

Tribhuvan University
Faculty of Management
Office of the Dean



Course detail of
BIM (Bachelor of Information Management) 2nd Semester

April 2014

BIM 2nd Semester Course Cycle

SOC 201: Sociology for Business	3 Cr. hrs
MTH 202: Discrete Mathematics and Its Application	3 Cr. hrs
MGT 204: Business Communication	3 Cr. hrs
IT 213: Structured Programming	3 Cr. hrs
IT 214: Data Communication and Computer Networks	3 Cr. hrs

IT 213: Structured Programming

Module Objectives

This module aims to introduce students to the discipline of computing with a focus on good program design, programming styles, and structured program development using a high-level programming language. The students shall also be introduced to the basic concepts in procedural abstraction, structured programming and top-down design with stepwise refinement. Laboratory work is essential in this module.

Contents:

Introduction to the C Language, Data Types and Variables, Input/Output Management, Expressions and operators, Selection statements, Loops, Arrays, Modular Programming with Functions, Pointers and Strings, Structures and Dynamic Memory Allocation, The Preprocessor, and File Input/Output

Detailed Course

Introduction to the C Language

[3hrs]

- The C Language and its Advantages
- The Structure of a C Program, Writing C Programs, Debugging a C Program
- Examining and Running a C Application Program

Data Types and Variables

[3hrs]

- Data Types (integer, floating, character, type conversion, type definitions, sizeof operator)

Input/Output Management

[3hrs]

- Input/Output Management: printf(), scanf()
- Conversion specifiers
- Escape sequences

Expressions and operators

[5hrs]

- Arithmetic operators: operator precedence and associativity
- Assignment operators
- Increment and decrement operators
- Expression evaluation
- Expression statements
- Relational operator, logical operator, arithmetic assignment,

Selection statements [4hrs]

- Logical expressions
- If statement
- Switch statement

Loops [4hrs]

- While
- Do..while
- For
- Exiting from a loop (break, continue, goto)

Arrays [3hrs]

- One-dimensional array
- Multidimensional array

Modular Programming with Functions [4hrs]

- Defining and calling functions
- Function declarations
- Arguments
- Return statement
- Program termination (exit function)

Pointers and Strings [4hrs]

- Pointer variables
- The address and indirection operators
- Pointer assignment
- Pointer as argument
- Pointer as return values
- Pointer Arithmetic
- Using pointers for array processing
- String literals, variables
- Reading and writing strings
- Using the C string library: strcpy, strlen, strcat, strcmp
- Arrays of strings

Structures and Dynamic Memory Allocation [4hrs]

- Structures, Arrays of Structures
- Passing Structures to Functions
- Nested Structures
- Unions
- enumerations

- Dynamic Memory Allocation (malloc, calloc, realloc)
- Deallocating storage
- Linked list (-> operator, creating, displaying, searching)

The Preprocessor

[4hrs]

- How the preprocessor works
- The C Preprocessor and the #include and #define Directives
- Macro definitions (simple, parameterized macros), general properties of macros
- #if and #endif directives
- The defined operator

File Input/Output

[4hrs]

- Streams: file pointers, standard streams and redirection, text files versus binary files
- File operations: opening a file, modes, closing a file, attaching a file to an open stream, obtaining file names from the command line
- File Input and Output, reading/writing data, structure to files, random access

Text Book:

K. N. King, K.N. King, **C Programming: A Modern Approach**, W W Norton & Co Inc (February 1996)

Brian W. Kernighan, Dennis M. Ritchie, **C Programming Language, 2nd Edition** Prentice Hall; 2 edition (April 1, 1988)

Reference book:

- David Griffiths, Dawn Griffiths, **Head First C**, O'Reilly Media; 1 edition (April 19, 2012)

- Clovis L. Tondo (Author), Scott E. Gimpel (Author), "The C Answer Book: Solutions to the Exercises in 'The C Programming Language,' Second Edition", Prentice Hall; 2nd edition (November 11, 1988)

- Peter van der Linden, **Expert C Programming: Deep C Secrets**, Prentice Hall; 1st edition (June 24, 1994)

IT214: Data Communication & Computer Networks

Module Objectives

The objective of this module is to provide a fundamental concept of the electrical characteristics of digital signals and the basic methods of data transmission, underlying principles in the design of a layered network architecture, identify the general characteristics of local area networks (LANs) and wide area networks (WANs), and concept of TCP/IP protocol stack as an example of a layered network architecture.

