St. Xavier's University, Kolkata

SYLLABUS FOR FOUR YEAR
B.A. (Hons) IN ECONOMICS with Minor in Statistics/Finance/Data Science
2026 onwards
(Semesters I & II)

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Content

Courses offered by Department of Economics to students of other Departments			
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Course Outline									
Sem	**Paper Type**	**Course Title**	**Full Marks**	**Pass Marks**	**CIA MARKS**			**End-Sem Marks**	**Credits**
					WT	**O**	**ATT**		
I	Discipline Specific Core (Major)	Introductory Microeconomics	100	40	20	5	5	70	4
	Minor/ Electives	Track A (Statistics) Basic Statistics	100	40	20	5	5	70	4
		Track B (Finance) Indian Financial System	100	40	20	5	5	70	4
		Track C (Data Science) Foundations of Statistics for Data Science-I	100	40	20	5	5	Theory-40 Practical-30	4
	Multidisciplinary	Understanding Human Behaviour	100	40	20	5	5	70	3
	Multidisciplinary	Introduction to Media Studies	100	40	20	5	5	70	3
	Ability Enhancement Course	Communicative English—I	50	20	10	2.5	2.5	35	2
	Skill Enhancement Course	Personality Development	100	40	20	5	5	70	3
	Value Added Course	Interreligious Studies for Global Citizenship	50	20	10	2.5	2.5	35	2
	Value Added Course	Environmental Education	50	20	10	2.5	2.5	35	2
II	Discipline Specific Core (Major)	Introductory Macroeconomics	100	40	20	5	5	70	4
	Minor/Elective	Track A (Statistics) Mathematics I	100	40	20	5	5	70	4
		Track B (Finance) Introduction to Corporate Finance	100	40	20	5	5	70	4
		Track C (Data	100	40	20	5	5	Theory-0	4

		Science) Programming for Data Science-I						Practical-70	
	Multidisciplinary	Indian Literature in English Translation	100	40	20	5	5	70	3
	Multidisciplinary	Child Development & Education	100	40	20	5	5	70	3
	Ability Enhancement Course	Communicative English-II	50	20	10	2.5	2.5	35	2
	Skill Enhancement Course	Statistical Analysis with R (Theory)	40	16	5	2.5	2.5	30	3
		Statistical Analysis with R (Practical)	60	24	15		2	50	
	Value Added Course	Service Learning	50	20	10	2.5	2.5	35	2
	Value Added Course	Understanding Indian Constitution	50	20	10	2.5	2.5	35	2

****Note: The Minor papers are offered under three tracks: A (Statistics), B (Finance), and C (Data Science). Students who select a Minor track in Semester I shall be required to pursue the same track throughout the next seven semesters.**

- **Program Outcomes for B.A. in Economics:**

PO1 Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2.Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4. Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO5. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

PO7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes

Course Name: Introductory Microeconomics
Course Code:
Credit: 4
Semester: 1
Nature of the Course: Discipline Specific Core (DSC)
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objectives: (CO)
CO1: The students will be able to recognize the basic theories of how individuals and firms interact within markets, when markets fail, and how government policy may improve outcomes for society. (BL1)

CO2: The course is designed to develop an understanding of the framework that economists use to analyse choices made by individuals in response to incentives and to consider how these choices can also serve the social interest. (BL2)

CO3: Students will learn to apply the basic economic theory and principles to understand current microeconomic issues (BL3)

CO4: Students will develop thinking capabilities like an economist and the course will illustrate how microeconomic concepts can be applied to analyse real-life situations. (BL4)

CO5: Students will be able to evaluate public policies and can be able to formulate appropriate solution to address socio-economic issues. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks allotted	Associated CO
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.	9	15%	CO2, CO3, CO4
2	Supply and Demand: How Markets Work, Markets and	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,	15	25%	CO2, CO3, CO4, CO5

	Welfare	demand and supply together; how prices allocate resources; elasticity and its application; controls on prices (price ceiling and price floor); taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.			
3	The Household	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. Application of basic concepts of consumer theory (Cobb-Douglas preference, CES utility function, Perfect complements and Perfect substitutes goods).	24	40%	CO2, CO3, CO4, CO5
4	The Firm and Perfect Market Structure	The production process; short-run costs and output decisions; costs and output in the long run and the behaviour of profit-maximizing firms.	12	20%	CO2, CO3, CO4

Suggested Readings:

Bernheim, B., Whinston, M. (2009). *Microeconomics*. McGraw-Hill.

Case, K., Fair, R. (2007). *Principles of Economics*, (8th ed). Pearson Education.

Maddala, G. S. and Miller, E. M. (1989). *Microeconomics: Theory and Applications.* McGraw-Hill.

Mankiw, N. (2007). *Economics: Principles and Applications*, (4th ed). South Western.

Pindyck R. S., Rubinfeld D. L. and Mehta, P. L. (2009). *Microeconomics*, (7^{th} ed.). Pearson Education India.

Samuelson, P. A., & Nordhaus, W. D. (2009). *Microeconomics 19e*. McGraw-Hill Higher Education, Maidenhead.

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	H						
CO_2	H	M					M
CO_3	H		H				M
CO_4		H	M				M
CO_5	H	M		L			M
Total	3	2.67	2.5	1			2

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.23

Course Name: Basic Statistics
Course Code:
Credit: 4
Semester: I
Nature of the Course: Minor/ Elective, Track A (Statistics)
No. of Lecture hours: 45
No. of Practical contact hours: 15

Course Objective: (CO)
CO1: Students will be able to identify and examine the use of statistics in everyday life. (BL1)

CO2: Students will be able to summarize and classify data using statistical methods. (BL2)

CO3: Students will learn to calculate and apply measures of central tendency and measures of dispersion, skewness and kurtosis -- grouped and ungrouped data cases. (BL3 & BL4)

CO4: Students will be able to calculate and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis, for forecasting. (BL3 & BL4)

CO5: The course will improve students' ability to summarize data and solve statistical problems. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
1	Introduction of statistics	What is Statistics?: Nature, Scope and Limitations of Statistics Nature of statistical data: Data sources – Methods of collection of statistical data – Census – Sample Survey – Measurement of Scales – Nominal, Ordinal, Interval and Ratio scales Collection and presentation of data – frequency and non-frequency data: Classification and Tabulation – Formation of frequency distribution – Cumulative frequency distribution –Diagrammatic and Graphical representation	12	20%	CO1, CO2

		of Data.			
2	Measure of location & Variability	Measure of Central Tendency: Arithmetic mean, Median, Mode, Geometric mean and Harmonic mean for raw and grouped data – Properties – Quartiles, Deciles and Percentiles Measures of Dispersion: Absolute and relative measures of Dispersion – Range – Quartile deviation – Mean deviation - Standard deviation – Coefficient of Variation – Lorenz Curve.	18	30%	CO2, CO3, CO5
3	Measures of Skewness, Kurtosis and Moments	Measures of skewness, kurtosis and moments: Definition – Calculation of Karl Pearson's, Bowley's and Kelly's coefficient of Skewness – Moments – Raw and Central Moments – Relation between raw and central moments – Measures of Skewness and Kurtosis	12	20%	CO2, CO3, CO5
4	Correlation and regression	Measures of correlation: Definition of Correlation – Types of correlation – Methods of correlation – Scatter diagram – Karl Pearson's correlation coefficient – Spearman's rank correlation coefficient – Properties – Concurrent deviation method – Correlation coefficient for ungrouped and grouped bivariate data. – Multivariate Correlation. Regression analysis: Meaning of Regression – Regression lines – Regression coefficients – Regression coefficients for	18	30%	CO4, CO5

		ungrouped and grouped bivariate data – Properties of regression coefficient – Finding the two regression equations of X on Y and Yon X and estimating the unknown values of X and Y; concept of multivariate regression ; Multivariate Regression.			

