

**CURRICULUM
OF
PUBLIC ADMINISTRATION
FOR**

BS 4-Year Program

(Revised 2009)



**HIGHER EDUCATION COMMISSION
ISLAMABAD**

CURRICULUM DIVISION, HEC

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PREFACE

Curriculum of a subject is said to be the throbbing pulse of a nation. By looking at the curriculum one can judge the state of intellectual development and the state of progress of the nation. The world has turned into a global village; new ideas and information are pouring in like a stream. It is, therefore, imperative to update our curricula regularly by introducing the recent developments in the relevant fields of knowledge.

In exercise of the powers conferred by sub-section (1) of section 3 of the Federal Supervision of Curricula Textbooks and Maintenance of Standards of Education Act 1976, the Federal Government vide notification No. D773/76-JEA (cur.), dated December 4th 1976, appointed the University Grants Commission as the competent authority to look after the curriculum revision work beyond class XII at the bachelor level and onwards to all degrees, certificates and diplomas awarded by degree colleges, universities and other institutions of higher education.

In pursuance of the above decisions and directives, the Higher Education Commission (HEC) is continually performing curriculum revision in collaboration with universities. According to the decision of the special meeting of Vice-Chancellor's Committee, the curriculum of a subject must be reviewed after every 3 years.

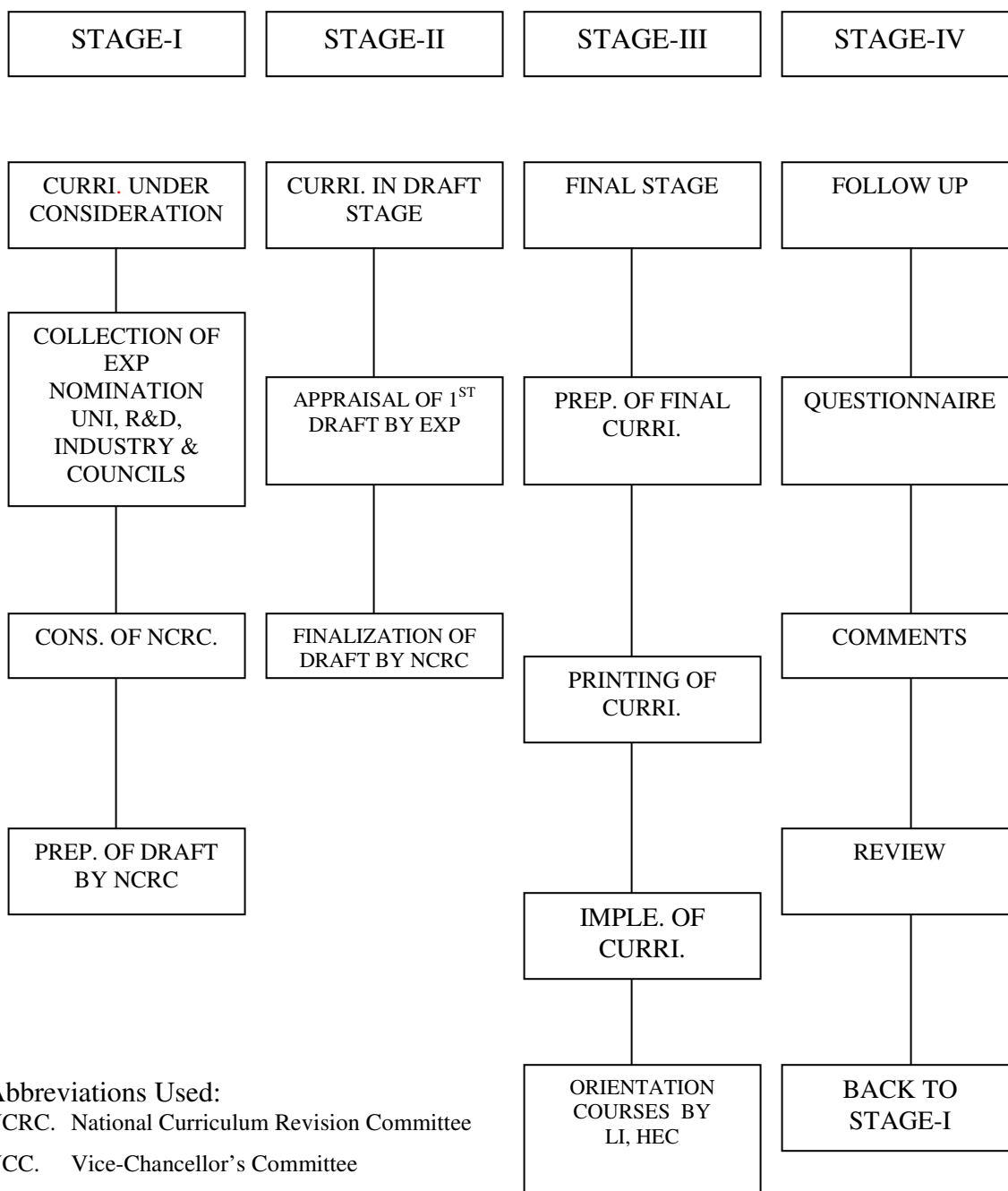
A committee of experts comprising of conveners from the National Curriculum Revision of HEC in Basic, Applied Social Sciences and Engineering disciplines met in April 2007 and developed a unified template to standardize degree programs in the country to bring the national curriculum at par with international standards, and to fulfill the needs of the local industries. It also aimed to give a basic, broad based knowledge to the students to ensure the quality of education. The new Bachelor (BS) degree shall be of 4 years duration, and will require the completion of 130-136 credit hours. For those social sciences and basic sciences degrees, 63.50% of the curriculum will consist of discipline specific courses, and 36.50% will consist of compulsory courses and general courses offered through other departments.

For the purpose of curriculum revision various committees are constituted at the national level, comprising of senior teachers nominated by universities, degree awarding institutions, R&D organizations, respective accreditation councils and stake holders. The National Curriculum Revision Committee for Public Administration in a meeting held on JANUARY 29-31, 2009 at HEC Regional Centre, Karachi in continuation of preliminary meeting held on October 16-18, 2008 at HEC Regional Center, Lahore, revised the curriculum in light of the unified template. The revised draft curriculum is being circulated for implementation in the concerned institutions.

PROF. DR. ALTAF ALI G. SHAIKH
Member Academics

August 2009

CURRICULUM DEVELOPMENT



Abbreviations Used:

- NCRC. National Curriculum Revision Committee
- VCC. Vice-Chancellor’s Committee
- EXP. Experts
- COL. Colleges
- UNI. Universities
- PREP. Preparation
- REC. Recommendations
- LI Learning Innovation
- R&D Research & Development Organization
- HEC Higher Education Commission

INTRODUCTION

The final meeting of the National Curriculum Revision Committee in Public Administration was held on January 29-31, 2009 to finalize the draft curriculum prepared in its preliminary meeting held on October 16-18, 2008 at HEC Regional Center, Karachi. Following were the experts of preliminary and final meeting: -

