

First Semester

S.No.	Course Code	Course Name	Credits
1	MGT 201	Principles of Management	3
2	ECO 201	Microeconomics	3
3	MTH 203	Applied Mathematics for Business	3
4	ENG 204	Business English	3
5	IT 205	Fundamentals of Information Technology	3
Total			15 Credits

MTH 203: Applied Mathematics for Business

Credits: 3

Lecture hours: 48

Course Objectives

The purpose of this course is to help students understand, appreciate and perform mathematical analysis in the field of business and finance. The course introduces students the mathematical techniques through examples and applications in solving business and financial problems.

Course Description

The course introduces mathematical techniques through example to apply them to finance and business problems. This course covers straight lines and linear functions and their applications in market analysis. Similarly, it covers up simultaneous equations and quadratic equations which are applicable to different business settings. Students will also be taught on how to use linear programming, decision making techniques and financial mathematics to solve the finance and business related problems. It also focuses on derivatives and anti-derivatives with an emphasis on their applications in the field of business and finance.

Course Details

Unit 1 Straight lines and Functions

4 LHs

Straight lines, Functions, Applications: demand, supply, cost, revenue, elasticity of demand, supply and income, Budget and cost constraints, Method of least squares.

Unit 2 Simultaneous Equations and Quadratic Equations

8 LHs

Simultaneous linear equations, Equilibrium and break even, Consumer and producer surplus, the IS-LM model, Graphs of quadratic function, Quadratic equations, Applications to business and finance.

Unit 3 Linear Programming Problems and Decision Making

12 LHs

Linear inequalities in two variables only, Linear programming: Graphical method, Simplex Method (two variables only), Decision making techniques under the conditions of certainty, uncertainty and risk.

Unit 4 Financial Mathematics

8 LHs

Concept of simple interest, Compound interest, Annual percentage rates, Depreciation, Net present value and internal rate of return, Annuities, Debt repayments: sinking funds, Relationship between interest rates and the price of bonds, Cost benefit analysis.

Unit 5 Differentiation and Applications

8 LHs

Slope of a curve and differentiation, Rules of differentiation, Differentiation and marginal analysis, Optimization for functions of one variable, Applications of maximum and minimum points, Concept of partial derivatives.

Unit 6 Integration and Applications

8 LHs

Concept of Anti-derivatives, Rules of integration: algebraic, exponential and logarithmic functions, Integration by parts, Evaluating definite integral, Application of integration in business and finance.

References

Frank S. Budnick, *Applied Mathematics for Business, Economics, and the Social Sciences*, McGraw-Hill Ryerson, Limited.

G. S. Monga, *Mathematics for management and economics*, Vikas Publishing House Pvt. Ltd., New Delhi.

Teresa Bradley, *Essential Mathematics for Economics and Business*, John Wiley & Sons Ltd.

Vassilis C. Mavron, Timothy N. Phillips, *Mathematics for Economics and Finance*, Springer-Verlag.

ENG 204: Business English

Credits: 3
Lecture hours: 48

Course Objectives

The main objectives of the course will be to enable students to develop their overall language skills in the fields of business and management; and to provide them with opportunities to express business concepts both verbally and in writing by reformulating them in their own words while summarizing, analysing, criticizing and discussing ideas. The specific objectives are to enable students to:

- develop standard writing skills and evaluate and interpret business text materials;
- acquire a range of intellectual and interpersonal skills;
- explain the materials logically, orally or on paper;
- work independently and as a member of a group; and
- present with language and concepts of business and management found in books, journals, newspapers and magazines and on websites.

Course Description

English for Business Studies is a comprehensive textbook designed to help develop students' overall skills in language works in business environment. The course from *Patterns for College Writing* functions as a mini rhetoric and is designed to cover the major English language skills. Prescribed lessons are based on the course related textbooks and the class teachers may use other supportive course materials to suit the class purposes. The course is highly participatory in essence and thus active class work is desirable. Basics of research writing technique such as quoting and paraphrasing should be taught right from the beginning.

Course Contents

The prescribed course is highly interdisciplinary in nature which helps students work from different perspectives in general and in business environment too. The following lessons are selected for the textbooks.

Module 1

32 LHs

From *English for Business Studies* the following chapters are prescribed.