Suggested Readings:

Freund J. E. (1981). *Modern Elementary Statistics.* PHI. New Delhi

Goon, A.M. , Gupta, M.K. , & Dasgupta, B. (2013). *Fundamentals of Statistics*: *Volume 1 & 2*. World Press Private Ltd. Kolkata

Gupta S. C., & Kapoor V. K. (2000). *Fundamentals of Mathematical Statistics*, (10^{th} ed.). Sultan Chand and Sons. New Delhi.

Hogg R. V., & Craig A. T. (2006). *Introduction to Mathematical Statistics.* MacMillan. London

Mukhopadhyay, P. (1999). *Applied Statistics.* Books and Allied (P) Ltd. Kolkata

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	H						M
CO_2	H	M					M
CO_3	H						H
CO_4	H						H
CO_5	H						H
Total	3	2					2.6

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.53

Course Name: Indian Financial System
Course Code:
Credit: 4
Semester: I
Nature of the Course: Minor/ Elective, Track B (Finance)
No. of Lecture hours: 45
No. of Practical contact hours: 15

Course Objectives: (CO)
CO1: Explain the basic concepts of finance, financial markets, financial systems, and the structure of the Indian financial system. (BL1)
CO2: Analyze the role and functions of financial regulators such as RBI, SEBI, and IRDA in maintaining financial stability and market discipline. (BL2)
CO3: Evaluate the functioning of financial intermediaries including banks, NBFCs, RRBs, and insurance organizations in India. (BL3)
CO4: Assess the importance of financial regulations, ethical practices, and sustainability issues in the financial sector. (BL4)
CO5: Develop independent understanding of evolving financial instruments, international financial operations, and contemporary developments in the financial system. (BL5&6)

Module Number	Module Name	Topics	Marks allotted	No of lecture hours allotted	Appropriate CO
I	Introduction to finance and financial system	Basic concepts of corporate finance and public finance, basic concepts of financial market and system	20%	12	CO1, CO2
II	Structure of Indian Financial System	Evolution of Indian financial system, Structure of Indian financial system	20%	12	CO2, CO3
III	Regulators of Financial System	Role of RBI, SEBI, IRDA, Norms and Regulations in different asset markets, International operations in the securities market, new financial instruments	30%	18	CO3, CO4

IV	Financial Intermediaries	Activities of banking sector, non-banking financial companies, role of commercial banks, NBFCs, RRBs, Insurance organizations in India. Norms and regulations of financial intermediaries	30%	18	CO4, CO5

Reference:

Bhole, L. M., & Mahakud, J. (2017). *Financial institutions and markets: Structure, growth and innovations* (6th ed.). McGraw Hill Education.

Pathak, B. (2018). *The Indian financial system: Markets, institutions and services* (5th ed.). Pearson Education India.

Reserve Bank of India. (2024). *RBI working papers*. Reserve Bank of India

Schipke, A., Turunen, J., Choueiri, N., & Gulde, A. M. (2011). *India's financial system: Building the foundation for strong and sustainable growth*. International Monetary Fund

Swarnkar, R. (2012). *Indian financial system*. Garima Publishing House.

CO/PO Mapping:

CO/PO Mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	M					
CO2	H	M					
CO3	M		M		M		
CO4	M			M	H	M	
CO5	H						H
Total	2.9	2	2	2	2.5	2	3

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.5

Course Name: Foundations of Statistics for Data Science-I

Course Code:

Credit: 4
Semester: I
Nature of the Course: Minor/ Elective, Track C (Data Science)
No. of Lecture hours: 45
No. of Practical contact hours: 15

Course Objectives:

CO1: Understanding the various sources and types of data and representation of data through charts, plots and tables. (BL1)

CO2: Understanding the descriptive statistics and applying them to solve problems. (BL2)

CO3: To make students acquainted with the concepts of correlation and regression (BL3)

CO4: Knowledge of the laws of probability and solving simple basic problems of probability. (BL4)
CO5: Acquire the knowledge of various probability distributions and their applications (BL5&6)

Course Outcomes (CO):

Module No.	Module Name	Chapter Topic	Marks Allotted	No. of Lecture Hours allotted	CO
I	Descriptive Statistics	Nature and Classification of data, levels of measurement, tabulation of data and frequency distribution, graphical representation of data- bar diagram, pie diagram, histogram, frequency curve, cumulative frequencies, ogives. Measures of central tendency: arithmetic mean, geometric mean and harmonic mean, median and mode. Properties and application of these measures (explicit mathematical proof of the properties not required) Measures of Dispersion: range, quartile deviation, mean deviation, standard deviation, coefficient of variation. Moments and quantiles, Skewness and kurtosis.	20%	12	CO1, CO2

II	Correlation and Regression	Concept of Correlation: simple, multiple and partial; linear and non-linear, Scatter diagram, Pearson's co-efficient of correlation. Curve fitting, Principle of least squares, Regression equations, Properties of regression coefficients	20%	12	CO2, CO3
III	Theory of Probability	Random experiments, Sample space, Definition of Probability according to Classical, Statistical and Axiomatic Approaches. Addition and multiplication laws of probability; Conditional probability, Bayes' Theorem.	10%	6	CO1, CO4
IV	Probability distributions	Random Variables – discrete and continuous, probability Mass and Density functions: Binomial, Poisson, Normal Distributions	20%	12	CO4, CO5
V	Practical	Hands-on training on descriptive statistics, correlation, regression, probability distribution	30%	18	CO1, CO2, CO3, CO4, CO5

Suggested Readings:

Goon, A M., M.K. Gupta and B.S. Dasgupta, Fundamentals of Statistics, Vol. I, The World Press Limited, Calcutta, 1996

Mood, A.M., Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory of Statistics, 3rd Edn. (Reprint), Tata McGraw-Hill Pub. Co. Ltd.

Reference books:

Goon, A M., M.K. Gupta and B.S. Dasgupta, Basic Statistics, The World Press Limited, Calcutta, 1996.

Tukey, J.W. (1977): Exploratory Data Analysis, Addison-Wesley Publishing Co.

Agresti, A. (2010): Analysis of Ordinal Categorical Data, 2nd Edition, Wiley.

Miller, Irwin and Miller, Marylees (2006)*: John E. Freund's Mathematical Statistics with Applications*, (7th Edn.), Pearson Education, Asia.

Freedman, D., Pisani, R. and Purves, R. (2014): Statistics, 4th Edition, W. W. Norton & Company.

S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical statistics, 1996, S. Chand & Sons.

S.C. Gupta and V.K. Kapoor, Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi, 1993.