Sr. Name

- | | | |
|----|--|-----------|
| 1. | Dr. M. Zafar Iqbal Jadoon,
Professor,
Institute of Administrative Sciences,
University of the Pubjab, New Campus,
Lahore | Convener |
| 2. | Dr. Bushra Hamid,
Associate Professor,
Institute of Management Studies,
University of Peshawar, Peshawar | Secretary |
| 3. | Mr. Nisar Ahmed Siddiqui,
Director IBA Sukkur
Airport Road, Sukkur | Secretary |
| 4. | Mr. Aman Ullah Khan,
Assistant Professor & Chairman,
Department of Public Administration,
Gomal Univeristy, D.I. Khan | Secretary |
| 5. | Dr. Farah Lalani,
Assistant Professor,
Department of Public Administration,
University of Sindh, Jamshoro | Secretary |
| 6. | Mr. Noor Shah Bukhari,
Professor,
Department of Public Administration,
Shah Abdul Latif University, Khairpur | Secretary |
| 7. | Mr. Majed Rashid,
Head Commonwealth International,
Allama Iqbal Open University,
Islamabad | Secretary |
| 8. | Dr. Sobia Ramzan,
Department of Public Administration,
University of Balochistan, Quetta | Secretary |
| 9. | Mr. Sohail Ahmed,
National School of Public Policy,
National Management College,
Shahra-e-Quaid-e-Azam, | Secretary |

New PC Hotel, Lahore

- | | | |
|-----|--|-----------|
| 10. | Dr. Muhammad Zahid Iqbal,
Assistant Professor,
COMSATS Institute of Information
Technology,
Islamabad | Secretary |
| 11. | Ms. Saima Akhtar,
Lecturer,
Department of Public Administration,
University of Karachi | Secretary |
| 12. | Dr. Syed Shabibul Hasan,
Lecturer,
Department of Public Administration,
University of Karachi,
Karachi | Secretary |

Following members could not attend the final meeting: -

Sr. Name

1. Mr. Ayaz Mehmood,
Professor,
Department of Management Sciences,
COMSAT Institute of Information Technology,
H-8/I Islamabad
2. Mr. Faheem Ghazanfar
Lecturer, Department of Public Administration,
University of Azad Jammu Kashmir,
Muzaffarabad

The Committee unanimously selected Dr. Iqbal Jadoon as convener and Dr. Bushra Hamid as Secretary of the meeting.

The committee reviewed the courses thoroughly and after making minor revisions and finalized the scheme of study for BPA /BS program in Public Administration/Management – Annexure-A.

The committee reviewed the draft sample program in BS with semester wise allocation of courses – Annexure-B.

The committee decided to develop competence based curriculum with main objective of the BS programs and desired knowledge areas and learning outcomes. In this regard the courses were allocated among the members of the committee and a format was agreed upon for developing course profiles. To discuss the broad contents of the courses, two groups

were formed, one for business and second for public administration/Management courses.

In the light of Higher Education Commission's framework for BS programs presented by Ms. Ghayyur Fatima in this last meeting held on 16-08-2008, the committee agreed upon the following agenda for this meeting.

1. To prepare curriculum for 4- years BS/BPA program
2. To make recommendations for effective implementation of curricula and promotion of discipline of public administration in the country.

BS/BPA Curricula

The committee reviewed the existing 4 years programs being offered in various departments/institutes of public administration/administrative sciences in public sector universities. It was observed that public administration is being taught at the undergraduate level (4 Years program) under different titles of programs including BS-Public Administration, Bachelor of Public Administration/BS (Hon)-Management. It was noted that all these programs offer an excellent blend of public and business management with an objective to prepare graduates to take professional position in public, non-profit, civil society and business organizations. These programs reflect the latest approach in management education as adopted by leading business schools, management schools and public administration schools. A review of curricula of various institutions in USA, UK, Canada and Asia revealed that Public Administration is a well-recognized discipline of management which caters to the needs of public, non-profit, and business sectors for good governance and effective service delivery. Even, business schools are offering MPA degree as a separate degree along with MBA degree. However, both degrees are treated at par with other for job opportunities and promotions at every level in the business and public organization.

The existing curriculum was reviewed using the Curriculum Development Guidelines of Punjab University, leading US/UK Universities and agreed upon the following categories of courses:

1. General Education Requirement
2. Pre-major/pre-requisite Courses
3. Core Courses
4. Specialization/Concentration Courses
5. Elective Courses

The committee after thorough discussion agreed upon the following steps towards development of state-of-the-art and implementable curriculum of 4 years programs in public administration:

1. To identify the existing and new courses using the above classification.

2. To place the courses in the framework of HEC.
3. To develop the objectives, learning outcomes, contents, reading material, assessment and evaluation, and delivery mechanism for each course.
4. To consult the stake holders after the draft curriculum is ready well before the next meeting in Lahore.

During the meeting situation analysis was carried out and after thorough deliberations a list of courses was developed within above categories.

The committee after extensive discussion and analyses adopted the framework developed by Curriculum Division of HEC for management sciences to develop an integrated framework for public administration/management education at undergraduate and graduate level. After thorough discussion the committees have made recommendations on the following:

- i. Implementation Guidelines
- ii. Promotion and Professionalization of Public Administration
- iii. Quality Assurance in Public Administration Programs
Employment of Public Administration Graduates

STANDARDIZED FORMAT / SCHEME OF STUDIES FOR FOUR-YEAR INTEGRATED CURRICULA FOR BACHELOR DEGREE IN BASIC, SOCIAL, NATURAL AND APPLIED SCIENCES

STRUCTURE

Sr.	Categories	No. of courses Min – Max	Credit Hours Min – Max
1.	Compulsory Requirement (No Choice)	9 – 9	25 – 25
2.	General Courses to be chosen from other departments	7 – 8	21 – 24
3.	Discipline Specific Foundation Courses	9 – 10	30 – 33
4.	Major Courses including research project / Internship	11 – 13	36 – 42
5.	Electives within the major	4 – 4	12 – 12
	Total	40 – 44	124 – 136

- Total numbers of Credit hours 124-136
- Duration 4 years
- Semester duration 16-18 weeks
- Semesters 8
- Course Load per Semester 15-18 Cr hr
- Number of courses per semester 4-6

LAYOUT FOR BS PUBLIC ADMINISTRATION / MANAGEMENT

Total Credit Hours 131

Compulsory Requirements (the student has no choice)		General Courses to be chosen from other departments		Discipline Specific Foundation Courses		Major courses including research project/internship		Elective Courses within the major	
9 courses		7 courses		11 courses		12 courses		4 courses	
25 Credit hours		21 Cr. hours		33 Credit hours		40 Credit hours		12 Credit Hours	
Subject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr	Subject	Cr. hr
1. English-I	3	1. Logic and Critical Thinking	3	1. Principles of Microeconomics	3	1. Business Finance	3	1. Elective-I	3
2. English-II	3	2. International Relations and Current Affairs	3	2. Politics and Administration	3	2. Public Admin and Management	3	2. Elective-II	3
3. English-III (Communication Skills)	3	3. World Civilization	3	3. Principles of Macroeconomics	3	3. Introduction to Human Resource Management	3	3. Elective-III	3
4. National International Language	3	4. Science, Society and Development	3	4. Core Concept of Accounting Information	3	4. Applied Statistics for Managers	3	4. Elective-IV	3
5. Computer App and Information Technology	3	5. Administrative Ethics	3	5. Fundamentals of Statistics	3	5. Research Methods and Techniques	3	Proposed areas of Concentration	
6. Pakistan Studies	2	6. Introduction to Sociology	3	6. Core concepts of Financial Report	3	6. Public Policy	3	• Human Resource Management	
7. Islamic Studies / Ethics (For Non-Muslims)	3	7. Introduction to Psychology	3	7. Fundamentals of Management	3	7. Administrative Law and Accountability	3	• Public Management	
8. Mathematics I	3			8. Marketing Fundamentals	3	8. Government, Business and Civil Society	3	• Public Finance	
9. Mathematics II	3			9. Contemporary issues of Public Admin in Pakistan	3	9. Strategic Management	3+	• Business Management	
				10. Principles of Public Finance	3	10. Managerial Economics	1	• Development Mgt	
				11. Introduction to Development Economics	3	11. Development Mgt / Project Management	6	• Public Policy	
						12. Internship Based Research Project		• Health Administration	
	25		21		33		40		12

