MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of B. Sc. In Economics
(Effective for 2021-2022 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2021-22

Semester-I							
Sl. No.	Category	Subject Code	Subject Name	Total no of contact hours			Credits
				L	T	P	
1	Core Course 1	BECO101	Introductory Microeconomics	5	1	0	6
2	Core Course 2	BECO 102	Mathematical Methods for Economics-I	5	1	0	6
3	Generic Elective 1		Any one from GE Basket				6
4	Ability Enhancement Compulsory Course (AECC 1)	BECO 104	(Communicative English)	2	0	0	2
Total of Semester-I							**20**

Core Economics Course 1: INTRODUCTORY MICROECONOMICS

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Outline

1. Exploring the subject matter of Economics

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs.

2. Supply and Demand: How Markets Work, Markets and Welfare

Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. The Households

The consumption decision - budget constraint, consumption and income/price changes,

demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision - choice between leisure and consumption.

4. The Firm and Perfect Market Structure

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run.

5. Imperfect Market Structure

Monopoly and anti-trust policy; government policies towards competition; imperfect competition.

6. Input Markets

Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by SouthWestern, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc.,New York, International Student Edition, 4th Edition, 2007.

Core Economics Course 2: MATHEMATICAL METHODS IN ECONOMICS–I

Course Description

This is the first of a compulsory two-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 level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Course Outline

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

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: characterizations, properties with respect to various operations andapplications; differentiable functions: characterizations, properties with respect to variousoperations and applications; second and higher order derivatives: properties andapplications.

3. Single-variable optimization
Geometric properties of functions: convex functions, their characterizations and applications; local and global optima: geometric characterizations, characterizations using calculus and applications.

4. Integration of functions

5. Difference equations

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, PearsonEducational Asia: Delhi, 2002.

BECO 104 Communicating English

Course Outcome:

After completion of the course the students will be able to

1. Talk in English so that he/she could express their views on any topic without any difficulty in speech.
2. Use English effectively during the entire course curriculum and enable the learner to communicate effectively and appropriately in real life situation.
3. Develop and demonstrate the speaking skills for group discussions.

Module 1

Small Talk & Conversational, Vocabulary; Express Yourself: Pronunciation; Elevator Speech

Module 2

Video Conferencing: Face to Face but Online; Group Discussion Language; Video

Conference Role Play

Module 3

Telephone Language; Understand and Be Understood on the Phone; Phone Role Pla

Module 4

Get Ready for the Interview; Improve Your Pronunciation

References:

1. S R Inthira&amp, V Saraswathi, Enrich your English a) Communication skills b) Academic skills, CIEFL &amp, OUP
2. R.C. Sharma and K.Mohan Business Correspondence and Report Writing Tata McGraw Hill , New Delhi , 1994
3. Maxwell Nurnberg and Rosenblum Morris, All About Words- A Text Book for English for Engineers &amp, Technologists General Book Depot, New Delhi, 1995