D. Bhattacharya and S. Roychowdhury Statistics Theory and Practice. U. N. Dhur & Sons Pvt. Ltd, Calcutta, 2004..

Teaching Pedagogy:

S. No.	Description	Used (Yes/No)
1	Lecture	Yes
2	Discussion/Demonstration	Yes
3	Case Study	Yes
4	Test/Assignment	Yes

5	Student Seminars/Presentation	Yes

CO/PO Mapping:

CO/PO Mapping	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**
CO1	H	M		H			H
CO2	H	M		H		H	
CO3	H		M		M		
CO4	M			M	H	M	
CO5	H		H				H
Total	2.9	2	2.5	2	2.5	2.5	3

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.75

Course Name: Understanding Human Behaviour
Course Code:
Credit: 3
Semester: 1
Nature of the Course: Multidisciplinary Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 15

Course Outcome (CO)- As per Bloom's taxonomy

CO1: to define and recall various components of self, emotions, social perception and influence
CO2: to illustrate and understand the key elements of emotions and emotional intelligence
CO3: to apply the understanding of self and relate it with different components of attitude and human behaviour
CO4: to connect and differentiate aspects of attitude consistency and change and its influence on behaviour
CO5: appraise the relevance and effectiveness of emotional regulation and self-presentation in human behaviour

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
1	Understanding Self	a. Definition of self and its components- self-concept, self-esteem, identity b. Types of selves- real self, ideal self, social self; self complexity c. Development of Self	**12**	**25%**	**CO1, CO3**
2	Understanding of Others	a. Social perception and Social Influence; Recognition of emotions. b. Attitude towards self and others- definition and components of attitude c. Formation and maintenance of attitude, attitude change	**18**	**40%**	**CO1, CO3, CO4**
3	Regulating own Behaviour	a. Understanding of emotions, Emotional Intelligence b. Emotional Regulation	**15**	**35%**	**CO1, CO2, CO3, CO5**

		c. Impression formation and impression management			

Suggested Readings:

1. Bates, A. P. and Julian, J.: Sociology - Understanding Social Behaviour
2. Dressler, David and Cans, Donald: The Study of Human Interaction
3. Lapiere, Richard. T – Social Change
4. Lindzey, G. and Borgatta, E: Sociometric Measurement in the Handbook of Social Psychology, Addison – Welsley, US.
5. Rose, G.: Oxford Textbook of Public Health, Vol.4, 1985.

CO/PO Mapping for Understanding Human Behaviour

CO/ PO mapping	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
CO1	H			M				
CO2	M	M	H		M	L	M	
CO3	H	M	M				M	
CO4	H		H	M		M		
CO5	M	H	M	H	L	M	H	
	13/5= 2.6	7/3= 2.33	10/4=2.5	7/3=2.33	3/2=1.5	5/3= 1.67	7/3=2.33	2.18

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

Course Name: Introduction to Media Studies
Course Code:
Credit: 3
Semester: 1
Nature of the Course: Multidisciplinary Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 15

Course Outcomes:

- CO 1: Students will be able to define the basic role of mass media.
- CO 2: Understanding mass media and its various aspects.
- CO 3: Analyze the essential and accurate role of media across all platforms in a healthy democracy.
- CO 4: Evaluate various forms of mass media and its relevance in the field of mass communication.
- CO 5: Developed critical thinking skills, creative and imaginative use of communicative forms and technologies.

Course Content

Module No.	Module Name	Topic(S)	No. of Hours Allocated	Marks Allotted	Associated Course Outcome
1	Introduction to Media	Understanding media, Use of media, Importance of media, Media and communication, Types of media and their utility, Mass Media effect, Media Convergence, Media Audience, Constructing the audience, Basic writing skills for media.		34%	CO1, CO2
2	Media Literacy	Basics of communication, Introduction to media literacy, Elements of media literacy, Media literacy skills, Levels of		34%	CO2, CO3

		media literacy, Challenges in media literacy, Mass culture, News Vs Propaganda, New dimensions of media literacy.			
3	New Dimensions	Digital media, Special convergence, Mass Media content, User generated content, Surveillance, Storytelling, Narratives, Global Perspectives, Conglomerations, Revenue Generation, Media Advertising.		32%	CO4, CO5

Evaluation	**Max. marks for which the exam is conducted**	**Remarks**
CIA	**30**	**Written test, Assignment, Presentation and Attendance**
End Semester Exam	**70**	**Exam to be conducted by COE**

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**
CO 1	**H**						
CO 2		**M**	**M**				
CO 3				**H**			
CO 4						**L**	

CO 5		**H**					**H**
TOTAL	**3**	**5/2=2.5**	**2**	**3**		**1**	**3**

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

References:

- Communication, culture and media studies, the key concepts by John Hartley, Routledge Publications.
- Introduction to Media Literacy- By W. James Potter · 2015
- Introduction to Mass Communication: Media Literacy and Culture Updated Edition- By Stanley Baran · 2014.
- Mass Communication in India By Keval J Kumar
- Understanding Media: The extension of Man By Marshall Mcluhan.
- Convergence culture: Where old and new media collide By Henry Jenkins.
- Introducing Intercultural Communication: Global Cultures and Contexts By Shuang Liu, Zala Volcic and Cindy Gallois

Course Name: Communicative English I
Course Code:
Credit: 2
Semester: 1
Nature of the Course: Ability Enhancement Course
No. of Lecture hours: 30
No. of Tutorial contact hours:

Course Description: The course aims to introduce students to knowledge, ideas, and concepts in English language-use and communication. It focuses on the technicalities of proper pronunciation, structure, and style in English-Language communication. Theories and modes of communication, as well as barriers to communication, are also covered. Different forms of communication, including various oral and written modes, are also discussed.

Course Objective

PO 1 PO 2	CO 1 - To make the students understand communicative competence.To demonstrate his/her verbal and non-verbal communication ability.	BL 1 and 2
PO 2 PO 3	CO 2 - To make the students analyse and conduct independent surveys, collect data, prepare and present reports and projects.	BL 2 and 3
PO 7	CO 3 - To apply effective business correspondence with brevity and clarity. Learn the process of acquiring a job with special reference to prepare a resume.	BL 4 and 5
PO 2 PO 3 PO 7	CO 4 - To evaluate the process of writing error free while making an optimum use of vocabulary & grammar leading to lifelong learning	BL 5
PO 4 PO 7	CO 5 - To create and enhance employability and prepare students for the challenges they face while communicating in English in any work space.	BL 6

Course Content

Module	**Credits (Total—2)**
Module 1 - Theory & Grammar A. Theory of Communication: Fundamentals, Process of Communication, Types of Communication, Mis-communication, Skills Required for Effective Communication B. Accurate Grammatical Usage: Sentence Structure, Verbs (Classification), Infinitive & Gerund, Tense, Voice, Phrasal Verbs & Idioms, Punctuation marks.	0.5
Module 2 - English Composition A. Composition: Reflective, Descriptive, Narrative, Argumentative B. Summarising C. Précis D. Article Writing E. Blog Writing F. Documenting and Note-Making	1
Module 3 - A. Speaking B. Personal Interview, Mock Interview C. Public Speaking, Presentations	0.5

CO-PO Mapping

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1):

	BL	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
CO 1	1, 2	H	H					
CO 2	2, 3		H	H				
CO 3	4, 5							H
CO 4	5		M	H				H
CO 5	6				L			H
-	-	3/1	8/3	6/2	1/1	-	-	9/3
-	-	3	2.6	3	1	-	-	3

CO- PO Attainment = 12.6/5 = 2.5

Reading List

Fluency in English - Part II, Oxford University Press, 2006.

Business English, Pearson, 2008.

Language, Literature and Creativity, Orient Blackswan, 2013.

A Practical English Grammar, A.J. Thomson, A.V. Martinet, Oxford University Press

A Handbook of English Grammar and Usage, D. Thakur, Bharati Bhawan Publication

Function in English- Jon Blundell et al, OUP

Oxford Practice Grammar, John Eastwood, Oxford University Press

Course Name: Personality Development
Course Code:
Credit: 3
Semester: 1
Nature of the Course: Skill Enhancement Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 45

Course Outcomes (CO):

At the end of this course, students will be able to

CO1: Identify strengths, weaknesses, opportunities and challenges related to their personal capabilities for effectively managing conflict and stress.

