# Tribhuvan University Faculty of Management Office of the Dean



Course detail of BIM (Bachelor of Information Management) 2<sup>nd</sup> Semester

# **Course Objectives**

The course seeks to enable students to

- explore communication theories and models to determine how to communicate effectively in business settings.
- develop awareness and skills of structuring information
- study different modalities of business communication
- make effective use of business etiquette with non-verbal communication skills
- identify different principles and approaches to oral and written communication in
- develop skills for professional presentations
- adapt to new ways of communication with the help of latest technology•
- understand and use appropriate style and tone in spoken as well as written texts
- be familiar with the language used in conducting meetings and prepare reports based on the discussion in the meetings
- write memos, letters, and other business communications
- apply formal structure and develop organization in writing memos, proposals, reports, and the like
- learn the art of using essential rhetorical techniques for developing effective communication.

#### **Course Description**

This course provides the principles of effective communication and methods of applying them in organizations. It provides an understanding of communication practices and prepares readers for their assignments in the corporate world. The course includes important topics like communication in general and business communication in particular, the communication process, interpersonal communication, oral communication, writing of proposals and reports, technology-enabled communication, and presentations among others. This course includes techniques for developing practical solutions to making communication in the business context more effective. This course seeks to enhance students' cross-cultural understanding and communicative competence in varied contexts. Special attention to be given to Nepali contexts.

The course consists of the following seven units:	
Unit 1. The Communication Process	
Unit 2. Business Communication	
Unit 3. Skills and Values in Business Communication	
Unit 4. Writing Electronic and Other Messages	
Unit 5. Oral Communication	
Unit 6. Visuals and Nonverbal Communication	
Unit 7. Communication in Career Planning	
Course Details	
I. The Communication Process	8 LHs
- Basics of communication	
- Theories and principles of communication	
- Communication methods, modes, and systems	
- Writing process	
- Importance of communication	
- barriers to communication	
II. Business Communication	8 LHs
- What is business communication?	
- History of business communication	
- Nature of communication	
- Why business communication?	
- Functions and importance of business communication	
- Components of business communication	
- Types of business communication	
III. Skills and Values in Business Communication	6 LHs
- Communication skills	
- Organizational communication skills	

- Interpersonal communication skills	
- Leadership and communication skills in leadership	
- Professionalism in business communication	
- Writing and listening skills	
- Ethical values	
- Cross-cultural sensitivities	
IV. Writing Electronic and Other Messages	10 LHs
- Memos	
- Notices	
- Letters	
- Emails	
- Blogs	
- Advertisements	
- Press releases	
- Business plans	
- Grants	
- Proposals	
- Reports	
V. Oral Communication	6 LHs
- Enhancing oral communication	
- Presentation strategies and soft skills	
- Telephone calls	
- Using nonverbal communication	
- Conversations and negotiations	
VI. Visuals and Nonverbal Communication	5 LHs
- Using visual aids	
- Pictures	
- Charts	
- Graphics	

- Planning and conducting a job search
- Résumés, references, and cover letters
- Group discussion and interview

#### **Teaching Method**

The suggested method of teaching is to engage students in practicing communication skills, especially in groups. It is desirable to take local examples and case studies to make the content alive and then lead students to the writing task, i.e. guide the students to practice specific skills of language knowledge necessary for communication in business. As far as possible, visits to business houses, short internships and arranging talks by leaders in the field will enhance students' knowledge and communicative competence. It is recommended to take examples from Nepali contexts as far as practicable.

#### **Evaluation**

The examinations will cover the materials specified in the course contents, and evaluate students' competence in the language skills including a range of tasks, and their ability to use English in a variety of business contexts with ease and accuracy.

#### **Recommended Readings**

Thapa, Anirudra. *Business Communication: Principles and Applications*. Kathmandu: Asmita, 2021.

Adhikari, Dharma, I. Hugh Holmes, Tika Lamsal, and Mike Sobiech. *Business Communication: Theory and Practice*. Kathmandu: Buddha Publications, 2020.

Oxford Advanced Learner's Dictionary of Current English. 10th ed., Oxford UP, 2020.

Guffey, Mary Allen, and Dana Loewy. *Essentials of Business Communication*. 11th ed., Cengage Learning, 2019.

Holmes, Hugh I. *English for Business Studies-I*. Buddha Publications, 2019.