SCHEME OF STUDIES FOR BPA /BS PUBLIC ADMINISTRATION/ MANAGEMENT 4YEARS PROGRAM

STRUCTURE

- Total numbers of Credit hours 130 – 136
- Duration 4 years
- Semester duration 16-18 weeks
- Semesters 8
- Course-load per Semester 15-18 Cr hr
- Number of courses per semester 4-6 (not more than
3lab/practical courses)
- Credit Hours 1-4 for each course*

S. No.	Categories	Credit Hours
1.	Compulsory Courses Required (No Choice)	25
2.	General Courses to be chosen from other departments	21
3.	Discipline Specific Foundation Courses	33
4.	Major Courses including research project / Internship	40
5.	Electives within the major	12
	Total	131

* 4-credit hours courses should consist of 3-credit hours of teaching component and 1-credit hours for lab /tutorials/seminars

Foundation Courses

PRINCIPLES OF MICROECONOMICS

3 Credit

Pre Requisites:

Calculus

Learning Objectives:

This course provides the conceptual basis and core principles of microeconomics. It covers the fundamental aspects of microeconomic theory that are required to the understanding of contemporary economic studies. Moreover it offers comprehension of microeconomics to the modeling of behavior of individuals, households, firms, and markets.

Learning Outcomes:

After completing this course, students should be able to:

- Understand and calculate the concept of opportunity cost
- Understand what influences demand- and supply curves in the market for goods and explain how they influence price and quantity
- Understand to apply the elasticity concept
- Understand the basis for consumer demand: utility theory and indifference curves
- Derive and graphically construct cost curves for a firm
- Derive and graphically construct demand- and marginal revenue curves for firms in perfect competition and monopoly
- Understand how game theory can be used in microeconomic analysis
- Make simple analysis of imperfect markets
- Use consumer- and producer surplus and dead weight loss to analyze the effect of imperfect markets and taxation on economic efficiency

Course Contents:

This course introduces: microeconomic concepts and analysis, supply and demand analysis, theories of the firm and individual behavior, competition and monopoly. Moreover it offers applications to problems of current economic policy, theory of utility maximization and demand, production, cost, firm behavior, and supply; price in product and factor markets; efficiency and welfare.

Text Books and Software:

1. Frank. R.H & Bernanke. B.S. (2007) Principles of Microeconomics. McGraw-Hill, Irwin.. (450 s). ISBN 0-07-110657-X
2. Frank Cowell., 2006: "Microeconomics: Principles and Analysis". Oxford University Press

POLITICS AND ADMINISTRATION

3 Credit

Pre Requisites:

This Paper intends to introduce students to the enduring normative and empirical questions in politics. Teach them to think critically about politics and to apply logic and empirical analysis of political questions:

Learning Objectives:

This Paper intends to introduce students to the enduring normative and empirical questions in politics. Teach them to think critically about politics and to apply logic and empirical analysis of political questions.

Learning Outcomes:

- Analyze the process by which bureaucratic agencies translate goals into tasks including the role of professional norms, political ideology, prior experience and personal beliefs.
- Evaluate the role that interests and organizational culture play in controlling the behavior of public employees, including the different constraints managers face in public and private sector organizations.
- Analyze the similarities and differences in the four types of agencies: production, procedural, craft and coping.
- Analyze the similarities and differences in efficiency, discretion, equity, accountability and authority between the public and private sector organizations, focusing on how the American political system controls the nature of the bureaucracy as well as Wilson's proposals for improving the system.
- Assess the argument that many recent political crises and controversies stem from traditional public administrative thinking and policy implementation, including 1) the increase in presidential power; 2) congressional abdication to the bureaucracy of its constitutionally granted legislative power; and 3) the failure of the courts to limit the federal government's power.

Course Contents:

Introduction: Politics and Political Science; Nations and States; Government;; Politics and society; Individual and Constitutions; Democracy; The Basic Structure of Government; The Basic Structures of government; Political Parties; Public Policy

Text Books and Software:

1. Almond, G. and Bingham, Powell G. (2002), Comparative Politics Today: A World View, Harper Collins: New York.

2. Roskin, Michael, (1997), Political Science: An Introduction, Prentice Hall Inc.: New Jersey.
3. Hague, Rod & F-Harrop. Martin (2004), Comparative Government and Politics, Palgrave Macmillan: New York.
4. Godwin, R. Kenneth (1997), Introduction to Political Science, Harcourt Brace Co: Orlando.
5. Rosen bloom, David H. (2000), Public Administration: Understanding Management, Politics, and Law in the Public sector, New York: Random House.
6. Rehman, Jamil-ur (ed.) (199), Government and Administration in Pakistan, Public Administration Research centre, (Mgt .services Division, Islamabad.

PRINCIPLES OF MACROECONOMICS

3 Credit

Pre Requisites:

Microeconomics

Basic Math

Learning Objectives:

The purpose of this course is to develop the students' economic perspectives and deeper understanding of key economic processes through the study of a range of economic and sociopolitical systems. Particular emphasis is placed on the examination of domestic and global economic policy options related to matters of poverty, use of resources, consumption of energy, unemployment, and trade. Through intensive reading, graphical analysis, and evaluation of economic systems, students should be able to distinguish between economics as a field of inquiry and the economy.

Learning Outcomes:

The students should be able to:

- Apply optimal control theory on resource allocation problems of consumption, investment and economic growth.
- Comprehend the theory of investment, the optimal growth model, overlapping generation's models for closed and open economies
- Analyze the real effects of government debt and other fiscal policy issues.
- Know the literature on empirical studies on the world income distributions and the fundamental causes of economic prosperity.
- Know the modern mainstream macro theory models used for business cycle analysis. Understand how prices and wages produce inefficient deviations from the optimal allocation of resources and how a good monetary policy design can improve efficiency. Derive the models based on optimizing behavior by the private sector where expectations are fully rational.

Course Contents:

National Income concepts; aggregate demand by household, business, government, and foreign sectors; determination of national income, interest rate, price, output, employment levels equilibrium analysis, inflation theory, dynamic analysis, and growth models

Text Books and Software:

1. Wickens Michael., (2008). [Macroeconomic Theory: A Dynamic General Equilibrium Approach](#). Princeton University Press; 1st edition.

**CORE CONCEPT OF ACCOUNTING
INFORMATION**

3 Credit

Pre Requisites: Nil**Learning Objectives:**

This course prepares students to address concepts of financial information process for roles as an accountant. Students learn important criteria for calculating capital changes, applying concepts of fixed assets and cost determination, and preparing consolidated financial statements. Other topics include the professional responsibilities of an accountant, cash flow statements, balance sheet preparation, and the intricacies of comprehensive income.