Contents

Introduction to Data Communication, Data Communication principles, Overview of Digital Communication, Computer Communication Architecture, Data Link Layer, Medium Access (MAC) Sub-layer, Packet Switching, Routing Algorithms, The Network Layer in the Internet, Transport Layer, Application Layer and Other technologies overview

Detailed Course

Unit 1: Introduction to Data Communication **LH 2**

- 1.1 A basic Communication model
- 1.2 Data Communication Networking: WAN, MAN, LAN

Unit 2: Data Communication principles **LH 4**

- 2.1 Basic Concept: Signal, Frequency, Amplitude, Bandwidth, Digital signal, Analog signals, Digital data and analog data, Transmission Impairments, Channel capacity, Overview of analog and digital transmission, Synchronous and asynchronous transmission
- 2.2 Data Encoding
 - 2.2.1 Digital data and digital signals- NRZ-L, NRZI, Manchester
 - 2.2.2 Digital data and analog signals- ASK, FSK, PSK, QPSK
- 2.3 Multiplexing Techniques (FDM, TDM, WDM)

Unit 3: Overview of Digital Communication **LH 3**

- 3.1 Media Concepts and classification of media
 - Guided Media (Twisted Pair, Coaxial cable, Fiber optics)
 - Unguided Media (description and working principle of VSAT and Satellite)
- 3.2 Transmission characteristics (Attenuation, Noise, Signal to Noise ratio, Propagation delay)

Unit 4: Computer Communication Architecture **LH 3**

- 4.1 OSI (Open systems Interconnection) Reference Model
- 4.2 TCP/IP (Transmission Control Protocol/Internet Protocol) Protocol Suite

Unit 5: Data Link Layer **LH 5**

- 5.1 Service Provided to Network Layer
- 5.2 Framing
- 5.3 Error Detection methods: Parity, Checksum, CRC
- 5.4 Data Link Protocols

- 5.4.1 A simplex stop and wait protocol
- 5.4.2 Sliding window protocols
 - 5.4.2.1 A One Bit Sliding Window Protocol
 - 5.4.2.2 A Protocol Using Go Back N
 - 5.4.2.3 A Protocol Using Selective Repeat

Unit 6: Medium Access (MAC) Sub-layer

LH 4

- 6.1 Multiple access Protocols
 - 6.1.1 ALOHA (Pure and Slotted ALOHA)
 - 6.1.2 Carrier Sense Multiple Access(CSMA)
 - 6.1.2.1 CSMA/CD
 - 6.1.2.2 CSMA/CA
- 6.2 Topologies
- 6.3 Overview of IEEE Standard 802 for LANS and MANS
 - 6.3.1 Brief introduction Ethernet
 - 6.3.2 Brief introduction Token Ring
- 6.4 Introduction to Wireless Communication
- 6.5 Introduction to Bridge, Switch and Router

Unit 7: Packet Switching

LH 2

- 7.1 Packet Switching Principles
- 7.2 Switching Techniques
 - 7.2.1 Datagram Approach
 - 7.2.2 Virtual Circuit Approach

Unit 8: Routing Algorithms

LH 4

- 8.1 Fixed Path Routing
- 8.2 Shortest Path Routing
- 8.3 Flooding
- 8.4 Distance Vector Routing
- 8.5 Link State Routing

Unit 9: The Network Layer in the Internet

LH 7

- 9.1 IP Protocol IP V4
- 9.2 IP Addresses
- 9.3 Subnets
- 9.4 Supernet
- 9.5 VLSM(variable length subnet masking), CIDR(Classless Inter-Domain Routing) and NAT (Network Address Translator)
- 9.6 Overview of Internet Control Protocols
 - 9.6.1 ICMP,IGMP
- 9.7 Routing Protocols
 - 9.7.1 Interior Routing Protocol: OSPF
 - 9.7.2 Exterior Routing Protocol: BGP
- 9.8 Introduction to IPv6

Unit 10: Transport Layer

LH 4

10.1 Transport Services

10.2 Addressing

10.3 Internet Transport Protocols TCP (Transmission Control Protocol) and UDP (User Datagram Protocol)

Introduction to UDP (Operation of UDP, Characteristics of UDP, Application of UDP)

Introduction to TCP (Operation of TCP, Characteristics of TCP, TCP three-way handshake process, Application of TCP)