Longman Business English Dictionary. 2nd ed., Longman, 2018.

Raman, Meenakshi, and Sangeeta Sharma. *Professional Communication*. 3<sup>rd</sup> ed., Oxford UP, 2017.

Bovee, C.L., and John Thill. Business Communication Essentials. 7th ed., Pearson, 2016.

Mukerjee, Hory Sankar. *Business Communication: Connecting at Work*. 2<sup>nd</sup> ed., Oxford UP, 2016.

Hartley, Peter, and Peter Chatterton. *Business Communication*. 2<sup>nd</sup> ed., Routledge, 2015.

Taylor, Shirley. *Communication for Business: A Practical Approach*. Pearson, 4<sup>th</sup> ed., 2015.

McKeown, Arthur. *Professional English in Use: Management*. Cambridge UP, 2011.

Bargiela-Chiappini, Francesca, *The Handbook of Business Discourse*. Edinburgh UP, 2009.

Raman, Meenakshi, and Prakash Singh. *Business Communication*. Oxford UP, 2006. Tourish,

Dennis, and Owen Hargie. *Key Issues in Organizational Communication*. Routledge, 2004.

Adair, J. *Effective Leadership: A modern guide to developing leadership skills*. Pan Books, 1986.

# Digital Logic

BIM 2nd Semester

Nature of the course: Theory + Practical

Credits: 3

Lecture Hours: 48

## **Course Description:**

This course familiarizes students with number systems, Boolean algebra, logic gates, simplification of Boolean functions, combinational and sequential logic, registers, counters and memory.

# **Course Objectives:**

The main objective of this course is to provide students both theoretical and practical knowledge of different concepts that are used in the design of digital systems.

#### **Course Contents:**

# **Unit 1: Binary Systems (6 Hrs.)**

Digital Computers and Digital Systems; Binary Numbers; Number Base Conversions; Octal and Hexadecimal Numbers; Complements; Binary Codes

# **Unit 2: Boolean Algebra and Logic Gates (6 Hrs.)**

Basic Definitions; Axiomatic Definition of Boolean Algebra; Basic Theorems and Properties of Boolean Algebra; Boolean Functions; Canonical and Standard Forms; Digital Logic Gates

#### **Unit 3: Simplification of Boolean Functions (8 Hrs.)**

The Map Method; Two- and Three-Variable Maps; Four-variable Map; Product of Sums Simplification; NAND and NOR Implementation; Don't-care Conditions

#### **Unit 4: Combinational Logic (13 Hrs.)**

Introduction and Design Procedure; Adders; Subtractors; Binary Parallel Adders; Encoders and Decoders; Multiplexers and Demultiplexers; Read-Only Memory (ROM); Programmable Logic Array (PLA)

#### **Unit 5: Sequential Logic (8 Hrs.)**

Introduction; Flip-Flops; Triggering of Flip-Flops; Analysis of Clocked Sequential Circuits

#### Unit 6: Registers, Counters, and the Memory Unit (7 Hrs.)

Registers; Shift Registers; Ripple Counters; Synchronous-counters; Timing Sequences; Memory Unit

**Laboratory Works:** The laboratory work includes designing and realizing all the concepts studied in each unit of the course particularly focusing on:

- Logic gates
- Adders and subtractors
- Decoder and multiplexers
- Sequential circuits

• Counters

# **Text Book:**

1. Digital Logic and Computer Design, M. Morris Mano, Pearson Education, 2016.

# **References Books:**

- 1. Digital Logic Design, Fourth Edition, Brian Holdsworth and Clive Woods.
- 2. Introduction to Digital Logic Design, John Patrick Hayes, Addison-Wesley.

# **Discrete Structure**

RIM 2nd semester

Nature of the course: Theory + Practical

Credits: 3

Lecture Hours: 48

## **Course Description:**

This course covers different concepts of discrete structures including logic and proofs, number theory, induction and recursion, counting and advanced counting techniques, graphs, and trees.

# **Course Objectives:**

The main objective of this course is to provide students both theoretical and practical knowledge of different concepts of discrete structures.