Learning Outcomes:

Accounting plays a vital role as an information system for monitoring, problem solving and decision-making. However, the first step is to generate and present information in a manner that is useful. In recognition of this, the principles of financial accounting course focuses on the record-keeping and financial statement preparation process. On completion of the course, students should:

- Develop a thorough understanding of accounting records and how to record transactions in them.
- Be able to prepare a set of financial statements for various forms of businesses and non-profit entities.
- Develop an ability to apply accounting concepts, principles and practices.
- Be familiar with the basic tools for analyses of financial statements.

Course Contents:

Basic Understanding of Issues; Reporting Working Capital Changes; Assets Liabilities; Equities; Financial Statements

Text Books and Software:

1. Fundamental Accounting Principles - Larson, Wild, Chiappetta.

Reference Books:

- *David H. Marshall, Wayne W. McManus, Wayne W. McManus, Daniel F. Viele, Daniel F. Viele (2007), "Accounting: What the Numbers Mean": McGraw-Hill Companies,*
- *Carl S. Warren, James M. Reeve, Jonathan Duchac,(2008), "Accounting": Cengage Learning*
- *Donald E. Kieso, Jerry J. Weygandt, Terry D. Warfield (2009), "Intermediate Accounting" : Wiley, John & Sons, Incorporated*
- *Paul D. Kimmel, Jerry J. Weygandt, Donald E. Kieso (2008), "Financial Accounting: Tools for Business Decision Making" : Wiley, John & Sons,*
- *Weygandt, J.J. and Kieso, D.E. (2000), Financial Accounting, New York: John Wiley & Sons.*
- *Meigs, T. & Meigs, W. (1993), Accounting the basis for Business Decision, New York: McGraw Hill.*
- *Dupree, F & Marder, G. (1984), Principle of Accounting, London: Addison Wesley Publishing Company.*

FUNDAMENTALS OF STATISTICS (STAT-I)

3 Credit

Pre Requisites:

Algebra, Calculus

Learning Objectives:

Exploratory analysis of data making use of graphical and numerical techniques to study patterns and departures from patterns. The realization that data must be collected according to a well developed plan if valid information on a conjecture is to be obtained. The realization that probability is a valuable tool for anticipating what the distribution of data should look like under a given model. The fact that models and data interact in statistical work. Models are used to draw conclusions from data. Inference from data is a process of selecting a reasonable model, including a statement in probability language, of how confident one can be about the selection.

Learning Outcomes:

- Use and apply knowledge learn in sampling, data description and data presentation in a business environment;
- Apply basic probability concepts and probability distributions as an aid to business decision making;
- Demonstrate an understanding from the knowledge learn and apply some fundamental statistical methodology to solve problems.

Course Contents:

Why Study Statistics? Data Descriptive Techniques: Graphical; Data Descriptive Techniques: Numerical; Probability; Random Variables; Discrete Probability Distribution; Continuous Probability; Estimation:

Text Books and Software:

1. Newbold, P. Carson, W.L. & Thorne, B. (2007). *Statistics for Business and Economics* 6 Ed. NJ: Pearson Education, Inc.
2. MS Excel

CORE CONCEPTS OF FINANCIAL REPORTING

3 Credit

Pre Requisites:

Accounting Information

Learning Objectives:

This course prepares students to address concepts of financial reporting for roles as an accountant. Students are required to learn the skills of using spreadsheet as an important tool for calculating capital changes, applying concepts of fixed assets and cost determination, and preparing financial statements.

Learning Outcomes:

- Conduct library research on financial accounting theory to form opinions on current issues.
- Improve communication skills by preparing and presenting written reports.
- Understand financial accounting theory and apply the underlying procedures and concepts to specific events.
- Understand the social, economic, political, ethical and global consequences of financial accounting standards and procedures.

Course Contents:

Overview of Financial Reporting; Reporting Using Spreadsheets (Excel), Formulas & Other Tools; Error Prevention in Reports; Assumption Documentation; Budget Reporting

Text Books and Software:

1. R.G. Schroeder, M.W. Clark, and J.M. Cathey. *Financial Accounting Theory and Analysis: Text and Cases*, 9ed. Wiley, 2009.
2. ACCT 6216 Course Packe
3. Oracle, Peachtree, Revelation, MYOB

Pre Requisites: Nil

Learning Objectives:

The specific objectives for this course include: Study of the basic functions of management (planning, organizing, leading/activating, and controlling), their component activities, and their interrelationships. Comprehending and critically evaluating the alternative schools of thought, or philosophies about the field of management. Expanding knowledge and understanding of major theories and concepts in the field of Management. Knowing and correctly using the key management terms and concepts. Learning to apply major Management concepts and theories to actual problems and cases. Getting knowledge of some of the contemporary developments in the field.

Learning Outcomes:

- This course covers the basic principles of the management function and its role in the context of Pakistani society. It will focus on the nature of the managerial role, and of managerial responsibilities in planning and decision-making, formal and informal organizational structures, and the processes of decision-making, leadership, motivation, communication, production and quality control.

Course Contents:

Overview; Nature & Challenges of the Management Profession. Managers and Entrepreneurs. The Evolution of Mgt. Thought; The Changing Managerial Environment ; International & Cross-Cultural Mgt.; Management's Social. & Ethical Responsibilities.; The Basics of Planning. Strategic, Long-Term Planning. Decision-Making & Creative Problem- Solving. Organization's Structure, Effectiveness, & Culture. Newer Approaches to Organizing. Human Resources Management. Communicating in the Computer Age. Motivating Job Performance. Group Dynamics & Teamwork. Influence Processes and Leadership. Production & Organization Control Processes. Improving Product & Service Quality

Text Books and Software:

1. Ricky W. Griffin. *Fundamental of Management*. 3rd ed. Texas and A. M. University.

Pre Requisites: NIL

Learning Objectives:

Introduction to the principles of modern-day marketing covering key topics as consumer behavior and demographics, marketing research, product development and pricing, marketing of business services, designing a marketing plan, mass advertising, sales promotion techniques and public relations, product distribution channels, international marketing, and current marketing issues.

Learning Outcomes:

- It will enable the students to identify the ways in which world events and cultural assumptions influence marketing. It is designed to acquaint the student with the principles and problems of the marketing of goods and the methods of distribution from producer or manufacturer to the consumer. It includes a study of the types, functions, and practices of wholesalers and retailers in the Pakistani marketing system and of efficient marketing techniques in the development and expansion of markets.

Course Contents:

Marketing: Managing Profitable Customer Relationships, Company and Marketing Strategy: Partnering to Build Customer Relationships; The Marketing Environment, Managing Marketing Information; Consumer and Business Buyer Behaviour, Segmentation, Targeting and Positioning; Product, Services and Brand Strategy; New-Product Development and Product Life-Cycle Strategies, Pricing Considerations and Strategies; Marketing Channels & Supply Chain Management, Retailing and Wholesaling; Advertising, Sales, Promotion, and Public Relations; Personal Selling and Direct Marketing, Marketing in the Digital Age; People, process and physical evidence. The Global Marketplace, Marketing Ethics; Development of a Marketing Plan; Services Marketing; Industrial Marketing

Text Books and Software:

1. Course Textbook. Marketing Management. Philip Kotler. Millenium Edition

CONTEMPORARY ISSUES OF PUBLIC ADMINISTRATION IN PAKISTAN

3 Credit

Pre Requisites: **Politics and Administration**

Learning Objectives:

Public Administration is the in depth study of Bureaucracy. This course outline not only contains detailed structural analysis of Public Administration in Pakistan but also problems and issues related to them. This course is specially design in a manner that that it aid the students to envisage ground root realities which develop their analytical and argumentative skills and they could come up with practical solutions of such issues.