Relationship between TCP & IP

Standard TCP / IP services

Port numbers and socket address

10.4 Overview of BSD Socket API

Unit 11: Application Layer

LH 3

11.1. DNS (ARP and RARP), Mail protocol (SMTP, POP, IMAP), DHCP, Web services (WWW, HTTP, HTTPS, FTP), telnet, DHCP.

11.2. Client server and P2P application

11.3. Relation between Application layer and Transport layer.

Unit 12: Other technologies overview

LH 3

PSTN, ISDN and its type, Frame relay, DSL and ADSL, VoIP, Bluetooth, Wi-Fi, Overview of GSM, Wi-Max, 3G and 4G(LTE), Near field Communication(NFC).

❖ Lab Work

- Lab 1, 2, 3, 4:- Cabling (straight cable, Cross cable) and Installation of client and server OS. Connecting the computers in Local Area Network with guided media/unguided media and Working with basic network commands.
- Lab 5, 6:- Sharing Resources such as file, printer, internet, hardware, and disk in peer to peer model
- Lab 7, 8:- Configuring server and Sharing Resources such as file, printer, internet, hardware, and disk.
- Lab 9, 10:- Creating Network user, setting up permissions, setting up fileserver.
- Lab 11:- Installing and configuring DNS
- Lab 12:- Installing and configuring DHCP
- Lab 13:- Installing and configuring web server
- Lab 14:- Setting Up wireless devices and access points.
- Lab 15:- Securing Wireless devices.

❖ Project Work: The instructor should assign a project to the students on focusing the designs of a small LAN.

❖ Field work, seminar/ presentation are essential in this subject.

Text Book

Behrouz A. Forouzan, Data Communications and Networking, 5th edition, McGraw-Hill

References

A.S Tanenbaum, Computer Networks. 4th Edition. PHI.

D.E. Corner, Internetworking with TCP/IP. Vol.1. 3rd ed. PHI.

S. Keshav, An Engineering Approach to Computer Networking Addison Wesley, Longman.

W. Stalling, Data and Computer Communications. 8th Edition. PHI.

W.R. Stevens, TCP/IP Illustrated Volume I, II and III, Addison Wesley Longman

Behrouz A. Forouzan, Firouz Mosharraf, Computer Networks: A Top-Down Approach, McGraw-Hill

MGT 204: Business Communication

Module Objectives

This course aims to develop students' skill in presenting effective oral and written communication in English language with a focus on presenting seminars, writing papers and reports, business correspondence and so on.

Contents

Communication in business: communication process and malfunctions. Essentials of business communication: shorter structured units, effective organization, unity, coherence, and standard grammatical forms. Written communication: business correspondence formats, terms papers, project reports and research reports. Oral communication: formal and informal oral communication, group discussions, seminar presentations, gestures and body language.

Detailed Course

Unit1: Communication Theory	LH 16
<ul style="list-style-type: none">▪ Role of communication in business▪ Model of the communication process▪ Perception and reality▪ Filter of the mind▪ Words and meaning▪ Some main functions of communication	
Unit 2: Fundamentals of Business Writing	LH 6
<ul style="list-style-type: none">▪ Principles of clear business writing▪ Qualities of effective correspondence	
Unit 3: Business Correspondence	LH 6
<ul style="list-style-type: none">▪ Sales and application▪ Memorandum	
Unit 4: Business Report writing	LH 6
<ul style="list-style-type: none">▪ Reports: Problems, Organization and Interpretations▪ Reports: Determination and make-up	
Unit 5: Other forms of Business Communication	LH 8
<ul style="list-style-type: none">▪ Public speaking and oral reporting▪ Other oral communication activities▪ Nonverbal communication	
Presentations and Project works	LH 3

Reference

Lesikar and Pettit (Sixth Edition) A-I-T-B-S. Publishers and Distribution 1999.

MTH 202 Discrete Mathematics and Its Applications

Module Objectives:

To understand the concepts: Mathematical Reasoning, Combinatorial Analysis, Discrete Structures, Algorithmic Thinking, and Applications.

Contents:

Logic and Proof, Algorithms, the Integers, Mathematical Reasoning, Induction, and Recursion, Counting, Relations and functions, Graphs, Trees.