CO2: Understand life skills as a perfect blend of knowledge and behaviour, attitudes and work ethics to respond effectively to demands and challenges of daily life.

CO3: Apply group dynamic techniques in the context of organizational culture to gain a deeper understanding of how to make team building more pro-active and efficient.

CO4: Evaluate inter-personal relations and analyze the barriers to effective communication.

CO5: Develop a leadership style that is uniquely theirs by effectively using their soft skills.

Course Content:

Module No.	Module Name	Topic(s)	Description	No of Hours allotted	Marks allotted	Associated Course Outcome (CO)
I	Personality & Personality Development: Fundamentals	• Define Personality & Why Personality Development? • Determinants of Personality Development • Types of Personality (including activities)	Orientation	1 2 2 **5**	20%	CO1
II	Self Management	• Motivation • Conflict Management • Time Management • Stress Management (including activities)	Personal Competence	3 4 4 9 **20**	40%	CO1, CO2
III	Social Skill Development	• Inter-personal Relations & Communication • Group Dynamics • Team Building • Leadership • Holistic Well-being (including activities)	Techniques in Personality Development	5 4 4 4 3 **20**	40%	CO3, CO4, CO5

Suggested Readings

- Mukherjee, S. (2021). *Personality Development Studies for Leadership: Foundation Course*.
  St. Xavier's University, Kolkata (1st ed.).
- Agarwal, R. & Tandon, A. (2012). *Personality Development & Leadership*. Oxford Book Company (1st ed.).
- Mitra, B. K. (2016). *Personality Development And Soft Skills*. Oxford University Press, India
  (2nd ed.).

Additional Readings

- Hurlock, E. B. (2017). *Personality Development.* Tata McGraw Hill, New Delhi (Indian Edition).
- Onkar, R. M. (2014). *Personality Development and Career Management: A Pragmatic Perspective*. S. Chand Publishing, New Delhi (3rd revised ed.).
- Gallagher, K. (2010). *Skills Development*. Oxford University Press, India (Indian Edition).
- Mangal, S.K. (2018). *Educational Psychology*. Tondon Publications, Ludhiana.
- Morgan, C. & King, R. (2017). *Introduction To Psychology*. McGraw Hill Education - 7th ed. (Indian Edition).

CO-PO Mapping:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	M		M		H		H
CO2	H	M	H	M	H	M	H
CO3	H	H	H	M	H		M
CO4		H	H	M	M		H
CO5	H	H	H	H	H	H	H

Course Name: Inter-Religious Studies for Global Citizenship
Course Code:
Credit: 2
Semester: I
Nature of the Course: Value Added Course
No. of Lecture hours: 30
No. of Tutorial contact hours:

Course Outcomes (CO):
At the end of this course, students will be able to

CO1: Identify the value system in different religions and understand their basic philosophy required for global citizenship.
CO2: Understand the meaning of spirituality.
CO3: Analyze the morals and ethics in different religious scriptures and learn from the life stories of Gurus, Mystics, Saints and Philosophers.
CO4: Explain the need for inter-religious dialogue and apply the same in relation to social change.
CO5: Develop an attitude of care and empathy for all and the environment.

Course Content:

Module No.	Module Name	Topic(s)	Description	No of Hours allotted	Marks allotted	Associated CO
I	Academic Study of Religion	• Religion, a Global Human Activity • Religion in Indian Education System • Essentials of Religion and Spirituality	Overview and Motivation	4	20%	CO1, CO2
II	The Global Religious Landscape	• Hinduism • Islam • Christianity • Buddhism • Jainsim • Sikhism • Zoroastrianism	A Study of Major Religious Groups	4 4 4 1 1 1 1 16	40%	CO1, CO2, CO3
III	Religious Pluralism and Dialogue	• Rationale for Global Spread of Religious Diversity • The Importance of Inter-religious Dialogue for Global Citizenship • Different Kinds of Dialogue	Inter-Religious Dialogue	8	30%	CO4
IV	Reflections			2	10%	CO5

Suggested Readings

- Romus, D. John (2023). *Religious Studies for Global Citizenship: Foundation Course*, St. Xavier's University, Kolkata.
- Kassam, M. (Ed.). (2017). *The Religions of India : A Microcosm of World Religions.* Manohar Publications, India.
- Gaus, R. (2021). Global (Citizenship) Education as inclusive and diversity learning in Religious Education. *Journal of Religious Education*, *69*(2), 179-192.
- Alles D., Gregory (2010). *Religious Studies: A Global View.* Routledge, UK (1st ed.).
- Dalal, R. (2014). *The Religions of India: A Concise Guide to Nine Major Faiths*. Penguin, India.
- Cavallin, C., Sander, Å., Sitharaman, S. (2020). *The Future of Religious Studies in India*. Routledge, India (1st ed.).
- Raj S.J., J. Felix (2022). *Tides: Story Bank.* St. Xavier's University Kolkata Alumni Association,
  Kolkata.
- Raj S.J., J. Felix (2020). *Waves: Story Bank.* St. Xavier's University Kolkata Alumni Association, Kolkata.

CO-PO Mapping:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	M		H	H	H		H
CO2	H		H	H			H
CO3	M		H	H	H		H
CO4	M	M	H	H			H
CO5			H	H	M	H	H

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

Course Name: Indian Literature in English Translation
Course Code:
Credit: 3
Semester: 1
Nature of the Course: Multidisciplinary Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 15

Course Description: This course aims to introduce students to the rich and diverse landscape of Indian literature through selected works translated into English. By exploring the works of prominent Indian authors from different regions and languages, students will gain insights into the cultural, social, and historical dimensions of India. Through close reading and analysis of these works, students will examine themes such as social issues, gender dynamics, identity, tradition, and modernity. Discussions will delve into the nuances of the translations and the cultural context of each literary piece. Additionally, students will be encouraged to explore the works from both a literary and socio-cultural perspective.

Course Outcomes

PO 1 PO 2	CO 1 - Understanding the Indian literary tradition through a detailed historical overview	BL 1 and 2
PO 1 PO 2 PO 3	CO 2 - Analyzing the anglophone culture in India and its literary application in translating vernacular texts	BL 3 and 4
PO 1 PO 3	CO 3 - Examining key concepts, issues and contexts in Indian literary texts with respect to Western models	BL 3 and 4
PO 1 PO 7	CO 4 - Evaluating the critical meaning of the texts by applying Indian epistemological methods	BL 4 and 5
PO 1 PO 4 PO 7	CO 5 - Creating new subjective interpretations and understanding the relevance, literary appeal of Indian literature in a period of globalization	BL 6

Module	**Details**	**Credits**
Module 1: Hindi literature in English translation	i. Premchand, "The Chess Players [Shatranj Ke Khiladi]" or "Idgah" ii. Nirmal Verma, "Dilli ki Galiyan (The Streets of Delhi)" or "Ek Chitthi Aur Maran (A Letter and Death)" iii. Phanishwarnath Renu, "Lal Paan ki Begum"	1

	iv. Krishna Sobti, "Nafisa" Any two stories to be taught	
Module 2: Bengali literature in English translation	i. Rabindranath Tagore, "Hungry Stones" or "The Parrot's Tale" ii. Sarat Chandra Chattopadhyay, "Mahesh," "Biraj Bou," "Pather Dabi" (any one) iii. Mahasweta Devi, "Stanadayini" or "Dhouli" iv. Ashapurna Devi, "Bolai" or "Patni or Preyoshi" Any two stories to be taught	1
Module 3: Other Indian literatures in English translation	i. Ambai [C. S. Lakshmi] (Tamil), "The City Rises from the Ashes" or "The Squirrel" ii. Fakir Mohan Senapati (Odia), "The Patent Medicine" or "Rebati" Any two stories to be taught	1

Reading List

Basu, Tapan, Mahanand, Anand et al, *Reflections on the Translation of Dalit Literature from the Regional Languages into English*, (Orient Blackswan, 2014)

Prasad, G.J.V and Gerardin, Cecil, *India in Translation, Translation in India* , (Bloomsbury India, 2019).