Learning Outcomes:

- Identify the fundamental changes in public management that have led to greater inter-agency and inter-sectoral collaboration;
- Understand the differences between managing hierarchies and managing networks;
- Learn through practice how to apply various techniques and tools for improving the management of network processes;
- Suggest courses of action for improving performance of public management networks.

Course Contents:

Conceptual Framework of Public Administration; Historical Background of Public Administration in Pakistan; Administrative Development and Change; Administrative Reforms (A brief summery); Administrative Accountability; Administrative Responsibility; Corruption: Types, Causes and Remedies; Efficiency & Effectiveness; Good Governance

Text Books and Software:

1. Lane, F.S. (Ed.) *Current Issues in Public Administration*. St. Martin Press: New York, 1986.
2. Khan, Sultan: *Public Administration with reference to Pakistan*. Famous Books: Lahore, 2000.
3. Shaikh, M. H., *Public Administration with reference to Local Government Plan and Devolution of Power Plan 2000*.
4. Jameel-ur-Rehman: *Government and Administration in Pakistan*, Government of Pakistan: Islamabad, 1980.
5. Mustafa Chaudhry: *Pakistan- Its Politics & Bureaucracy*. Associated Publishing House, New Delhi, 1988.
6. S. M. Shahid: *Public Administration: Theory & Practice in Pakistan*, 2004. Emporium, Urdu Bazar Lahore.

7. Quddus, S.: *Bureaucracy & Management in Pakistan*. Royal Book Company, 1991.

PRINCIPLES OF PUBLIC FINANCE

3 Credit

Pre Requisites: Microeconomics

Learning Objectives:

The present course will look at the evolved theory behind the practice of public finance, budgeting and financial arrangements of the government. In addition, the consequences of government policies on resource allocation and income distribution affecting welfare of the people will be discussed. Such a course of study requires understanding and careful application of a number of tools of economic and financial analysis. While some of these analytical tools will be discussed and explained in the class, a good grasp of microeconomic theory is a pre-requisite for deriving full benefits from such a course. Students will therefore be well advised to review their knowledge of micro-economic theory for this purpose.

Learning Outcomes:

- Examines policy options, with their strategic trade-offs and operational implications, for the design and implementation of public finance in both high-income countries as well as developing and transitional economies. Covers the role and size of the public sector, including the rationale for public sector interventions such as market failure and distributional concerns; key factors determining a nation's fiscal architecture; public resource mobilization via user charges and taxation (including the economics of taxation, taxation of income, wealth, consumption and trade, tax incentives, tax compliance and enforcement, and tax reform); public expenditure policy, including assessment of government social protection programs and public sector efficiency and effectiveness; fiscal balance and deficit financing; and fiscal decentralization and intergovernmental fiscal relations. Emphasizes utilization of theoretical and applied techniques in a comparative context for evaluation of the impact of alternative resource mobilization and expenditure policies on allocative efficiency, social equity, and economic growth.

Course Contents:

The Role of Government in the Economy; The Tools of Political Economy; Principles of Budgetary Analysis;; National Income and Product Accounts – importance in budgetary analysis; Federalism; Financial Administration in Pakistan; Project work (Details to be worked out)

Text Books and Software:

1. Public Finance and Public Policy by Jonathan Gruber, Worth Publishers (2005)
2. Compulsory
3. Public Sector Economics by Stephen J. Bailey, Palgrave (2002). - Optional
4. Public Finance and the Price System by Edgar K. Browning and Jacqueline M.
5. Browning, Prentice Hall (1994) - Optional
6. Annual budgets of Federal and Punjab governments
7. Economic Surveys of Pakistan
8. Statistical Year Books of Pakistan

**INTRODUCTION TO DEVELOPMENT
ECONOMICS**

3 Credit

**Pre Requisites:
Microeconomics****Learning Objectives:**

Models of economic growth and structural transformation are introduced. The role of the market versus the state is explored in the context of economic reform and liberalization. The impact of globalization on developing (emerging) economies is scrutinized. Also included are such issues as trade and finance, in so far as they impinge on economic development. Resources from the Internet will be used extensively.

Learning Outcomes:

After completing this course, students should have acquired:

- basic understanding of the problems facing developing countries
- specific skills for conducting research on developing countries

Course Contents:

Introduction: Redistribution, Growth and Welfare; Media and Policy; Property Rights; Economic Growth: The Neo-classical and Endogenous story; Economic Growth: Education and Human Capital; Land Redistribution; Poverty, Undernutrition & Intra-household Allocation; Microfinance; Credit, Saving and Insurance; Social Networks and Social Capital; Decentralisation and Public Good Provisions; Regulation and Development

Text Books and Software:

1. Ray, D. (1998). Development economics. Princeton University Press.

Reference:

- Duflo, E., Glennerster, R & Kremer, M. (2006). Using Randomization in Development Economics
Research: A Toolkit.
<http://www.aniket.co.uk/teaching/devt2009/duflo2006.pdf>
- Donaldson, D. and Mueller, H. (2005). Some Notes on the Intuition behind popular econometric techniques.
<http://www.aniket.co.uk/teaching/devt2009/Donaldson2005.pdf>
- Angrist and Krueger (Autumn, 2001). Instrumental Variables and the Search for Identification:
From Supply and Demand to Natural Experiments The Journal of Economic Perspectives, Vol.15,
No.4, pp. 69-85. <http://econ-www.mit.edu/files/18>

Major Courses

BUSINESS FINANCE

3 Credit

Pre Requisites:

Basic course in Economics, Statistics, Accounting, Management and Computer Skills

Learning Objectives:

An overview of basic concepts and principles of finance with particular emphasis on risk, return and valuation. An exposure to students with variety of real world problems faced by financial managers. An opportunity to apply theoretical concepts in actual life situations with special reference to our domestic economy. |An insight of working and operations of financial system (with special focus on its components i.e. financial institutions and financial markets).

Learning Outcomes:

- The participants will develop an understanding of following (1) the general framework for financial decision making, (2) the role of financial decision making in maximizing the value of a firm, (3) in general, how to determine whether an investment should be made and how to finance acceptable investments, (4) what is meant by the risk/return tradeoff and how risk and return affect investment decisions, and (5) how external factors, such as financial markets, affect financial decisions made by the firm. You will find that much of the information provided in this class can be applied to make informed personal financial decisions.

Course Contents:

General Finance Concepts; Fundamentals of valuation; Corporate Decision Making; Investor Decision Making

Text Books and Software:

1. Scott Besley, *Comprehensive Notes for Essentials of Managerial Finance, 2003 Edition*, (Fort Worth, TX: Harcourt, Inc., 2003).
2. Any book on fundamentals of Business Finance

Pre Requisites: Nil**Learning Objectives:**

More specifically the course is designed for participants to gain: An introduction to the academic discipline of public administration as a means of clarifying, organizing and understanding their experiences as public managers, citizens and researcher; An understanding of the role and issues of public administration in developing nations with a particular reference to Pakistan; An introduction to the core functional areas of public administration such as organizational structuring, management of human resources, finance, public policy analysis and evaluation both theoretically and with particular reference to Pakistan; Development and enlargement of analytical abilities, critical sense and writing skills, including enlarged vocabulary in public administration; A more explicit and articulated value framework, one which will evolve over time, but which gives a basis for judgment. This will include a consideration of ethics in government and administration; A clear understanding of democracy and democratic values in contemporary society and to appreciate the role of public administration in attaining societal goals; A comparative perspective on a variety of public management reform undertaken around the world and particularly in Pakistan; An indigenous perspective on public administration and management issues of Pakistan as a researcher.