Detailed Course

1 The Foundations: Logic and Proof,

1.1 Logic

- Propositions, Proposition variables, Truth table, conjunction, disjunction, Exclusive, implications, converse, inverse, Contra positive, Bi-conditional, Tautology, Contradiction, translating English sentences, logic and bit operations

1.2 Propositional Equivalences

- Introduction, Logical equivalences: Identity law, Domination law, Idempotent laws, Double negation law, commutative law, associative law, Distributive law, De-Morgan's law, Absorption law, Negation law (Verification)

1.3 Brief introduction and examples of Predicates and Quantifiers

1.4 Methods of Proof

Methods of proving theorems (direct proofs, indirect proofs, vacuous and trivial proofs, proof by contradiction).

2 The Fundamentals: Algorithms, the Integers, and Matrices

2.1 Algorithms

Introduction, searching algorithms (linear, binary), sorting (bubble, insertion), greedy algorithms, halting problem

2.2 The Growth of Functions

Introduction, big-O notation, the growth of combinations of functions, big-omega and big-theta notation

2.3 Complexity of Algorithms

Introduction, time complexity, worst case complexity, average case complexity, understanding the complexity of algorithms

2.4 The Integers and Division

Introduction, division, primes, the fundamental theorem of arithmetic, the infinitude of primes, the division algorithm, GCD and LCM, modular arithmetic, applications of congruence's, Cryptology.

3. Mathematical Reasoning, Induction, and Recursion

3.1 Sequences and Summations

Introduction, sequences, recurrence relations, special integer sequences, summations

3.2 Mathematical Induction

Introduction, mathematical induction, Recursive Definitions.

Introduction, recursively defined function,

3.3 Recursive Algorithms, recursion and iteration, the merge sort

4. Counting

4.1 Basic counting principle – The sum rule and the product rule.

4.2 Permutation of n different objects, The number of r – permutations of n distinct objects when (a) repetition of objects are not allowed (b) repetition of objects are allowed.

Permutations of n objects when the things are not distinct, circular permutations.

Restricted permutations – The number of r -permutations of n different objects in which (i) k particular objects do not occur and (ii) k particular objects are always present.

4.3 Combination: - r -combinations of n different objects Restricted combinations, combinations with repetitions: the number of combinations of n objects taken r at a time with repetition is $c(n+r-1, r)$

4.4 Binomial Theorem, Binomial coefficients and Pascal triangle Pascal's identity.

4.5 The pigeonhole principle and Inclusion and Exclusion principle.

4.6 Recurrence relation and solving it.

5. Relations and Functions

5.1 Product sets, Binary relations, Domain and Range of binary relation.

5.2 Types of relations – Inverse relation, Identity relation, universe relations, void relation, complementary relation, ternary relation and n -ary relation.

5.3 Representation of relations – Table of relation, Arrow diagrams of relation, Graph of relation, Matrix of relation, Directed graph of a relation on a set A .

5.4 Boolean matrix, Boolean matrix operation, Boolean product of two matrices, complement of Boolean matrix.

5.5 Properties of relations – reflexive, irreflexive, symmetric, asymmetric, anti-symmetric and transitive relations. Equivalence relation, Equivalence relation and partition, Equivalence classes and quotient set. Partial order relation, Partial ordered set

5.6 Composition of two relations, matrix of composition relations properties –

a) If R is a relation from A to B and S a relation from B to C , then $M_{S \circ R} = M_R \odot M_S$ (*without proof*)

b) If R is a relation from A to B , S a relation from B to C , and T a relation from C to D , then $T \circ (S \circ R) = (T \circ S) \circ R$. (*without proof*)

c) Let A , B and C be sets, R a relation from A to B , and S a relation from B to C . Then $(S \circ R)^{-1} = R^{-1} \circ S^{-1}$ (*without proof*)

5.7 Concept of function, Domain and Range, image and pre-image, Graph of a function $f : A \rightarrow B$, Equality of functions, Real valued function, constant function and Identity function. Special functions – Floor function, ceiling function

5.8 Types of functions – onto function, one-to-one function, one-to-one correspondence between A and B , Inverse function.

5.9 The composition of two functions, Properties – (a) $I_B \circ f = f$, (b) $f \circ I_A = f$, (c) $f^{-1} \circ f = I_A$, (d) $f \circ f^{-1} = I_B$, (with proof), (f) $(g \circ f)^{-1} = f^{-1} \circ g^{-1}$.