Management

1 Management 2 Work and motivation 3 Managing across cultures 4 Women in business

Production

5 The different sectors of the economy 6 Production

Marketing

7 Products 8 Marketing 9 Advertising

Finance

10 Banking 11 Venture capital 12 Bonds 13 Stocks and shares 14 Market structure and competition 15 Takeovers

Economics 16 Corporate social responsibility 17 Economics and ecology

Module 2

16 LHs

From *Patterns for College Writing*, the following chapters are prescribed.

Introduction: How to use this book

Henry L. Gates Jr., "What's in a Name?"

Responding to an Essay

The Writing Process: Reading to Write 2. Invention 3. Arrangement 4. Drafting and Revising 5. Editing and proofreading

Maria Hinojosa, *A Supreme Sotomayor: How My Country Has Caught Up to Me*

Narration: What is Narration? Structuring a Narrative Essay

- Sandra Cisneros: *Only Daughter*

Description: What is Description? Structuring a Descriptive Essay

- E. B. White: *Once More to the Lake*

Cause and Effect: What is Cause and Effect? Structuring a Cause and Effect Essay

- Lawrence Otis Graham: *The "Black Table" is Still There*

Argumentation: What is Argumentation? Structuring an Argumentative Essay

- Thomas Jefferson: *The Declaration of Independence*

Using and Documenting Sources

- Paraphrasing, Summarizing, and Using Quotations, Avoiding Plagiarism
- Using APA Style to Cite and Document Sources

Prescribed Text Book:

1. Ian Mackenzie, *English for Business Studies*, 3rd ed. (2014 or later). Cambridge U. Press
2. G. Laurie Kirszner & Stephen R. Mandell. *Patterns for College Writing A Rhetorical Reader and Guide*, 12th ed. New York: St. Martin's Press.

References:

1. R. Mary Colonna, & J. E. Gilbert: *Reason to Write* (Advanced), Oxford U. Press
2. *Oxford /Cambridge Dictionary* latest edition

Methods of Teaching

Teaching approaches will include lectures, demonstration, pair work, small group work and individual research and presentations. The teaching method will be mostly student-centered and activity-oriented. The teacher's book will support the faculties practically in conducting classes. (Class Lecture: 45 hrs. and Assessment: 3 hrs.)

Evaluation Procedure:

a. Internal Evaluation: 40 Marks

Class activities: Participation/Oral presentation/Quizzes:	10 Marks
Written assignments:	15 Marks
Term test:	15 Marks

b. External Evaluation: 60 Marks (as per Tribhuvan University's guidance and exam rules)

IT 205: Fundamentals of Information Technology

Credits: 3
Lecture hours: 48

Course Objectives

The main objective of this course is to provide fundamental concepts of computers and information technology, and its applications in real world business. Students are expected to learn how to use the MS word, MS excel, MS PowerPoint, Outlook and internet.

Course Description

This course covers the basic concepts of computers and information technology including introduction to computer, hardware, software, memory, input/output, data representation, database, networks and data communication, Internet, multimedia, computer security, financial information system and office package. This course requires lab works for which a guideline is presented at the end of this document. The course instructor is advised to focus lab works and evaluate the lab components during in-semester evaluation.

Course Details

Unit 1: Introduction to Computer

3 LHs

Introduction; Digital and Analog Computers; Characteristics of Computer; History of Computer; Generations of Computer; Classification of Computer; The Computer System; Application of Computers in real business.

Unit 2: Computer Hardware

9 LHs

Introduction; Central Processing Unit; Memory Unit; Microprocessor; Interconnecting the Units of a Computer; Memory Representation; Memory Hierarchy; CPU Registers; Cache Memory; Primary Memory; Secondary Memory including Magnetic Tape, Magnetic Disk, Optical Disk, Magneto-Optical Disk; Access Types of Storage Devices; How the Computer uses its memory; Input-Output Unit; Input Devices; Human Data Entry Devices; Source Data Entry Devices; Output Devices; I/O Port; Working of I/O System

Unit 3: Computer Software

4 LHs

Introduction; Types of Software; System Software; Application Software; Software Acquisition; Operating System (Introduction, Objectives of Operating System, Types of OS, Functions of OS including Process Management, Memory Management, File Management, Device Management, Protection and Security, User Interface) Examples of Operating Systems

Unit 4: Data Representation

4 LHs

Introduction; Number System: Binary, decimals, octal, hexadecimal; Conversion from Decimal to Binary, Binary to decimal, Hexadecimal to Decimal, Binary to Octal, Octal to binary, Hexadecimal to Binary; Binary Arithmetic.