Kothari, Rita. *Translating India: The Cultural Politics of English*, (Routledge India, 2003).

Tharu, Susie and K. Lalita, Selections from *Women Writing in India: 600 B.C to the Present* (Oxford India Paperbacks, 1997).

CO-PO Mapping

	BL	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
CO 1	1, 2	H	M					
CO 2	3, 4	H	M	L				
CO 3	3, 4	H		L				
CO 4	4, 5	H						M
CO 5	6	H			H			H
		15/5	4/2	2/2	3/1			5/2
		3	2	1	3			2.5

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO- PO Attainment = 11.5/5 = 2.3

Course Name: Introductory Macroeconomics
Course Code:
Credit: 4
Semester: 2
Nature of the Course: Discipline Specific Core
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objectives: (CO)
CO1: The students will be able to comprehend the basic concepts of macroeconomics, which deals with the aggregate economy. (BL1)

CO2: Students will be able to explain the preliminary concepts of determination and measurement of national income and other macroeconomic aggregate variables like savings, investment, money, inflation, balance of payments, etc. (BL2)

CO3: Students will be able to explain the preliminary theories of income fluctuations in the short run (BL3)

CO4: Students will be able to analyze different economic policies and its limitations. (BL4)

CO5: Students will be able to evaluate real life macroeconomic issues and develop their own understanding about working of an economy. (BL5 & BL6)

Course Content:

Module No.	**Module Name**	**Topic**	**No. of Lecture Hours allotted**	**Marks allotted**	**Associated CO**
1.	Introduction to Macroeconomics and National Income Accounting	What is Macroeconomics? Measurement of GDP through various approaches. National income accounting in closed and open economy Real and nominal GDP, Price indices	9	15%	CO1, CO2
2.	The closed-economy in the short run: Goods Market	Goods market equilibrium, Simple Keynesian Model, Multiplier Introduction to classical macroeconomics Keynes vs classics	18	30%	CO1, CO3
3.	Money	Functions of money; quantity theory of money; demand for	12	20%	CO1, CO2

		money; determination of money supply and demand; credit creation			
4.	The closed economy in the short-run: Goods and Money Market	Goods market equilibrium and IS curve Money market equilibrium and LM curve Equilibrium in goods and money market Fiscal and Monetary Policies	21	35%	CO3, CO4, CO5

Suggested Readings:

Abel, A.B., & Bernanke, B. (2017). *Macroeconomics*, (9th ed.). Pearson. New York

Blanchard, O. & Johnson, D.R. (2013). *Macroeconomics*, (6th ed.). Pearson Prentice Hall, Delhi

D'Souza, E. (2008). *Macroeconomics*. Pearson Education. Delhi

Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics*, (13th ed.). McGraw Hill Education. New York

Froyen, R.T. (2013). *Macroeconomics: Theories and Policies*, (10th ed.). Pearson Education. Delhi

Ghosh, C., & Ghosh, A. (2011). *Macroeconomics*. PHI Publishers. New Delhi.

Mankiw, N.G. (2016). *Macroeconomics*, (9th ed.). Worth Publishers. New York

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	H	M					
CO_2	H		M				M
CO_3	H						H
CO_4	M			M			H
CO_5	H	M					H
Total	2.8	2	2	2			2.25

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.21

Course Name: Mathematics I
Course Code:
Credit: 4
Semester: II
Nature of the Course: Minor/ Elective, Track A (Statistics)
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objective: (CO)
CO1: Students will be able to identify and examine the basic concepts of Real analysis. (BL1)

CO2: Students will be able to explain the concepts related to Set Theory, Real Number System etc. (BL2)

CO3: Students will be able to apply various mathematical concepts and solve mathematical problems. (BL3)

CO4: Students will be able to analyze the concepts related to real number, series, sequence, differentiability, and continuity, etc. (BL4)

CO5: Students will be able to integrate various mathematical concepts and develop and understanding about solving mathematical problems. (BL5 & BL6)

Course Content:

Module No.	**Module Name**	**Topic**	**No. of Lecture Hours allotted**	**Marks Allotted**	**Associated Course Learning Outcome (CLO)**
1.	Set, Function and Relations	Set Theory & Relations; Real valued functions defined on set	9	15%	CO1, CO2
2.	Introduction to Real number system	The natural numbers, Integers, Rational Numbers. Peano's Axiom, the well ordering principle, the Archimedean property, open and closed sets, countable and uncountable sets, bounded set, supremum and infimum. Least upper bound axiom or completeness axiom. Archimedean property and density property, Symbols $+\infty$ and $-\infty$. Symbols of intervals	12	20%	CO3, CO4
3.	Series and Sequence	Bounds, Limits, Convergence & non-convergence of sequences. Operations on limits, Cauchy convergence criterion for sequences, Sandwich rule, Cauchy's theorem on limits (statements), monotone sequences and their	15	25%	CO3, CO4, CO5

		convergence (monotone convergence theorem without proof). Limits of some important sequences. Infinite series of real numbers: Convergence, divergence, Cauchy's criterion of convergence. Tests of convergence – Cauchy's condensation test. Root test, Kummer's test. Statements of Ratio Test, Raabe's test, Logarithmic test and Gauss's test. Simple Problems.			
4.	Continuity and Differentiability	Definition, graphical interpretation of continuity, discontinuous functions, types of discontinuity, elementary properties on continuous functions (no proofs), intermediate value property (Bolzano's theorem of continuity, intermediate value property, fixed-point theorem (only statements, no proofs) Concept of differentiability and differential: Chain rule, sign of derivative. derivability, relation between continuity and derivability, standard formula and rules for differentiation, implicit and parametric forms, geometric interpretation of a derivative, intermediate value property of derivatives. Successive differentiation, Leibnitz's theorem. Darboux theorem, Rolle's theorem, Mean Value theorems, Taylor's theorem with Lagrange's and Cauchy's forms of remainder, Taylor's series, Maclaurin's series of sin x, cos x, ex, log(l+x), (l+x)m	24	40%	CO3, CO4, CO5

Suggested Readings:

Bartle, R. G., & Sherbert, D. R. (2000). *Introduction to real analysis* (4th ed.). New York: Wiley

Trench, W. F. (2003). *Introduction to real analysis*. Prentice Hall/Pearson Education

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	M						M
CO_2	H						M
CO_3	H						M
CO_4	H						M
CO_5	H						M
Total	2.8						2

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.4

Course Name: Introduction to Corporate Finance
Course Code:
Credit: 4
Semester: II
Nature of the Course: Minor/ Elective, Track B (Finance)
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objective: (CO)

CO1: Develop an understanding of financial statements, cash flow statements, and standardised financial statements for evaluating the financial performance of firms. (BL1)