6. Graphs

6.1 Introduction to Graphs and graph terminologies:

Simple graph, multiple graph and pseudo graph, order of a graph and size of a graph adjacent vertices, adjacent edges, degree of a vertex, isolated vertex and Pendant vertex. Degree sequence of a graph.

Properties (with proofs):

- The sum of the degree of the vertices of a graph is equal to twice the number of edges.
- The number of odd vertices in a graph is always even.

Special types of simple graph – Isolated graph, complete graph, Regular graph, Path graph, Cycle graph, Wheel graph, Bipartite graph and complete bipartite graph, Graphs of regular Platonic Solids.

Properties (with proofs):-

- The total number of edges in a complete graph K_n is $\frac{n(n-1)}{2}$
- The number of vertices in a r -regular graph is even if r is odd.
- The complete graph K_n is the regular graph of degree $n-1$.
- In the cyclic graph C_n , size of C_n is equal to order of C_n .
- The size of wheel W_n is twice the size of C_n .
- The sum of the degrees of vertices in W_n is four times the size of C_n .
- Size of the complete bipartite graph $K_{m,n}$ is $m \times n$ and order is $m+n$.

6.2 Representing Graphs: Adjacency list, Adjacency matrix, and Incidence matrix.

6.3 Isomorphism of Graph: Isomorphic graphs, Isomorphism classes, Self Complementary.

6.4 Connectivity: walk, trail and circuit, Path and Cycle, Connected graph, Cut-sets and Cut-vertices. Edge connectivity and vertex connectivity.

6.5 Euler and Hamilton Paths:

Eulerian trail, Eulerian Circuit, Eulerian graph, Königsberg Bridge problem. Theorems *without proofs*:- a. A connected graph G is Eulerian if and only if each vertex has even degree.

b. A connected graph G has Eulerian trail if and only if it has exactly two odd vertices. path, Hamiltonian cycle and Hamiltonian graph.

Theorems *(without proofs)*

- (Ore's) A connected graph with n vertices is Hamiltonian if for any two non-adjacent vertices u and v , $\deg(u) + \deg(v) \geq n$.
- (Dirac) A connected graph with $n(>2)$ vertices is Hamiltonian if degree of every vertex is at least $n/2$.

Labeled graphs and weighted graphs,

6.6 Shortest-Path Problems: – Dijkstra's algorithm

6.7 Digraph, Simple digraph, Reflexive, Symmetric and Transitive digraph, Loop and parallel arc (edge), adjacent vertices and degree of vertices, Source vertex and Sink vertex.

Theorem (without proof) – In a digraph, the sum of the in-degrees of vertices, the sum of the out-degrees of vertices and the number of edges are equal to each other.

6.8 Representation of digraph - Adjacency list, Adjacency matrix and Incidence matrix.

6.9 Connectivity of digraphs – underlying graph, directed walk, closed walk, directed path, directed cycle, spanning path. Weakly connected, unilaterally connected and strongly connected theorems (without proofs):

- a) A digraph D is unilaterally connected if it has a spanning path in D.
- b) A digraph D is strongly connected if it has a closed spanning path in D.

7. Trees

7.1 Introduction, rooted tree, non-rooted tree, root vertex, Terminal vertex, Internal vertex, Level of a vertex, Height of tree, Branch, Parent and child, siblings, Ancestors, Descendants, Labeled tree and non Labeled tree, Forest.

7.2 Properties of tree (with proofs).

- a) Let $G(V, E)$ be a loop-free undirected graph. Then G is a tree if there is a unique path between any two vertices of G .
- b) A tree with n vertices has exactly $n - 1$ edges.
- c) In any tree G , there are at least two pendant vertices.
- d) A forest G with n vertices has $n - k$ edges, where k is the number of components of G .

7.3 Spanning tree and Methods of constructing a spanning tree from a graph by

- a) Breadth – first search and b) Depth – first search (Backtracking), Determination of the number of spanning tree in a simple connected graph, using 'Matrix tree theorem's (Kirchhoff's Theorem).

