), macroeconomics (national production, employment, inflation and interest rates) and international economics (balance of payment, exchange rate and trade) with graphical illustration and contemporary examples.

- **Course Learning Outcomes:**

By studying this course, the students will learn to think like an economist and understand how a modern market economy function. They will learn about the factors that determine long-run growth and short-term fluctuations and role of government and financial institutions, so they can better understand how economics applies to the everyday life.

- **Content (Unit-wise):**

Unit 1 : Microeconomic Foundations

Foundations of economics, how market works, firms and market structures, markets for factor of production, role of government

Unit 2 : Macroeconomic Foundations

GDP (measuring total production, income and economic growth), unemployment and inflation; aggregate demand and aggregate supply analysis; monetary and fiscal policies

Unit 3 : Foundation of International Economics

Comparative advantage and the gains from trade, macroeconomics in an open economy

- **Suggested Readings**

- Hubbard, G., Garnett, A., & Lewis, P. (2019). Essentials of economics. 5th edition, Pearson Higher Education AU.

- Sloman, J., & Garratt, D. (2016). Essentials of Economics, 7th edition, Pearson

- **Course Assessment:** Internal Assessment - 25, Final Examination - 75