CO2: Apply ratio analysis and financial statement interpretation techniques to assess liquidity, profitability, solvency, and operational efficiency of firms. (BL2)

CO3: Analyse investment decisions using capital budgeting techniques such as Net Present Value, Internal Rate of Return, Payback Period, and project evaluation methods. (BL3)

CO4: Understand theories of capital structure, including the Modigliani–Miller theorem, corporate taxation, and the determinants of financing decisions under different market conditions. (BL4)

CO5: Evaluate the causes and implications of financial distress, debt overhang, and market fragility, and analyse the role of net worth and leverage in financial stability. (BL5&6)

Module Number	Module Name	Topics	Marks allotted	No of lecture hours allotted	Appropriate CO
I	Financial Statement and Ratio Analysis	Cash Flows and Financial Statements, Standardised Financial Statement,	25%	15	CO1, CO2
III	Capital	Net Present	25%	15	CO2, CO3

	Budgeting	Value and other investment criteria, Capital Investment Decisions, Project Analysis and evaluation			
III	Capital Structure	Capital Structure and basic concepts: Modigliani - Miller theorem and the financial structure puzzle; Corporate tax and personal tax;	25%	15	CO3, CO4
IV	Financial Distress	Limits to debt and cost of financial distress of a firm, Role of net worth in determining the fragility of financial markets.	25%	15	CO4, CO5

References:

Berk, J. B., Harford, J. V. T., DeMarzo, P. M., Stangel, D., & Marosi, A. (2019). *Fundamentals of corporate finance*. Pearson Education Canada.

Brealey, R. A., Myers, S. C., & Allen, F. (2011). *Principles of corporate finance* (10th ed.). McGraw-Hill.

Freixas, X., & Rochet, J.-C. (2008). *Microeconomics of banking* (2nd ed.). MIT Press.

Kevin, S. (2006). *Portfolio management*. Prentice Hall India.

CO/PO Mapping:

CO/PO Mapping	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**
CO1	H	M	H			H	
CO2	H	M					
CO3	M		M		M		
CO4	M			M	H	M	
CO5	H	H					H
Total	2.9	2.3	2.5	2	2.5	2.5	3

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.65

Course Name: Programming for Data Science-I

Course Code:

Credit: 4
Semester: II
Nature of the Course: Minor/ Elective, Track C (Data Science)
No. of Lecture hours: 0
No. of Practical contact hours: 45

Course Objectives:

CO1: Understand and apply basic programming concepts using C/C++ for computational tasks.
CO2: Write C/C++ programs to solve mathematical and statistical problems.
CO3: Use R for data visualization, descriptive statistics, and exploratory data analysis.
CO4: Perform correlation and regression analysis using R on real-world datasets.
CO5: Analyze categorical data and statistical distributions using R.
CO6: Develop problem-solving skills by implementing computational techniques in C/C++ and R.

Module No.	Module Name	Chapter Topic	Marks Allotted	No of Lecture Hours	CO
I	Basics of Programming in C/C++	Introduction to programming concepts, Syntax and structure of C/C++. Data types, Variables, Operators, and Expressions. Control flow statements: if-else, for, while, do-while loops. Functions.	15	25%	CO1

II	Computational Problems Using C/C++	Prime number checking, Fibonacci series, Factorial computation. Computation of summary statistics (mean, median, standard deviation). Matrix operations: Addition, multiplication, and transposition. Numerical methods: Finding roots of equations using iterative methods (Bisection, Newton-Raphson method).	15	25%	CO2, CO6
III	Introduction to R for Data Science	Basics of R: Syntax, data structures (vectors, matrices, data frames, lists). Importing, exporting, and manipulating datasets. Random sampling and basic probability simulations. Graphs and plots: Histogram, boxplot, scatterplot, line plots.	15	25%	CO3
IV	R for Statistical Analysis	Descriptive statistics: Mean, median, variance, standard deviation, quantiles Correlation and regression analysis using R Analysis of categorical data (contingency tables, bar charts, mosaic plots) Introduction to probability distributions in R: Binomial, Normal, Poisson	15	25%	CO4, CO5

Suggested Readings:

Text Books:

1. Balagurusamy, E. (2011): *Programming in ANSI C*, 6th Edn. McGraw Hill Education, India.

2. Crawley, M.J. (2013): *The R Book*, 2nd Edn. Wiley, UK.
.

Reference Books:

1. Kernighan, B.W. and Ritchie, D.M. (1988): *The C Programming Language*, 2nd Edn. Prentice Hall, USA.

2. Venables, W.N. and Ripley, B.D. (2002): *Modern Applied Statistics with S*, 4th Edn. Springer, USA.

3. Ross, S.M. (2014): *Introduction to Probability and Statistics for Engineers and Scientists*, 5th Edn. Academic Press, USA.

4. Chambers, J.M. (2008): *Software for Data Analysis: Programming with R*, Springer, USA.

Teaching Pedagogy:

S. No.	Description	Used (Yes/No)
1	Lecture	Yes
2	Discussion/Demonstration	Yes
3	Case Study	Yes

4	Test/Assignment	Yes
5	Student Seminars/Presentation	Yes

CO/PO Mapping:

CO/PO Mapping	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**
CO1	H	M	H	H			H
CO2	H	M		H		H	
CO3	H		M		M		
CO4	M			M	H	M	M
CO5	H	H	H		H		H
Total	2.9	2.5	2.8	2.7	2.5	2.5	2.8

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.9

Course Name: Child Development and Education
Course Code:
Credit: 3
Semester: 2
Nature of the Course: Multidisciplinary Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 15

Course Outcome:

After completing this course, students will be able to:

CO1: Describe the key theories and frameworks of childhood development**.**

CO2: Discuss the physical, cognitive, social, and emotional development of children from infancy through early childhood.

CO3: Discover and **explain** the key concepts and theories of learning and its relationship with Development**.**

CO4: Appraise the role of play in children's development and learning**.**

CO5: Plan and **compare** the effective instructional strategies and educational approaches for young children**.**

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
1	Introduction to Child Development and Education	Growth and Development : Meaning, Concepts and Characteristics, Developmental Influences Concept of childhood: Theories of childhood development – Psychoanalytic, Erikson, Vygotsky and Piaget	**15**	**30**	**CO1, CO4**
2	Dimensions of Individual Development	Physical development and motor skills, Cognitive development and language acquisition, Social and Moral Development: Emotional development and attachment	**15**	**35**	**CO2**
3	Childhood Education Approaches and Current	Learning – concept, characteristics, learning process, learning curve. Theories of Learning -	**15**	**35**	**CO3, CO4, CO5**

	Issues	Trial and Error, Classical Conditioning. Transfer of Learning - Concept, types, educational implications. Relationship between Development and Learning, Play-based learning and its benefits, Effective instructional strategies for young children			

Suggested Readings:

1. Mitchell, P., and Ziegler, F. (2013). Fundamentals of Developmental Psychology. Routledge.
2. Feldman, R. S. (2015). Discovering the Life Span. Pearson.
3. Harris, M. (2008). Exploring Developmental Psychology: Understanding Theory and Methods
4. Berk, L. E. (2018). Development Through the Lifespan (7th Edn). Pearson.
5. Santrock, J. (2019). Life-Span Development (17 th Edn). McGraw-Hill Education.
6. Papalia, D. E.,Olds, S. W.,and Feldman, R. D. (2009). Human Development(11 th Edn.). McGraw-Hill Education.