Unit 5: Data Communication and Computer Network

4 LHs

Introduction; Importance of Networking; Data Transmission Media; Data Transmission across Media; Data Transmission and Data Networking; Computer Network; Network Types; Network Topology; Communication Protocol; Network Devices; Wireless Networking

Unit 6: The Internet and Internet Services

5 LHs

Introduction; Internetworking Protocol; The Internet Architecture; Managing the Internet; Connecting to Internet; Internet Connections; Internet Address; Internet Services; Uses of

Internet; Introduction to Internet of Things (IoT), Wearable Computing, and Cloud Computing, Introduction to E-commerce, E-governance, and Smart City, and GIS.

Unit 7: Fundamentals of Database

4 LHs

Introduction; Database; Database System; Database Management System; Database System Architectures; Database Applications.

Unit 8: Multimedia and Computer Security

5 LHs

Introduction; Multimedia - Definition; Characteristics of Multimedia; Elements of Multimedia; Multimedia Applications in business; Introduction to computer security; Security Threat and Security Attack; Malicious Software; Security Services; Security Mechanisms (Cryptography, Digital Signature, Firewall, Users Identification and Authentication, Intrusion Detection Systems); Security Awareness; Security Policy; importance of security in business.

Unit 9: Financial Information System (FIS)

5 LHs

Introduction, Feature of FIS, Personal Financial System, Organizational Financial Management, FIS and Organizational Decision Making Process, FIS and Organizational Decision Making Process, Application of FIS, Use of Financial Calculator, Financial Calculator: Ratio Analysis, Future value, Annuity, NPV and IRR, Retirement Planning, Amortized loan, Measuring Riskiness of Firm and Risk Comparison.

Unit 10: Office Package

5 LHs

Basic features of MS Word, MS excel, MS PowerPoint and Outlook.

Text Book:

Goel, A. *Computer Fundamentals*, Delhi: Pearson Education India.

Reference Books:

Norton, P. *Introduction to Computers*, 7th Edition, New Delhi: McGraw Hill Education.

Keyes, J. *Financial Services Information Systems (Best Practices)*, 2nd Edition, Auerbach Publications.

Bower, J., Schlosser, R. E. & Zlatkovich, C.T., *Financial Information Systems: Theory and Practice*, Allyn and Bacon publications.

Laboratory Works:

Students should have practical knowledge of different hardware components of computer, operating systems, Word Processors, Spreadsheets, Presentation Graphics, Database Management Systems, and Internet and its services. The laboratory work includes:

1. Demonstration of different hardware components of a computer.
2. Knowledge of different operating systems like Windows, Linux, and DOS; Working with folders; Adding and removing programs.
3. Knowledge of different features of word processors like creating, saving, opening, editing, formatting, and printing documents; Using page setup; Working with bullets and numbers; Working with tables, mail merge, macros, and table of contents; Inserting pictures; Checking spelling, thesaurus and grammar.
4. Knowledge of Spreadsheet features like workbooks and worksheets, functions and formulas, cell referencing, sorting, data validation, conditional formatting; creating charts.
5. Creating presentation slides; Adding animations; Inserting Charts, Graphics, Movies and Sound Clips.
6. Creating tables, query, reports, and forms; Understanding different data types.
7. Understanding Internet and its services like WWW and E-mail; Using search engine; managing web browsers

ECO 201: Microeconomics

Credits: 3
Lecture Hours: 48

Course Objectives

This module aims to develop students' understanding of the microeconomic concepts and theories in order to enhance their skill in analyzing business opportunities, market and risks.

Course Description

Microeconomics: concepts and uses. Theory of demand and supply: demand function, change in quantity demanded and change in demand, supply function: change in quantity supplied and change in supply, elasticity of demand and supply – concepts, degrees and measurements. Utility Analysis: cardinal vs ordinal utility and indifference curve analysis. Theory of production: Production function, laws of production. Cost and revenue curves. Pricing: Price and output determination under perfect competition, monopoly and monopolistic competition, concept of oligopoly. Factor pricing: rent (modern theory of rent) wages (marginal productivity theory), interest (loanable fund theory and liquidity preference theory) and profit (dynamic theory and innovation theory).