#### **Course Contents:**

#### **Unit 1: Logic and Proofs (8 Hrs.)**

Propositional Logic and Applications; Propositional Equivalences; Predicates and Quantifiers; Nested Quantifiers; Rules of Inference for Propositional Logic and Quantified Statements; Proof Methods and Strategies; Mistakes in Proofs

# **Unit 2: Number Theory (7 Hrs.)**

Divisibility and Modular Arithmetic; Integer Representations and Algorithms; Primes; Greatest Common Divisors; Least Common Multiplier; Euclidian and Extended Euclidian Algorithm; Solving Congruences; Chinese Remainder Theorem; Computer Arithmetic with Lage Integers; Pseudorandom Numbers

#### **Unit 3: Induction and Recursion (5 Hrs.)**

Mathematical Induction and Examples; Strong Induction and Well Ordering; Recursive Definitions and Structural Induction; Recursively Defined Functions and Sets; Recursive Algorithms; Program Correctness; Recursion and Iteration

## **Unit 4: Counting and Advanced Counting (12 Hrs.)**

Basics of Counting (Sum Rule, Product Rule, Subtraction Rule, Division Rule); Pigeonhole Principle; Generalized Pigeonhole Principle; Permutations and Combinations; Binomial Theorem; Pascal's Identity and Triangle; Permutations and Combinations with Repetition; Generating Permutations and Combinations; Recurrence Relations and Applications; Solving Linear Recurrence Relations (Homogenous and Non-homogenous; Theorems without Proof); Principle of Inclusion-Exclusion

#### Unit 5: Graphs (10 Hrs.)

Graph and Graph Models; Graph Terminology and Special Types of Graphs; Representing Graphs and Graph Isomorphism; Connectivity (Paths and Circuits, Connectedness in Undirected and Directed Graphs); Euler and Hamilton Paths and Circuits; Shortest-Path Problem (Dijkstra's Algorithm, Travelling Salesman Problem); Planar Graphs and Applications; Graph Coloring and Applications

#### Unit 6: Trees (6 Hrs.)

Trees (Introduction, Rooted Trees, Trees as Models, Properties of Trees); Applications of Trees (Binary Search Trees, Decision Trees, Prefix Codes, Game Trees); Tree Traversals (Introduction and Traversal Algorithms); Depth-First and Breadth-First Search; Spanning Trees; Minimum Spanning Trees (Introduction, Prim's Algorithm, Kruskal's Algorithm)

#### **Laboratory Works:**

Students should implement all the concepts and algorithms studied in each unit of the course using any suitable programming language.

#### **Text Books:**

1. Discrete Mathematics and Its Applications, Eighth Edition, Kenneth H. Rosen, McGraw-Hill Education, 2019

#### **Reference Books:**

- 1. Discrete Mathematical Structures, Sixth Edition, Bernard Kolman, Robert Busby and Sharon C. Ross, Pearson Publications, 2015.
- 2. Discrete Mathematics for Computer Scientists and Mathematicians, Second Edition, Joe L Mott, Abraham Kandel and Theodore P Baker, Printice Hall of India, 2008.
- 3. Discrete Mathematics for Computer Scientists, First Edition, Ken Bogart, Scot Drysdale, and Cliff Stein, Addison-Wesley, 2010

# **Object Oriented Programming with Java**

Nature of the course: Theory + Practical

Credits: 3

Lecture Hours: 48

Semester: II

# **Course Objectives**

The main objective of this course is to provide students both theoretical and practical knowledge of object-oriented programming using Java programming language.

# **Course Description**

This course covers different concepts of object-oriented programming with Java including fundamental concepts, different programming structures, classes and objects, inheritance, interface, package, exception handling, generic programming, modules and some essential Java classes.

#### **Course Details**

Unit 1: Introduction 4 LHs

Java Introduction; Short History of Java; Java Buzzwords; Java Virtual Machine (JVM); Java Runtime Environment (JRE); Bytecode; Object Oriented Programming and its Principles; Writing Simple Java Programs; Compiling and Running Java Programs using Command Line and IDE; Using Command Line Arguments; Using Scanner for Reading Input and System.out.print() for Writing Output

#### **Unit 2: Fundamental Programming Structures**

**12 LHs** 

Writing Comments; Primitive Data Types; Variables and Constants; Type Conversion and Casting; Operators (Arithmetic, Bitwise, Logical, Assignment, and Conditional); Precedence and Associativity of Operators; Control Statements (if, switch, for, while, dowhile, for-each, nested statements, break, continue, and return); Working with Big Numbers; Arrays (One Dimensional and Multidimensional)

