Tribhuvan University

Faculty of ManagementOffice of the Dean



Course detail and pedagogy of **BBM (Bachelor of Business Management) 6th Semester**

COM 312: Database Management					
MGT 315: Business Environment in Nepal					
MGT 316: Introduction to International Business					
One Focus Area Course among the following group which is already selected in previous Semes	<u>ter</u>				
	3 Cr. Hrs				
Bank Operations and Cooperative Management (BNK)					
Sales and Marketing (MKT)					
Insurance and Risk Management (INS)					
Entrepreneurship and Enterprise Development (EED)					

COM 312: Database Management

Credits: 3 Lecture Hours: 48

Course Objectives

The main objective of this module is to provide strong theoretical and practical knowledge of the database management system.

Course Description

Database system, Data Abstraction, Data Models, Database users, Entity-Relation Model, Constraints, E-R Diagrams, Design of E-R Database Schema, Relational Data Model, Structure of Relational Database, Relational Algebra, Fundamental Operations, Additional Operations, Modifying the database, Structured Query Language Data Definition Language, Data manipulation Language, Transaction Control Language, Join operations, Integrity Constraints, Assertion, Triggers, Relational database design issues, Normalization, Database Governance, Database Management, Transaction Management.

Course Details

Unit 1: Introduction LH 6

Database Management Systems

Purpose of Database Systems

Data Abstraction

Data Models

- The E-R Model
- The Object-Oriented Model
- The Relational Model
- The Network Model
- The Hierarchical Model
- Physical Data Models

Instances and Schemes

Data Independence

Database Administrator

Database Users

Application Architecture (One tier, two tier and n-tire)

Overall Database System Structure and Components

Unit	2: Ent	tity-Rela	tionship Model	LH 6
	2.1	Entities	and Entity Sets	
	2.2	nships and Relationship Sets		
	2.3	Attribut	es	
	2.4	Mapping	g Constraints	
	2.5	Keys (Super key, Candidate key and Primary key)		
		2.5.1	Primary Keys for Entity Sets and Relationship Sets	
	2.6	The Ent	ity Relationship Diagram	
	2.7	Reducin	ng E-R Diagrams to Tables	
		2.7.1	Representation of Strong Entity Sets	
		2.7.2	Representation of Weak Entity Sets	
		2.7.3	Representation of Relationship Sets	
	2.8	General	ization and Specialization	
	2.9	Aggregation		
	2.10	Mapping	g Cardinalities	
		2.10.1	Representation of Mapping Cardinalities in E-R Diagram	
	2.11	Use of E	Entity or Relationship Sets	
	2.12	2 Use of Extended E-R Features		
	2.13	Design	of an E-R Database Scheme (Case study)	
Unit	3: Rel	ational I	Model	LH 7
	3.1	Structur	re of Relational Database	
	3.2	Basic Structure		
	3.3	Database Scheme		
	3.4	Keys		
	3.5	Query Languages		
	3.6	The Rel	ational Algebra	
		3.6.1	Fundamental Operations	
		3.6.2	Formal Definition of Relational Algebra	
		3.6.3	Additional Operations	
	3.7	Modifyi	ing the Database	
		3.7.1	Deletion	
		3.7.2	Insertions	
		3.7.3	Updating	
	3.8	Views a	and View Definition in Relational Algebra	
Unit	4: Str	uctured	Query Language (SQL)	LH 6

4.1 Background

- 4.2 Data Definition Language
 - 4.2.1 Domain Types in SQL
 - 4.2.2 Schema Definition in SQL

4.3	Data Ma	anipulation Language	
	4.3.1	The select Clause	
	4.3.2	The where Clause	
	4.3.3	The from Clause	
	4.3.4	The Rename Operation	
	4.3.5	Tuple Variables	
	4.3.6	String Operations	
	4.3.7	Ordering the Display of Tuples	
	4.3.8	Duplicate Tuples	
4.4	Set Oper	rations	
4.5	Aggrega	te Functions	
4.6	Null Val	lues	
4.7	Nested S	Subqueries	
	4.7.1	Set Membership	
	4.7.2	Set Comparison	
	4.7.3	Test for Empty Relations	
	4.7.4	Test for the Absence of Duplicate Tuples	
4.8	Derived	Relations	
	4.8.1	Views	
4.9	Modifica	Modification of the Database	
	4.9.1	Deletion	
	4.9.2	Insertion	
	4.9.3	Updates	
	4.9.4	Updates	
	4.9.5	Update of a View	
4.10	Joined R	telations	
	4.10.1	Join types and Conditions	
4.11	Embedd	ed SQL	
4.12	Dynamic	e SQL	
4.13	Transact	ion Control Language (Commit, Rollback)	
Unit 5: Int			LH 3
5.1		Constraints	
5.2		ial Integrity	
	5.2.1	Basic Concepts Performation Integration in the F. P. Madel	
	5.2.2	Referential Integrity in the E-R Model	
	5.2.3	Database Modification	
	5.2.4	Referential Integrity in SQL	