Course Details

Unit 1: Introduction to Microeconomics LHs 3

Meaning, Scope, Types, Uses

Unit 2: Theory of Demand and Supply LHs 6

Demand function

- Meaning and types
- Movement along a demand curve and shifts in demand curve

Supply Function

- Meaning and types
- Movement along a supply curve and shifts in supply curve

Concept of Elasticity of demand and supply

- Price elasticity of demand: degrees, measurement (percentage, total outlay, point and arc methods), uses in business decision making.
- Income elasticity of demand: degrees, measurement (percentage, arc and point methods)
- Cross elasticity of demand: types, measurement (percentage and arc methods)
- Price elasticity of supply: degrees, measurement (percentage, point and arc methods)

Measurement of elasticity

Unit 3: Theory of Consumer's Behaviour LHs 8

Cardinal vs ordinal utility

Indifference curve analysis

- Meaning, assumptions and properties
- Principle of MRS
- Consumer's equilibrium
- Price effect – derivation of PCC and demand curves for normal goods (substitutes and complements)

- Income effect – derivation of ICC and Engel curves for normal goods and inferior goods
- Substitution effect – Hicksian approach
- Decomposition of price effect into income and substitution effects – Hicksian approach
- Applications – tax and subsidy, income leisure choice of workers

Computations and Numerical assignments

Unit 4: Theory of Production

LHs 7

Concept of total, average and marginal product

Production function – meaning, types (short run and long run production function, Cobb-Douglas production function).

Law of variable proportions (explanation of three stages of production with reasons)

Isoquants

- Meaning, assumptions and properties
- Principle of marginal rate of technical substitution
- Optimal employment of two inputs (or least cost combination of two inputs)

Laws of returns to scale

- Explanation with table and diagram (using IQ)

Computations and Numerical assignments

Unit 5: Cost and Revenue Curves

LHs 8

Cost function

Various concepts of costs: opportunity cost, explicit and implicit costs, accounting and economic costs

Short run costs

- Behavior of short run total costs
- Behavior of average and marginal cost curves
- Relation between AC and MC, TVC and MC and AC and AFC and AVC

Long run costs

- Meaning
- Derivation of U-shaped and L-shaped LAC with reasons

Revenue

- Revenue under perfect competition
- Revenue under imperfect competition
- Relationship of Revenues (TR, AR and MR) with price elasticity of demand

Computations and Numerical assignments

Unit 6: Theory of Product Pricing

LHs 10

Profit maximization and equilibrium of a firm

- TR-TC approach (table and diagram)
- MR-MC approach (table and diagram)

Equilibrium price and output determination under perfect competition

- Meaning and characteristics
- Derivation of short run supply curve of a firm
- Short run equilibrium (firm and industry)
- Long run equilibrium (firm and industry)

Equilibrium price and output determination under monopoly

- Meaning and characteristics
- Short run equilibrium

- Long run equilibrium
- Meaning and conditions of price discrimination
- Degrees of price discrimination
- Equilibrium of firm under third degree discrimination

Equilibrium price and output determination under monopolistic competition

- Meaning and characteristics
- Short run equilibrium
- Long run equilibrium of a firm

Oligopoly

- Meaning and characteristics

Computations and Numerical assignments

Unit 7: Theory of Factor Pricing

LHs 6

Rent

- Concept of economic rent and its determination: modern theory of rent.

Wages

- Marginal productivity theory of wages

Interest

- Loanable funds theory of interest
- Liquidity preference theory of interest

Profits

- Dynamic theory of profits
- Innovation theory of profits

Computations and Numerical assignments

References

- Ahuja, H.C. *Advanced Economic Theory – Micro Economic Analysis*, New Delhi – S. Chand (Latest ed.)
- Browning and Browning (1994), *Microeconomic Theory and Applications*, New Delhi, Kalyani Publishers
- Case, Karl E. and Ray C. Fair, (2002), *Principles of Economics*, Singapore, Pearson Education
- Dwivedi DN (2003), *Microeconomics Theory and Applications*, Delhi, Pearson Education Pvt. Ltd.
- Dwivedi DN (2010), *Microeconomics Theory and Practice*, New Delhi, Tata McGraw Hill.
- Koutsoyanis, A (1979), *Modern Microeconomics*, London, Macmillan
- McConnell CR and S. Brue, (2002), *Economics : Principles, Problems and Policies*, New York, McGraw Hill.