Learning Outcomes:

Successful participants at conclusion of the course should be able to:

- develop a research proposal on any issue of public administration and management in Pakistan while maintaining theoretical rigor and relevance;
- express ideas, concepts and values clearly and easily both verbally and in writing;
- Know and use some of the common definitions of terms which are frequently used in governance and public administration;
- articulate one's positions on various administrative issues and challenges faced by Pakistan; and
- Perform more effectively in a variety of administrative situations both in public, private and civil society organizations in Pakistan and abroad.

Course Contents:

Role and Functions of Government; What is Public Administration; Competing Approaches to Public Administration; Structuring Public Organizations; Organization of Federal, Provincial and Local Governments in Pakistan; Managing People in Public Organizations; Management of Civil Service in Pakistan; Public Budgeting and Finance; Budgeting and Finance in Pakistan; Managing for Results: Performance, Monitoring and Evaluation;

Performance Management in Public Organizations in Pakistan; Decision Making in Public Organizations; Public Administration and Public Policy; Managing Regulation; Managing Service Delivery; Public Administration and Governance; State of Governance in Pakistan; Public Administration and Management Reform in Developed Countries; Public Administration and Management Reform in Developing Countries; Public Administration and Management Reform in Pakistan

Text Books and Software:

1. Rosenbloom, David H. and Kravchuk, Robert S. (2005). Public Administration: Understanding Management, Politics, and Law in the Public Sector. 6th Edition, McGraw Hill, Singapore: McGraw Hill.
2. Schiavo-Campo, Salvatore and McFerson, Hazel M. (2008). Public Management in Global Perspective, New York: M.E.Sharp.
3. Pollit, Christopher and Bouchaert, Geert (2004). Public Management Reform: A Comparative Analysis, Oxford: Oxford University Press.
4. McCourt, Willy and Minogue, Martin (ed.) (2001). The Internationalization of Public Management: Reinventing the Third World State, UK: Edward Elgar.

**INTRODUCTION TO HUMAN RESOURCE
MANAGEMENT**

3 Credit

Pre Requisites:

Fundamentals of Management

Learning Objectives:

The purpose of this course is to prepare the students for management of people at work. There is a great demand of the modern business and not-for-profit organizations for high caliber of human resource. Theorists and planners equipped with sound knowledge for personnel policies and procedures to motivate the workforce for higher efficiency and maximum productivity. In considering the demand, this course is designed to give an overview of current ideas and issues in Human Resource Development. The core objective if the course is to provide students with clear thinking and understanding of how to plan, recruit, train, develop, appraise, compensate and lead human resource.

Learning Outcomes:

- After the Studying these topics Students are well familiar with the application of all these techniques to get the maximum of productivity as well as the technique of developing & management People in organization.

Course Contents:

Concept of Human Resource Management; Human Resource Challenges; Human Resource Functions; Philosophical approaches to Human Resource Management; Job design and analysis; Human resources planning & recruitment; Career Planning & Development; Training and Development; Motivation and reward system; Performance appraisal; Compensation and Services

Text Books and Software:

1. Human Resource Management, (11th Edition). By *Gary Dessler*, (2008).

Reference Book:

- *Fundamentals of Human Resource Management (8th Edition)*. By David A. Decenzo, Stephen P. Robbins

APPLIED STATISTICS FOR MANAGERS

3 Credit

Pre Requisites:**Fundamental of Statistics****Learning Objectives:**

To know about the quantitative (Statistical) dimension of new-management.

Learning Outcomes:

- Capability to use statistical tools in decision-making and research.

Course Contents:

Introduction; Managerial Application of Statistics; Estimation Theory; Sampling Theory; Project for Applied Statistics; Testing of Hypotheses; Correlation and Regression Analysis

Text Books and Software:

1. Levin, Richar I. (1984) Statistics for Management. 3rd Ed. Prentice-Hall Inc.
2. SPSS 12.0

RESEARCH METHODS AND TECHNIQUES

3 Credit

Pre Requisites:

'Fundamentals of Statistics' and 'Applied Statistics for Managers'

Learning Objectives:

This course is aimed at explaining the value and importance of research to public management with a broad focus on research capabilities, including qualitative as well as quantitative approaches to knowledge acquisition. The purpose of this course is to help students gain an understanding of the conduct of inquiry in the social sciences and the forms, potential and limitations of research. Keeping learners abreast of different methods of conducting research in public and nonprofit organizations, issues of measurement in social science research, review of descriptive statistics and introduction to statistical software package(s), time series concepts and applications, sampling, inferential statistics and statistical significance, multivariate analysis, and communication of findings is intent of this course.

Learning Outcomes:

- On completion of this course, students are likely to have research skills to understand the fundamentals of the research process for internal and external exploratory, small- and large-scale studies to be carried out at government departments; recognize the strengths and weaknesses of a range of research methodologies; appreciate the investigation of important relationships of interest to public management and its related areas; understand basic statistical arguments in reports and presentations; select sensible variables for constructing a model; be able to supervise and evaluate small- and large-scale research projects.

Course Contents:

The course emphasizes the significance of research for public utilities and demonstrates the conduct of research as an intellectual process involving definition of public administrative problems, concepts, constructs, operational definitions, hypotheses, theories, the inference process, ethical issues in social science research, insights and material from bibliographic searches, research design and implementation of research methods of conducting research in public and nonprofit organizations such as analytical, case study, comparative, correlational-predictive, design and demonstration, evaluation, developmental, experimental, exploratory, historical, meta-analysis, methodological, opinion polling, status, theoretical, trend analysis, qualitative etc. In addition to distinguishing between primary and secondary sources of information, it helps learners identify major techniques by which primary data are collected. During the course learners are to examine the measurement process by using a number of different scale types in assignments/academic activities, which will further help them know about the instrument development process that combines the question hierarchy concept and logical design sequence. This stage requires students' work on the statistical and other techniques necessary to carry out quantitative and/or qualitative data analysis with and without use of sophisticated statistical software(s). Students are also to learn the basics of writing and presenting an acceptable

research report followed by learning how to supervise and then evaluate research studies to be used by public administrators in the public sector work environment. Quality of research is not compromised at any stage, therefore by the end of this course students should choose a topic for individual research on any public utility, and produce a research design having immediate practical implications.