Unit	6: Re	lational	Database Design	LH 5		
	6.1	Pitfalls in Relational DB Design				
		6.1.1	Representation of Information			
		6.1.2	Anomalies			
	6.2	Functio	onal Dependencies			
		6.2.1	Basic Concepts			
		6.2.2	Closure of a Set of Functional Dependencies			
		6.2.3	Closure of Attribute Sets			
	6.3	Decom	position			
		6.3.1	Lossless-Join Decomposition			
		6.3.2	Dependency Preservation			
	6.4	Normal	lization			
		6.4.1	First Normal Form			
		6.4.2	Second Normal Form			
		6.4.3	Third Normal Form			
		6.4.4	Boyce-Codd Normal Form			
		6.4.5	Comparison of BCNF and 3NF			
Unit '	7: Da	ta Gove	rnance	LH 4		
	7.1	7.1 Introduction				
	7.2	Data go	overnance drivers			
	7.3	Data go	overnance initiatives			
Unit	8: Da	tabase N	Management	LH 6		
	8.1	Data m	aintenance			
	8.2	Data qu	uality Management: Data cleansing, data integrity, Data enrichment, Data q	uality		
	8.3	Data Se	ecurity Management: Data access, Data erasure, Data Privacy, Data Security	y		
Unit	9: Tr	ansactio	on Management	LH 5		
	9.1	ACID P	Properties			
	9.2.	Transac	etion States			
	9.2	2.1 Imple	ementation of Atomicity and Durability			
	9.2	2.1 Serial	lizability			
	9.2	2.3 Basic Concept of Concurrency Control and Recovery				
			ing Protocols			

5.3

Assertions

5.4 Triggers

Note:

- The students are required to undertake a project work. The project work can be done individually or in group (at most 4 5 students). The format of the project report is as follows:
 - o Project Description
 - o Description of entities or object considered in the project
 - o Algorithm or Diagram showing description of project
 - o Conclusion of the project

The project report should be original, and the reproduction of others' work is strictly prohibited. Number of pages of the report should be at least 4.

References

Abraham Silberchatz, Henry F. Korth, S.Sudarshan; *Database System Concepts*. McGraw Hill, 4th ed Date, C.J.; *An Introduction to Database System*. Addison Wesley, 8th ed

RAMEZ ELMASRI, B. NAVATHE, Fundamentals of Database System, Pearson Education Asia, Fifth Edition

MGT 315: Business Environment in Nepal

Credits: 3
Lecture Hours: 48

Course Objective

This course examines the economic, social, political, and legal interfaces between the business institution (especially the corporation) and the environment. The course intends to provide students with an overview of the environmental forces within which business must operate, and an understanding of some of the analytical tools that managers use to solve business and economic problems. The focus is to enable students to identify, understand and evaluate the environmental forces causing change in business performance and future strategic options.

Course Description

The topics include socio-economic, political-legal, technological, and global business environment, business-government relations, performance of industry and agricultural sectors, and financial sector policy reforms.

Course Details

Unit 1: Introduction LH 5

Business and its environment, types of business environment, environmental analysis – process and techniques, scanning methods, use of environmental analysis in strategic management.

Unit 2: Macroeconomic Environment

LH 15

Dimensions of the economy, major problems and challenges facing Nepalese economy, employment trends and labour market issues, migration and foreign employment, economic development plans, industry and agricultural sectors – performance and emerging challenges, economic policies and reforms - industrial policy, privatization policy, trade policy, tourism policy, and monetary policy; liberalization of the Nepalese economy and capital market reforms, factors contributing to competitive business environment in Nepal.