7.4 Minimum spanning tree – a) Kruskal algorithm b) Prim's algorithm.

7.5 Tree Traversal: In order, Pre-order, and post order traversal

7.6 Applications of Trees: Binary expression tree

7.7 Full binary tree and its properties:

- a) The number of vertices n in a binary tree is always odd.
- b) The number of pendant vertices of a binary tree with n vertices is $\frac{1}{2}(n + 1)$.
- c) The number of internal vertices in a binary tree is one less than the number of pendant vertices.
- d) The maximum number of vertices possible in K -level binary tree is $2^0 + 2^1 + 2^2 + \dots + 2^k \geq n$.
- e) The minimum possible height of an n -vertex binary tree is $\min l_{\max} = \lceil \log_2(n+1) - 1 \rceil$, where $l_{\max} = \max^m$ level of any vertex.
- f) The maximum possible height of an n – vertex binary tree is $\max l_{\max} = \frac{(n-1)}{2}$

Lecture: 48 Hours

Tutorial: 12 Hours

Text Book

Rosen K.H., *Discrete Mathematics and its applications, 5th Edition*, McGraw Hill Companies

References

Kolma, Busby, Ross; *Discrete Mathematical Structures*, Prentice – Hall of India.

R. Johnsonbaugh; *Discrete Mathematics*, Pearson Education Asia.

Seymour Lipschutz and Marc Lipson; *Discrete Mathematics*, (Schaum's Outline).

S.M. Maskey: *First course in Graph Theory*, Published by Ratna Pustak Bhandar.

E. G. Gooduire and M. M. Paramenter, *Discrete mathematics with graph theory*, Prentice – Hall of India.

Narsingh Deo: *Graph Theory (with application to engineering and computer science)*, Prentice – Hall of India Pvt. Ltd.

SOC 201: Sociology for Business

Module Objectives

This module aims to inculcate knowledge of basic sociological concepts and methods so that students are equipped with an adequate understanding of the sociological perspectives on management and business administration.

Contents

Introduction to Sociology, Basic concepts in Sociology; Social Institutions: Social Processes; Social Stratification; Social Disorder, Deviance and Social Control; Social Change; Theoretical Perspectives in Sociology; Research Methods in Sociology and; The Sociological perspectives on Management and Business Administration.

Detailed Course

Unit 1: Introduction to Sociology LH 4

- Meaning, nature, subject matter and emergence of sociology.
- Relationship of sociology with economics, psychology and anthropology.
- Relevance of sociology in management and business administration.

Unit 2: Basic Concepts in Sociology LH 4

- Meaning and definition of society, community, culture, group, norms, values, status, role, ethnicity, gender, class and caste.
- Implication of sociological concepts in management and business administration related issues/problems.

Unit 3: Social Institutions LH 4

- Meaning and definition, and basic features of family, kinship, economy, polity, education and religion.
- Linkage of social institutions with management and business administration related issues/problems.

Unit 4: Social Processes LH 4

- Meaning and definition of socialization, adaptation, cooperation, competition, conflict, globalization.
- Implications of social processes in management and business administration.

Unit 5: Social Stratification LH 5

- Meaning and definition of social differences, inequalities and stratification
- Caste, class, ethnicity and gender dimensions of social stratification in Nepal
- Social stratification vis-à-vis management and business administration

Unit 6: Social Disorder, Deviance and Social Control **LH 2**

- Meaning and definition of social problems (disorder and deviance) and social control.
- Linkage with management and business administration.

Unit 7: Social Change **LH 4**

- Meaning and definition of social and cultural change.
- Factors of social and cultural change.
- Connection of management and business administration to social and cultural change.

Unit 8: Theoretical Perspectives in Sociology **LH 6**

- The sociological imagination and sociological perspectives.
- Functionalism: basic assumptions.
- Conflict Theory: basic assumptions.
- Postmodernism: basic assumptions.
- Implications of sociological theories in management / business administration.

Unit 9: Research Methods in Sociology **LH 5**

- Nature and trend of sociological research
- Choosing a research problem or a topic
- Formulating hypothesis or assumptions
- Designing a research or writing a research proposal
- Collecting / acquiring data through fieldwork
- Processing, analyzing and interpreting data / findings
- Writing up the report and Presenting / disseminating the findings

Unit 10: The Sociology of Management and Business Administration **LH 10**

- Sociology of organizations
- Networks and organizations
- Analysis of organization
- Organizational / bureaucratic goals and societal expectations
- Managers and corporations vis-à-vis politics and power
- Work and leisure
- Group dynamics and intergroup relations
- Indigenous management and management of indigenous knowledge
- Dynamics of social capital
- Interdependence of social and technical skills
- Market and political culture
- Management of non-government development organizations
- Social movement politics and organization
- Relations in Business

Project Work (Specify the hours allocated to Unit 10)