CO/PO Mapping for Child development and education:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	
CO1	H	M	L	L			H	
CO2	H	M	M	L			H	
CO3	H	H	M				M	
CO4	H	M	M				L	
CO5	H	H	H	M	M		L	
Total	15/5 = 3	12/5 = 2.4	10/5 = 2	4/3= 1.3	2/1 = 2		10/5 = 2	12.7
	Total CO score as per mapping							2.11

Course Name: Communicative English II
Course Code:
Credit: 2
Semester: 2
Nature of the Course: Ability Enhancement Course (AEC)
No. of Lecture hours: 30
No. of Tutorial contact hours:

Course description: The course is designed to introduce the students to a study of literature and thereby improve their language-use, and writing skills. Use of Business English which includes writing of formal letters, notice, agenda, report and proposal is used as a means to improve students' ability to communicate effectively in the English language in a professional workspace. Soft skills are also developed by focussing on group discussions and interviews.

Course Objectives:

PO 1 PO2	CO 1 - To understand the basic methods of reading and comprehending a passage to enable students to identify main ideas and draw relevant inferences	BL 1 and 2
PO 1 PO 2 PO 7	CO 2 - To analyze the role of communication in a professional and personal space and develop an interactive ability	BL 3 and 4
PO 2 PO 3 PO 7	CO 3 - To examine the need to write formal business letters and emails using appropriate vocabulary and develop advanced communication skills	BL 4
PO 3 PO 7	CO 4 - To evaluate methods of group discussion and mock interviews to prepare the students for real life situations	BL 5
PO 2 PO 3 PO 7	CO 5 - To create effective communicators with the ability to express themselves in the workplace and elsewhere	BL 6

Course Content

Module	**Credits (Total鈥2)**
Module 1 - Reading Comprehension A. Skimming and scanning, identifying main ideas, drawing inferences (Related texts should be selected by the concerned faculty member of the department for practicing comprehension skills)	0.5
Module 2 - Business English A. Role of Communication in the business world - introduction B. Business letters C. Meetings - Writing Notice, Agenda, Minutes D. CV & Cover Letter E. E-mail F. Writing Reports - types (commercial) G. Writing Business Proposal	1
Module 3 - Soft Skills A. Skills of listening, speaking, reading & writing in theory. B. Group Discussion: Concept of a Group Discussion/Interview, Types of Group Interviews, Skills Evaluated in a GD, Methods to Adopt in a Group Discussion, Mock Group Discussions	0.5

Reading List

Raymond Murphy, *Intermediate English Grammar*, Cambridge University Press

Martin Hewings, *Advanced Grammar in Use*, Cambridge University Press

W. Stannard Allen, *Living English Structure (5th Edition)*, Pearson Publications

E. Sureshkumar and P. Sreehari, *Communicative English*, E. Orient Blackswan

Tony Lynch, *Study Listening*, Cambridge University Press

Jeremy Comfort, *Speaking Effectively*, Cambridge University Press

CO-PO Mapping

	BL	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
CO 1	1, 2	H	H					
CO 2	3, 4	M	H					H
CO 3	4		H	M				H
CO 4	5			M				H
CO 5	6		M	M				M
		5/2	11/4	6/3				11/4
		2.5	2.75	2				2.75

CO- PO Score= 10/4 = 2.5

Course Name: Statistical Analysis with R
Course Code:
Credit: 3
Semester: 2
Nature of the Course: Skill Enhancement Courses (SEC)
No. of Lecture hours: 15
No. of Practical contact hours: 30

Course Objective: (CO)
CO1: Students will be able to recognize topics in probability and statistics as applied to real life data (BL1)

CO2: Students will be able to translate conceptual issues of statistics into practical applications by using R. (BL2)

CO3: Students will be able to solve statistical problems by using R (BL3)

CO4: Students will learn to analyze data and illustrate their properties through data analysis and graphical interpretation using `R'. (BL4)

CO5: Students will learn to integrate different statistical concepts and summarize real life data by using 'R'. (BL5 & BL6)'

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
I	Introduction to R	Basics of R. Loading R and RStudio. Introducing R programming. Data types in R—Data structures in R—vectors, matrix, dataframe, table, etc. Mathematical and logical operations with R Conditional statements. Introduction to R graphics—ggplot2. Writing your own functions Generate automated reports giving detailed descriptive statistics and graphical analysis. .	5	33.3%	CO1, CO2

		Practical	10		
II	Data management with R	Learn how to load data, import data, code editing. Extraction of economic and financial data from RBI, IMF, World Bank, etc Reading data in R (file formats like csv, xlsx, dat, sas etc. Dplyr/tidyr package to manipulate and clean data. Exploratory data analysis and data visualization	5	33.3%	CO2, CO3, CO4
		Practical	10		
III	Basic Statistics & Regression Analysis with R	Simple analysis and create and manage statistical analysis projects. Descriptive statistics—mean, median, variance, skewness, kurtosis etc. Summarizing large data into basic descriptive statistics. Data simulations with R. Regression analysis with R—Simple and multiple regression—basic idea of OLS with R packages. Lmtest and other packages to understand regression results.	5	33.3%	CO3, CO4, CO5
		Practical	10		

Suggested Readings:

Braun, W. J., & Murdoch, D. J. (2021). *A First Course in Statistical Programming with R*. Cambridge University Press.

Gardener, M. (2012). *Beginning R: The Statistical Programming Language*. John Wiley & Sons.

Grolemund, G., & Wickham, H. (2017). *R for Data Science: Import, Tidy, Transform, Visualize and Model Data.* O'Reilly Media.

Hothorn, T., & Everitt, B. S. (2014*). A Handbook Of Statistical Analyses Using R*. CRC press.

Moore, D. S. (2009). *Introduction to the Practice of Statistics*. WH Freeman and company.

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	M						H
CO_2	M						H
CO_3	H						H
CO_4	H						H
CO_5	H						H
Total	2.6						3

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.8

Course Name: Principles of Microeconomics
Course Code:
Credit: 4
Semester: I
Nature of the Course: Minor
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objectives: (CO)
CO1: The students will be able to recognize the basic theories of how individuals and firms interact within markets, when markets fail, and how government policy may improve outcomes for society. (BL1)

CO2: The course is designed to develop an understanding of the framework that economists use to analyse choices made by individuals in response to incentives and to consider how these choices can also serve the social interest. (BL2)

CO3: Students will learn to apply the basic economic theory and principles to understand current microeconomic issues (BL3)

CO4: Students will develop thinking capabilities like an economist and the course will illustrate how microeconomic concepts can be applied to analyse real-life situations. (BL4)

CO5: Students will be able to evaluate public policies and can be able to formulate appropriate solution to address socio-economic issues. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks allotted	Associated CO
1	Introduction to Economics	Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.	9	15%	CO2, CO3, CO4
2	Demand and supply in the market	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, price elasticity of demand, calculating elasticity, determinants of price elasticity; Consumer surplus, producer surplus and welfare; taxation, price rationing, price floors;	15	25%	CO2, CO3, CO4, CO5

		market failure.			
3	Consumer Behaviour	Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, indifference curves, consumer choice, income and substitution effects.	24	40%	CO2, CO3, CO4, CO5
4	Production and Cost	The production process; short-run costs and output decisions; costs and output in the long run and the behaviour of profit-maximizing firms.	12	20%	CO2, CO3, CO4

Suggested Readings

Frank, R. H., & Cartwright, E. (2010). *Microeconomics and Behaviour*. McGraw-Hill. New York.