Unit 3: Political-Legal Environment

LH 9

Political structure in Nepal, political parties, Nepalese Constitution, Government and its branches, business-government relations, risks involved with Nepalese political environment and the emerging issues, an overview of business legislation in Nepal, legislations relating to labour, finance, investment, intellectual property, e-business, and consumer protection.

Unit 4: Socio-cultural Environment

LH 5

Components of socio-cultural environment, family structure and social organizations, class structure and classification, socio-cultural changes and their effects on business.

Unit 5: Technology and Energy Management

LH 6

Business and technology, current status of technology, technology transfer issues, IT Policy of Nepal, natural environmental issues, energy situation in Nepal, environment and energy management issues in Nepal.

Unit 6: Global Business Environment

LH 9

Concept of globalization – trends and issues, regional grouping of nations, regional trade agreements in South Asia – SAARC, SAPTA, SAFTA and BIMSTEC, foreign direct investment in Nepal, WTO and Nepal.

Basic Books

Pant, Prem R. *Fundamentals of Business Environment in Nepal*, Buddha Academic Enterprises. Agrawal, Govind. *Dynamics of Nepalese Business Environment*. M. K. Publishers. Business Legislations and related publications of the Government of Nepal.

MGT 316: Introduction to International Business

Credits: 3 Lecture Hours: 48

Course Objectives

This course provides an overview of the importance of international business and trade in the global economy, explores the factors and environment that influence success in international markets, and familiarizes students with the basic terminologies, key concepts and issues unique to the subject. Students will learn about the techniques and strategies associated with different dimensions of marketing, financial management, and human resource management which arise in an international business context.

Course Description

This is a broad – based introductory course organized around three main modules: 1) the external environment of international business, 2) international business strategy, and 3) international business operations. This course provides students the opportunity to explore the international business environment and understand internationalization strategies, modes of entry and the operational decisions facing managers of companies that operate beyond their domestic market.

Course Details

Unit 1: Globalization and International Business

LH 6

Concepts of globalization and international business; Factors affecting globalization; Reasons for international business expansion; Drivers of market globalization; Domestic vs international business.

Unit 2: Theories of International Trade and Investment

LH8

Theory of Mercantilism, Theory of Absolute Advantage, Theory of Comparative Advantage, Factor Endowment Theory, Product Life-Cycle Theory, Theory of Competitive Advantage; Foreign direct investment based theories; Implications of international trade and investment theories; Contemporary issues of international trade.

Unit 3: Global Business Environment

LH 12

Political and legal systems; Actors in political and legal systems; Political risks; e-commerce and intellectual property rights; Government interventions and investment barriers; Cultural environment – concept, why culture matters in international business?; Regional economic integration – types, leading economic blocs; Emerging foreign markets; The changing demographics of the global economy; International monetary and financial environment – currencies and exchange rate systems; The floating exchange rate system.; Modes of payment in international trade; Global financial system; International economic institutions; WTO and free trade policies.

Unit 4: International Strategic Management

LH 10

Strategy and opportunity assessment; Role of strategy in international business; Estimating market potential; Choosing a strategy; Entering and operating in international markets – exporting and importing, collaborative ventures and strategic alliances, licensing, franchising; Global outsourcing; MNCs and Foreign Direct Investment (FDI) in the world economy – concept, types and trends.

Unit 5: Functional Areas of International Business

LH 12

Global production, outsourcing and logistics – managing global supply chain; Global marketing strategy – global branding, product development, pricing, communications, and distribution strategies; Global e-marketing strategy; Financial management – sources of funds for international operations: Investment decisions; Tax practices; Currency risk management; International human resource management – staffing policy, diversity management, labour relations, preparing employees for repatriation.

Basic Books

Charles W L Hill and Arun K. Jain. *International Business: Competing in the Global Marketplace*. Tata McGraw Hill, New Delhi.

Johan S. Hill. *International Business: Managing Globalization*. Sage Publications. New Delhi.

References

Alan Sitkin and Nick Brown. *International Business: Challenges and Choice*. Oxford University Press. New Delhi.

Oded Shenkar and Y. Luo. *Internatinal Business*. Wiley Publications. New Delhi. Rakesh Mohan Joshi. *International Business*. Oxford University Press. New Delhi.