# **Unit 3: Classes and Objects**

**10 LHs** 

Object Oriented Principles; Defining Classes; Adding Variables and Methods; Creating Objects and Accessing Class Members; Method Parameters and Return Types; Constructors; static Fields and Methods; Method Overloading; this Keyword; Access Control; Nested and Inner Classes; Recursive Methods; Garbage Collection; Creating and Using Packages

# **Unit 4: Inheritance and Interface**

7 LHs

Inheritance Basics; Defining Subclasses; Using super and final Keywords; Abstract Class; The Object Class; Dynamic Method Dispatch; Declaring, Extending, and Implementing Interfaces

## **Unit 5: Exception Handling**

4 LHs

Exception Handling Fundamentals; Exception Types; Uncaught Exceptions; Using try, catch, throw, throws, and finally; Java's Built-in Exceptions; Creating Your Own Exception

#### **Unit 6: Generics and Modules**

4 LHs

Importance of Generic Programming; Defining Generic Classes and Methods; Bounds for Type Variables; Generic Code and Virtual Machine; Restrictions and Limitations; Inheritance Rule; Wildcard; Reflection and Generics; Modules

## **Unit 7: Essential Java Classes**

7 LHs

String, StringBuffer, and StringBuilder Classes; Primitive Type Wrappers; Math Class; I/O Classes and Interfaces; File I/O

# **Laboratory Works:**

Students should write Java programs to implement all the concepts studied in each unit of the course.

## **Text Books:**

- 1. Core Java Volume I Fundamentals, Eleventh Edition, Cay S. Horstmann, Pearson Education, 2019.
- 2. Java: The Complete Reference, Twelfth Edition, Herbert Schildt, McGraw Hill, 2022.

## **Reference Books:**

- 1. Effective Java, Third Edition, Joshua Bloch, Pearson Education, 2018.
- 2. Learning Java An Introduction to Real World Programming with Java, Marc Loy, Patrick Niemeyer, and Daniel Leuck, O'Reilly, 2020.

# **Organizational Behavior & Human Resource Management**

Level: Bachelor of information Management (BIM) Full Marks: 100

Semester: Second

Nature of the Course: core Credit Hours: 3(48 HRs)

# **Course objectives**

The objectives of this course are to introduce the basic concepts of Organizational Behavior and Human Resource Management. It also aims to enhance the knowledge and approaches of Human Resource Management and develop students' skills to handle tactfully emerging human resources challenges and issues and to provide students with an in-depth understanding of fundamental concept and understanding of organizational behavior.

# **Learning Outcomes**

Upon successful completion of this course, the students will be able to;

- Develop basic understanding of organizational behavior
- Apply different dimensions of organizational behavior in organizational system and procedures
- Understand the importance and basic concepts of human resource management
- Know the functions of human resource management and their importance for organizational effectiveness

# **Learning Strategies**

The faculty member / course instructor strictly follow the following learning strategies while teaching the student

- Quizzes/ Surprise Test: Quizzes to be taken individually without prior information. The quizzes include objective questions covering the related text chapter materials.
- **Project & Live Projects**: The students should work in team for producing live project report as a part of experiential learning. They should go to the field, collect real time data and develop report. They also should present it in the class within 10 minutes of each group.
- Case analysis: The students should submit analysis of the cases provided by the course instructor reflecting the text/ practice related problems, genesis of the problems. It may be presented in class too.
- **Assignments:** The students tend to develop and deliver a presentation of 15 minutes on contemporary issues that are worthy enough. Home assignment in preparation of term paper can be provided.
- **Simulation**: The students need to participate in the activities that are set inside the class room. Course Convenor should provide issues and make practice as in real life situation.
- **Term paper & Thematic review**: The Course Convenor should provide issues that are importantly raised in the society and ask students to review related articles and develop the theme as the part of term paper and ask them to present in the class.
- **Oral Presentation**: The Convenor should provide issues a day before and ask them to speak 5-10 minutes without any supportive materials in the class

#### **Course Description**

This course contains introduction to OB, perception and learning, personality, job satisfaction, organizational conflict and stress, organizational change and development. It also covers

introduction to HRM, job design and analysis, talent management, performance management, reward, motivation and employee maintenance and emerging issues in HRM.