MGT 201: Principles of Management

Credits:3
Lecture Hours: 48

Course Objectives

This module aims to impart the basic management knowledge, and skills to the students so as to enhance their managerial capabilities and enable them to apply in the practical field.

Course Description

Concepts and functions of management. Management perspective. Planning: meaning, classification, steps and tools. Planning premises. Decision making: meaning, types, conditions and process. Organizing: meaning, process, principles, and architecture. Authority and responsibility. Centralization, delegation and decentralization. Staffing. Emerging issues in organizing. Leading: meaning, qualities and styles. Individual differences and psychological contract. Introduction to groups. Concept of managerial ethics. Motivation: concept and techniques. Communication: meaning, process, types and barriers. Controlling: meaning, process and techniques. Quality. Total Quality Management. Issues in quality management. Organizational change and development.

Course Details

Unit 1: Introduction

LHs 4

Management: concepts, meaning and functions. Types of managers. Managerial roles and skills. Becoming a manager: role of education, experience and situation.

Unit 2: Perspectives in Management

LHs 8

Early development. Classical Perspective: scientific management, administrative management and bureaucracy. Behavioral Perspective: Hawthorne studies, human relations movement, and emergence of organizational behavior. Quantitative Perspective: management science and operations management. Integrating perspectives: systems and contingency perspectives. Emerging management issues and challenges.

Unit 3: Planning

LHs 7

Meaning. Levels of Planning: Strategic, Tactical and operational. Steps in Planning. Tools for planning. Planning premises. Pitfalls of planning. Improving planning. Decision Making: meaning, types and process. Decision making conditions – certainty, risk and uncertainty. Practical exercises on taking decisions including decision making using indicators.

Unit 4: Organizing

LHs 10

Meaning, process and principles of organizing. Organization Architecture: vertical differentiation – tall versus flat hierarchies, horizontal differentiation – functional structure, multidivisional structure, geographic structure, and matrix structure. Responsibility: establishing task and reporting relationships, creating accountability. Authority: line authority and staff authority. Delegation of authority. Centralization, Decentralization and Devolution: meaning, reasons, advantages and disadvantages. Emerging issues in organization design. Staffing: concept and importance.

Unit 5: Leading**LHs 8**

Meaning and qualities of leadership. Understanding Individual differences and psychological contract. Concept and types of groups. Leadership Styles: autocratic, democratic, and participative. Concept of managerial ethics. Motivation: concept, importance, and techniques. Communication: meaning, process, and networks. Concept of active listening. Types of communication, Barriers to effective communication.

Unit 6: Controlling**LHs 6**

Meaning, purpose, Process and types of controls. Essentials of effective control systems. Control tools and techniques. Quality: Concept and importance. Total Quality Management: concept, components, principles, tools and techniques. Emerging issues in quality management.

Unit 7: Organizational Change and Development**LHs 5**

Nature, forces, paradigm shifts and areas (structure, technology, business process and behaviors) of organizational change. Resistance to change. Overcoming resistance to change. Concept of Organizational Development

Addendum: At least one case will be administered at the end of each chapter. The students will also complete a project work and a few other assignments as specified by the faculty member.

References

- Charles W.L. Hill and Steven L. McShane, *Principles of Management*, Tata Mc-Graw-Hill Company, New Delhi.
- Griffin, Ricky W., *Management*. AITBS Publishers and Distributors, New Delhi.
- Hitt, M.A., J.S. Black and Porter, L.W., *Management*, Pearson Education, New Delhi
- Pant, Prem Raj, *Principles of Management*, Buddha Academic Publishers and Distributors Pvt. Ltd.
- Paudyal, Santosh Raj, Pradhan, Gopal Man and Bhandari, Kedar P. (2064), *Principles of Management*, Asmita Publication, Kathmandu.