Text Books and Software:

1. Colton, D., & Covert, R. W. (2007). *Designing and constructing instruments for social research and evaluation*. US: John Wiley & Sons.
2. Somekh, B. & Lewin, C. (2005). *Research methods in the social sciences*. New Delhi, India: Sage Publications.
3. Thomas A. B. (2004). *Research skills for management studies*. London, UK: Routledge.
4. Schumacker, R. E., & Lomax, R. G. (2004). *A Beginner's Guide to Structural Equation Modeling* (2nd ed.). London, UK: Lawrence Erlbaum Associates.
5. Laws, S., Harper, C., & Marcus, R. (2003). *Research for development: A practical guide*. New Delhi, India: Sage Publications.
6. Mitchel, M. & Jolley, J. (2001). *Research Design Explained* (4th ed.). Earl McPeck, USA: Thomson Learning Inc.
7. Bechhofer, F., & Paterson, L. (2000). *Principles of research design in the social sciences*. London, UK: Routledge.
8. Gupta, S. (1993). *Research methodology and statistical techniques*. New Delhi, India: Deep & Deep.

Software Packages

- MS Excel (for data entry)
- SPSS with AMOS (latest version)

PUBLIC POLICY

3 Credit

Pre Requisites: Microeconomics

Learning Objectives:

The purpose of this class is to evaluate the effectiveness of public policy in promoting efficiency and equity in our economy. Microeconomics and welfare economics provide a theoretical base, and regression and cost-benefit analyses serve as the primary empirical tools of analysis. A number of selected policies will be studied and evaluated. In addition to being of interest in their own right, the outcomes of these policies can inform future social decision-making, by revealing responses to incentive effects and potential

unintended consequences, and by providing examples of effective and ineffective means of attaining social and economic goals.

Learning Outcomes:

The students will understand the policy process and

- Will be equipped with analytical tools of public policy analysis.
- The students will be able to prepare a policy paper on any policy issue.

Course Contents:

The Role of Public Policy; Tools of Analysis; Selected Policy Issues

Text Books and Software:

1. Weimer and Vining. 2005. *Policy Analysis: Concepts and Practices*. 4th Ed. Pearson/Prentice Hall.
2. Quade, E. S., *Analysis for Public Decisions*. 2nd Ed.

ADMINISTRATIVE LAW AND ACCOUNTABILITY

3 Credit

Pre Requisites: NIL

Learning Objectives:

Areas covered will include the constitutional and institutional framework of administrative law, rule-making, judicial review (standing, grounds of review, remedies and so on) and non-judicial review. The emphasis will be on theories and concepts rather than on the detail of the law of the various jurisdictions.

Learning Outcomes:

- The course is also designed to give you the opportunity to engage in a scholarly and reflective analysis of the issues involved in cases which are coming before the courts today. Issues will be examined both from a theoretical and practical dimension.

Course Contents:

Administrative Law, Administrative Justice and Accountability; Constitutional Background; The Institutions of Administrative Justice: Courts, Agencies and Tribunals; Constitutional Theory and Administrative Law: Legislative Supremacy, Separation of; Powers and Rule of Law; Administrative Process: Individual Decision-Making; Administrative Process: Rule/Policy-Making; Judicial Review: Access, Scope and Remedies; Judicial Review: Grounds and Standards; Non-Judicial Review; Non-Adjudicative Control; Tort Liability of Public Authorities

Text Books and Software:

1. P Cane, Administrative Law, 4th edn (Oxford: Oxford University Press, 2004) ('Cane').
2. P Cane and L McDonald, Principles of Administrative Law: Legal Regulation of Governance (Melbourne: Oxford University Press, 2008) ('Cane and McDonald').
3. B Schwartz and HWR Wade, Legal Control of Government: Administrative Law in Britain and the United States (Oxford: Clarendon Press, 1972) ('Schwartz and Wade').
4. PL Strauss, Administrative Justice in the United States, 2nd ed. (Durham, NC: Carolina Academic Press, 2002) ('Strauss').

GOVERNMENT AND SOCIETY IN PAKISTAN

3 Credit

Pre Requisites:

Public Administration and Management

Learning Objectives:

This course will provide students with conceptual and practical tools that they can use to examine the role of business in society, to explore the ways in which public policy shapes and constrains business decision-making and to understand the social and ethical responsibilities of business. The course will introduce students to the political, social, regulatory, environmental and technological challenges facing businesses and the impact of the institutional diversity of organizations.

Learning Outcomes:

At the end of this course students will:

- Will have concepts and practical tools to examine the role of business in country.
- Will be able to identify factors affecting decision making.
- Will have an ethical framework to address ethical dilemma in decision making
- Will be knowledgeable about the institutional environment of business as well as public organizations.

Course Contents:

Business, Government, and Society: The Fundamentals and The Dynamic Environment; Business Power, Stakeholders relations theory, Critics of Business, Business crisis situations; Corporate Social Responsibility: Theory and Practice; Business Ethics and Decision Making; Business in Politics; Regulation of Business; Multinational Corporations; Globalization; Industrial Pollution and Environmental Policy; Managing Environmental Quality; Consumerism; The Changing Workplace; Civil Rights in the Workplace; Corporate Governance; Role of government in society: the main elements of

the government public policy process, and business and government interaction

Text Books and Software:

1. David P. Baron. *Business and Its Environment 5th Edition*. Pearson Prentice Hall. 2006. (On reserve)

Suggested Readings:

- James A. Brander. *Government Policy Towards Business* 4th edition. John Wiley and Sons, 2006.
- George A. Steiner and John F. Steiner. *Business, Government and Society*. 11th edition. McGraw Hill/Irwin, 2005
- Murray L. Weidenbaum. *Business and Government in the Global Marketplace*. Pearson Education Canada, 2004.
- Robert J. Jackson, Gregory S. Mahler, Holly Teeters-Reynolds, and Carl C. Hodge. *North American Politics. Canada, USA and Mexico in a Comparative Perspective*. Pearson Education Canada 2004.

STRATEGIC MANAGEMENT

3 Credit

Pre Requisites: Nil

Learning Objectives:

To provide an integrative framework that will allow students to synthesize knowledge from other business courses into a comprehensive understanding of competitive advantage. To provide a basic understanding of the nature and dynamics of the strategy formulation and implementation processes as they occur in complex organizations. To encourage students to think critically and strategically. To develop the ability to identify strategic issues and design appropriate courses of action.

Learning Outcomes:

- Upon completion of this course, students will be able to complete the following key tasks:
- Articulate a vision that gives meaning to all the firm's stakeholders of the firm's objectives;
- Formulate a strategic plan that operationalizes the goals and objectives of the firm;
- Identify the resource endowments specific to the firm and those that are homogeneous to industry participants;
- Specify current and desired strategic positioning in order to respond to market demands;

- Implement a strategic plan that takes into account the functional areas of business;
- Evaluate and revise programs and procedures in order to achieve organizational goals;
- Consider the ethical dimensions of the strategic management process; and
- Effectively communicate change management strategies in various forums to an array of audiences with accuracy, clarity, specificity and professionalism.

Course Contents:

Course Introduction, Strategic Management, Concepts; External Environment & Competition; Internal Environment & Resources; Business-Level Strategy; Competitive Dynamics; Strategy in High-Tech Industries; Corporate Strategy; Cooperative Strategy & Alliances; International Strategy

Text Books and Software:

1. Strategic Management, Competitiveness and Globalization: Competitiveness and
2. Globalization (Concepts), 2nd Canadian edition, by Hitt, Ireland, Hoskisson,
3. Rowe, & Sheppard.

MANAGERIAL ECONOMICS

3 Credit

Pre Requisites:

Principles of economics

Learning Objectives:

This course will increase the awareness among students about the importance of economics and how economics is used in decision making process in organizations.

Learning Outcomes:

- Economic analysis will basically enable students to get an idea how managers make optimal decisions keeping limitations and boundaries under considerations for profit maximization.