Lipsey, R., & Chrystal, A. (2011). *Economics*. Oxford University Press.

Mankiw, N. (2007). *Economics: Principles and applications*, (4th ed.). South Western.

Pindyck R. S., Rubinfeld D. L., & Mehta, P. L. (2009). *Microeconomics*, (7th ed.). Pearson Education India.

Samuelson, P., & Nordhaus, W. (2009). *Economics*. McGraw Hill.

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	H						
CO_2	H	M					M
CO_3	H		H				M
CO_4		H	M				M
CO_5	H	M		L			M
Total	3	2.67	2.5	1			2

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.23

Course Name: Understanding Poverty
Course Code:
Credit: 3
Semester: 1
Nature of the Course: Multi-disciplinary Course
No. of Lecture hours: 30
No. of Tutorial contact hours: 15

Course Objective: (CO)
CO1: Students will be able to identify the basic concepts related to poverty. (BL1)

CO2: Students will be able to classify the major issues, trends, and challenges related to poverty. (BL2)

CO3: Students will be able to explain the problem of poverty in a scientific manner. (BL3)

CO4: Students will be able to compare between various concepts of poverty (BL4)

CO5: Students will be able to evaluate various anti-poverty public policy and develop their own ideas about solving the problem of poverty. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
I	Introduction	What is poverty? Understanding current trends in poverty across globe; where do we stand in terms of the Millennium Development Goal (2000)?. Issues related to regional disparity in achieving poverty reduction targets. India's long battle and recent trend in poverty; state level performances in India.	9	20%	CO1, CO2
II	Poverty: Measurement issues	Who is poor? ; Measurement of Poverty; calorie and poverty line; Income as an indicator of poverty. Absolute and relative poverty; rural vs urban poverty; HCR, PGR as measurement of poverty Multi-dimensional aspects of poverty; moving from money-metric to other non-monetary dimensions of poverty.	18	40%	CO3, CO4

III	Understanding policies to eradicate poverty	Assessment of several poverty alleviation programs across globe Poverty alleviation programs; India as a case study. Political Economy of poverty and policies to eradicate it.	18	40%	CO4, CO5

Suggested Readings:

Banerjee, A.V., Benabou, R., & Mookherjee, D. (Eds). (2006). *Understanding Poverty*. Oxford University Press. New York.

Ray, D. (2009). *Development Economics*. Oxford University Press. New Delhi.

Sen, A. (2000). *Development as Freedom*. Oxford University Press. New Delhi.

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	M	M	M		L		M
CO_2	M	M	M		L		M
CO_3	M	M	L	M	M		H
CO_4	H			M	M		H
CO_5	H			H	H		H
Total	2.4	2	1.67	2.33	1.8		2.6

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.13

Course Name: Principles of Macroeconomics
Course Code:
Credit: 4
Semester: I
Nature of the Course: Minor
No. of Lecture hours: 45
No. of Tutorial contact hours: 15

Course Objectives: (CO)
CO1: The students will be able to comprehend the basic concepts of macroeconomics, which deals with the aggregate economy. (BL1)

CO2: Students will be able to explain the preliminary concepts of determination and measurement of national income and other macroeconomic aggregate variables like savings, investment, money, inflation, balance of payments, etc. (BL2)

CO3: Students will be able to explain the preliminary theories of income fluctuations in the short run (BL3)

CO4: Students will be able to analyze different economic policies and its limitations. (BL4)

CO5: Students will be able to evaluate real life macroeconomic issues and develop their own understanding about working of an economy. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks allotted	Associated CO
1.	Introduction to Macroeconomics and National Income Accounting	What is Macroeconomics? Concepts of GDP and National Income. Measurement of GDP through various approaches. National income accounting in closed and open economy Real and nominal GDP; Limitations of the concept of GDP	9	15%	CO1, CO2
2.	Goods Market and Determination of Equilibrium Income	Goods market equilibrium, Aggregate expenditure, consumption, investment, equilibrium GDP— Simple Keynesian Model, Multiplier	18	30%	CO1, CO3
3.	Money in a Modern	Functions of money;	12	20%	CO1, CO2

	Economy	quantity theory of money; demand for money; determination of money supply and demand; credit creation			
4.	Combining the Goods and Money Market	Goods market equilibrium and IS curve Money market equilibrium and LM curve Equilibrium in goods and money market Fiscal and Monetary Policies	21	35%	CO3, CO4, CO5

Suggested Readings:

Abel, A.B., & Bernanke, B. (2017). *Macroeconomics*, (9th ed.). Pearson. New York.

Blanchard, O. & Johnson, D.R. (2013). *Macroeconomics*, (6th ed.). Pearson Prentice Hall, Delhi .

Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics*, (13th ed.). McGraw Hill Education. New York.

Froyen, R.T. (2013). *Macroeconomics: Theories and Policies*, (10th ed.). Pearson Education. Delhi.

Mankiw, N.G. (2016). *Macroeconomics*, (9th ed.). Worth Publishers. New York.

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	H	M					
CO_2	H		M				M
CO_3	H						H
CO_4	M			M			H
CO_5	H	M					H
Total	2.8	2	2	2			2.25

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.21

Course Name: Issues in Indian Economy
Course Code:
Credit: 3
Semester: 2
Nature of the Course: Issues in Indian Economy
No. of Lecture hours: 30 Hours
No. of Tutorial contact hours: 15

Course Objective: (CO)
CO1: Students will be able to identify the major economic trends in India with regard to major indicators like growth; employment; inflation; unemployment and others. (BL1)

CO2: Students will be able to understand the relative performance of Indian economy vis-a-vis rest of the world. (BL2)

CO3: Students will be able to explain the debate over growth versus development in Indian Economy (BL3)

CO4: Students will be able to analyze India's economic policies and the changes there in from planning to post liberalization period. (BL4)

CO5: Students will be able to evaluate the performance of the Indian economy and develop their own understanding about the problems faced by the Indian economy. (BL5 & BL6)

Course Content:

Module No.	Module Name	Topic	No. of Lecture Hours allotted	Marks Allotted	Associated CO
1	Trends in Indian Economy	Indian Economy since independence : Trend in major economic indicators Structural transformation in Indian Economy Indian economy from the perspective of global economy : a comparative analysis	15	33.33%	CO1, CO2
2	Issues in Economic Growth vs Development	India's growth story: where do we stand now? India's performance in-terms of poverty, inequality and HDI. Trend in Education; health : Analysing India's performance from Sen's capability approach	15	33.33%	CO2, CO3, CO4, CO5
3	India's economic policies since	India's economic policies from 1950-	15	33.33%	CO2, CO3, CO4, CO5

	independence	1991 New economic policies ; post economic liberalization Understanding economic policies from the perspectives of political economy			

Suggested Readings:

Dreze, J., & Sen. A. (2013). *An Uncertain Glory: India and its Contradictions*. Penguin. New Delhi

Jha, R. (Ed.). (2008). *The Indian Economy Sixty Years After Independence*. Springer.

Kapila, U. (2022). *Indian Economy since Independence*, (33rd ed.). Academic Foundation. New Delhi

CO-PO Mapping:

CO/PO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7
CO_1	M	M		M			M
CO_2	M	M		M			M
CO_3	M	M		M	M		H
CO_4	H			M	M		H
CO_5	H			H	H		H
Total	2.4	2		2.25	2.33		2.6

*H/M/L: High/Medium/Low level of mapping (H=3; M=2: L=1)

CO Score: 2.32