- Choosing a topic for research

- Preparing research plan / proposal and developing research tools
- Conducting fieldwork / research
- Writing report and presentation

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

References

- Abraham, M. Francis, 1982, **Modern Sociological Theory: An Introduction**, Calcutta: Oxford University Press, pp. 72-113, 209-242.
- Chaturvedi, A. and A. Chaturvedi 1995, The Rationale of a Sociology of Organizations: Introduction, In **The Sociology of Formal Organizations**, Delhi: Oxford University press, pp. 1-40.
- Fligstein, N. 2002, Markets as Politics: A Political – Cultural Approach to market Institutions. In **Readings in Economic Sociology**, London: Blackwell.
- Haralambos, M. and RN Heald 1980, **Sociology: Themes and Perspectives**, New Delhi: Oxford University Press, pp 228-324.
- Lewis, D. 1999, **The Management of Non-governmental Development Organizations**,
- Shankar Rao, C.N. 2000, **Sociology: Primary Principles**, Third Edition, New Delhi: S Chand and Company.
- Turner, J.H. 1994, **Sociology: Concepts and Uses**, New York: McGraw-Hill, Inc. pp. 139-172.
- Vidyabhusan and DR Sachadeva, 1983, **An Introduction to Sociology**, New Delhi: Kitav Mahal.

Model Question

Candidates are required to give their answers in their own words as far as practicable. Figures in the margin indicate full marks.

Attempt all questions

Brief answer questions.

[1 x 10]

1. Point out the subject matters of sociology.
2. What is the difference between sex and gender?
3. List any three features of family.
4. Mention the agents of socialization.
5. What is meant by social stratification?
6. What are the means of formal social control?
7. List the factors of social change.
8. List any three assumptions of conflict theory.
9. List the types of status with examples.
10. List the sources of social capital.

Brief answer questions.

[7 x 5]

11. Discuss the relationship of sociology with economics.
12. Explain gender based stratification in Nepali society.
13. What is functionalism? Trace out its assumptions.
14. What do you mean by social change? How does social change impact on organizations?

Or,

What do you mean by social control? Discuss the control mechanisms applied in organizations.

15. How can you link the process of adaptation to business environment?
16. How does sociology help in comprehending organizational problems?
17. What is social capital? Discuss the advantages of social capital.

18. Read the following case and answer the questions that follow:

Mahila Jagriti Saving / Credit Co-operative was established in the year 1998. There were altogether 47 groups affiliated with 686 shareholders to date. The co-operative provided loan at the rate of 18% interest rate and maximum loan of Rs. 5000 could be obtained at a time.

The co-operative record showed highest percentage of loan i.e., 65% was disbursed for buffalo raising followed by goat raising (20%), business (10%) and for vegetable farming (5%). The loan disbursement record of July 15, 2005 by ethnic affiliation showed that 33% of loan was disbursed to Brahman followed by the Magar (29%), the Tamang (14%), the Newar (12%). The lowest amount of loan was disbursed for the Praja (8%) and the Dalit (4%). Though the majority of the loan was disbursed to Brahman, The repayment rate was very high. The Tamangs had the highest number of overdue loans followed by the Magar and the Brahmans.

There were different committees such as loan committee, education committee and executive committee to ease the work. The manager handled all the accounting as well as daily management of the office. The executives met once a month regularly but it was found they were giving much of their time and effort in discussing saving / credit operations.

There were 20 loan defaulter members with variation in period from 1-9 months. There was also the case of misuse of saving amount by the ex-manager of the co-operative. The result of which, other members of that group could not access loan from co-operative for longer period. With lots of effort, they were able to release the amount and the groups were then able to access the loan. Now there was a provision of supervision of loan utilization from loan committee.

The co-operative members had received various trainings including leadership, group management and saving / credit operations. The executive members highly owned the co-operative and their participation in co-operative affairs was very impressive. The members said that being in the group and in the co-operative they had found lots of changes in themselves. They had become self-reliant and capable of sending their children to school. Apart from that, they were aware of legal and human rights, gender equity and many other issues which they were not aware of before.

Questions

- a) Discuss the social and administrative composition of the cooperative and give your opinion about the mode of cooperation among the members.
- b) Explain the socio-economic benefits that were enjoyed by cooperative members.
- c) List the social and managerial problems you observed in the cooperative and give suggestions to overcome these problems.