#### **Course Details**

## Part I: Organizational Behavior

#### Unit 1: Introduction 6 LHs

Concept of organizational behavior; Levels of OB analysis; Organizational behavior system; Basic assumptions of organizational behavior; Contributing disciplines to the field of organizational behavior; Individual behavior as an input-output system; Mental process: beliefs, attitudes, values, needs, motives and behavior; Emotions and Cognitive dissonance; New challenges for manager in OB.

# **Unit 2: Perception and Learning**

4 LHS

Concept of perception; Perceptual process; Factors affecting perception; Attribution theory; Attribution errors; Perception and individual decision making; Concept and principles of learning; Learning theories: cognitive learning and social learning; Behavior modification.

# Unit 3: Personality 4 LHs

Concept and types of personality; Personality traits and characteristics; Determinants of personality; Emotions and personality; Major personality attributes influencing organizational behavior:

#### Unit 4: Job Satisfaction 2 LHs

Concept and importance of job satisfaction; Measuring job satisfaction; Effects of job satisfaction on employees' performance.

# **Unit 5: Organizational Conflict and Stress**

4 LHs

Conflict: concept, nature, and types; Sources of conflict; Approaches to conflict management; Resolving conflict through negotiation; Functional and dysfunctional conflicts; Organizational stress: concept, causes and managing stress.

#### **Unit 6: Organizational Change and Development**

4 LHs

Concept and forces of change; Resistance to change; Approaches to managing organizational change: Lewin's three steps model; Organizational development (OD): concept and features of OD.

# Part II: Human Resource Management

# Unit 7: Introduction 6 LHs

Human Resource Management: concept, characteristics, objectives and functions; Human resource management system; Human resource outcomes: quality of work life, productivity and readiness to change; Challenges of human resource management. Human Resource Planning: concept, characteristics, process and importance.

## **Unit 8: Job Design and Analysis**

4 LHs

Meanings of job, task, position and occupation; Concept, benefits and methods of job design; Concept and purposes of job analysis; Sources of job analysis information; Job description, job specification and job evaluation: concept and contents.

#### **Unit 9: Talent Acquisition and Development**

5 LHs

Talent, Talent management and Talent development: concept and importance; Meaning, sources and methods of recruitment; Concept of selection; Difference between selection and recruitment; Selection process, selection tests, interviews and their types; Concept and process of socialization; Human resource development: concept and importance; Concept, objectives and benefits of training; Determining training needs; Training methods: on - the - job and off - the – job training; Concept and techniques of management development;

## Unit 10: Performance Appraisal, Reward Management and Motivation 6 LHs

Concept and uses of performance appraisal; Methods of performance appraisal: graphic rating scale, alternative ranking, paired comparison, forced distribution, critical incident, essay and checklist methods; Concept of reward management; Types and qualities of effective rewards; Performance appraisal practices in Nepalese organizations. Motivation: Concept. Theories of motivation – Need Hierarchy and Motivation-Hygiene. Motivation through employee participation: quality of work life, and self- managed teams.

# **Unit 11: Employee Maintenance and Emerging Issues in HRM**

3 LHs

Employee health and safety, employee welfare, social security; Grievance handling and redressal; General guidelines in administrating employee's discipline; Emerging issues and challenges of HRM: employee empowerment, downsizing, work- life balance, e-HRM, green-HRM, outsourcing HRM, ethics in HRM (surveillance vs. privacy); HRM in Nepalese organization.

#### Suggested Readings

Aswathappa K., *Human Resource and Personnel Management: Text and Cases*, New Delhi: Tata McGraw Hill.

Arnold, H.J. &Fieldman, D.C. *Organizational Behavior*. New York: McGraw Hill Book Company.

Decenzo, D.A. and Robbins, S.P., Human Resource Management, New Delhi: Prentice Hall of India Pvt. Ltd.

Dessler, G., A Framework of Human Resource Management, New Delhi: Pearson Education.

Dwivedi,R.S., *Human Relations and Organizational Behavior: A Global Perspective*. New Delhi: Macmillan India Limited.

Newstorm, J.W., *Organizational Behavior: Human Behavior at Work*, New Delhi: Tata McGraw\_Hill Publishing company.

Robbins, S.P., Organizational Behavior, New Delhi: Pearson.

Chalise,M &Gautam,P.,*Organizational Behavior & Human Resource Management*, KEC Publication, Kathmandu, Nepal