Course Contents:

Economic Decision Making Or Concept Of Managerial Economics; Economic Optimization or Optimization techniques; Demand Analysis; Forecasting; Production Analysis; Cost Analysis; Linear Programming; Pricing Practices

Text Books and Software:

1. Managerial Economics by mark Hirschey, Revised Edition.
2. Managerial Economics by Dominick Salvatore, 2nd edition.

**DEVELOPMENT MANAGEMENT / PROJECT
MANAGEMENT**

3 Credit

Pre Requisites: NIL**Learning Objectives:**

This course provides a comprehensive view of Project Management with a special focus on project management tools and techniques. Project Management has become an effective Instrument of management in managing a variety tasks. The students would be familiarizing themselves with different stages of project management and will also learn different tools and technique used in managing projects.

Learning Outcomes:

- Define a project, program, and project management and its processes.
- Determine effective ways of integrating project management and general business management in an organization.
- Determine ways to effectively integrate a project across an entire enterprise to reduce the impact of change.
- Determine how ethics, integrity, and objectivity affect project management.
- Discuss ways of effectively communicating throughout the Project Lifecycle.
- Determine stakeholders and how they affect the project.
- Describe the Project Management Lifecycle and develop a basic project plan.
- Form an effective project team.
- Recognize one's own work behavior style and quickly read other people's styles.
- Identify how to mesh divergent styles together to achieve project success.

Course Contents:

Introduction to the course and Project Management; Project Selection and it's strategic relevance; Project Management Phases; Project Initiation / Definition; The project planning phase 1; The work break down structures; The project planning phase 2; Human Recourse Issues costing Risk analysis project partnering and outsourcing; The project planning phase 3 scheduling project activities; Project Implementation (Project Leadership,

Communication and Teams.); Project evaluation, monitor and Control;
Project Closure / Termination

Text Books and Software:

1. Project Management the managerial Process, 3rd addition by Ray, Clifford.Larson,Erik.
2. Information Systems Project Management by David Olson

INDUSTRIAL RELATIONS AND LABOR LAWS

3 Credit

Pre Requisites:

Introduction to HRM & Strategic HRM.

Learning Objectives:

Industrial Relations in Pakistan; Link between Industrial relations & Human Resource Management; Collective bargaining; Worker involvement in decision-making; Grievance and dispute settlement; The management of conflict between employers, workers and trade unions

Learning Outcomes:

- Apply labor relations concepts in order to deal effectively with management and union advocates.
- Find the most recent labor relations information.
- Apply labor relations rules and legislation to practical situations in the workplace, taking into account both "sides" of the issue.
- Focus on an objective, flexible, and collaborative approach to problem resolution, not the acceleration of disputes.
- Develop an informed opinion about the labor relations actions of parties that you hear about in the news.

Course Contents:

An overview of Industrial Relations; Industrial Relations Act, 2008; The Industrial & Commercial Employment (Standing Orders) Ordinance, 1968; The Industrial & Commercial Employment (Standing Orders) Ordinance, 1968; The Factories Act, 1934; The Payment of Wages Act, 1936; The employees Social Security Ordinance, 1965; The Shops & Establishments Ordinance, 1969; The Employees Old -Age benefits Act, 1976; The Employees Cost of Living Act, 1973; Minimum Wages Ordinance, 1961; Case Study on ICI Pakistan Limited; Case Study on Glaxo Laboratories Pakistan Limited; Case Study on Ammar Textiles

Text Books and Software:

1. Complete set of labor laws

Elective Courses

Four Courses may be selected from any of the following:

A. Human Resource Management

HRM 460	Labor Laws and Industrial Relations
HRM 461	Compensation, Incentives and Corporate Governance
HRM 463	Organization Change and Development
HRM 497	Strategic Human Resource Management

ORGANIZATION CHANGE AND DEVELOPMENT

3 Credit

Pre Requisites:

Strategic Human Resource Management

Learning Objectives:

See change as an essential element that is positive; Recognize that adapting to change is all about attitude; Identify the stages of change we go through as we learn to deal with change; See change as an opportunity for self-motivation and innovation; Develop strategies for dealing with and accepting changes in organization; To be able to understand the concepts and intervention strategies; Providing framework for applying different models of change to different scenarios; To apply the knowledge acquired in case studies related to change management; To encourage students to think out of the box and recommend innovative change management interventions

Learning Outcomes:

- This course teaches students how to develop the skills to proactively address change and meet the challenges of transition in the workplace. Students will work to overcome the problems encountered when making changes in your organization. Students will also learn how to develop the ability to effectively handle organizational changes by examining the transition process and understanding their own, and others, needs and responses to each phase.

Course Contents:

The impact and definition of change; Intervention strategies; the organizational development model; Practical cases in change management;

Text Books and Software:

1. Paton. A. Robert, McCalman. James.,” Change Management” (2008) Sage Publishers, India

COMPENSATION, INCENTIVES AND CORPORATE GOVERNANCE

3 Credit

Pre Requisites:

Introduction to human Resource Management

Learning Objectives:

This course aims at enhancing students' capability and decision making skills in handling compensation management functions. It is expected that students will be aware of their judgmental errors and be able to suggest solutions to performance management issues.

Learning Outcomes:

On completion of this course, students are expected to be able to:

- relate compensation management to behavioral theories and concepts and within the wider context of human resources management
- conduct pay surveys and present pay data systematically with the use of information technology
- describe the process and evaluate the implications of job evaluation
- identify the internal and external environmental factors that have an impact on the pay structure of an organization
- demonstrate an understanding of the process of designing a pay structure taking account of the company environment
- analyze and suggest appropriate type of performance appraisal methods to be used under different situations
- apply equal opportunity in compensation and performance management issues

Course Contents:

Theories and Concepts; Compensation Strategies; Identification of Job Value and Pay Structures; Performance Management

Text Books and Software:

1. Milkovich, G. T., & Newman, J. M., *Compensation*, 8th ed., Boston: Irwin/McGraw-Hill, 2005

STRATEGIC HUMAN RESOURCE MANAGEMENT

3 Credit

Pre Requisites:

Introduction to HRM

Learning Objectives:

The course is aimed at helping students in developing an understanding of how human resources decisions contribute to organizational performance.

Learning Outcomes:

- Conduct a basic job analysis and apply this understanding of job requirements to other human resource management systems such as selection, performance appraisal, and compensation.
- Recognize basic human resource management tools such as performance appraisal forms, and understand some of the technical details of human resource management practices.
- Apply relevant theories to the management of people in organizations.
- Analyze business challenges involving human resource systems.
- Critically assess and evaluate human resource policies and practices.

Course Contents:

Conceptual overview of HRM; Overview of Strategic HRM; Strategic HR planning; Strategic Job Analysis; Employee Recruitment strategies; Selection Strategies; Strategic Training & Development; Strategies for Managing Performance; Reward Strategy; Strategies for developing the Employee Relationship

Text Books and Software:

1. Strategic Human Resource Management by Alan Nankervis
2. Strategic Human Resource Management by Michael Armstrong, 2nd Edition

B. Marketing

MKT 405 Advertising and Promotion Management
MKT 440 Marketing Analysis and Strategy
MKT 445 New Product Development and Branding
MKT 450 Consumer Behavior and Marketing
MKT 463 Pricing Strategies
MKT 465 Global Marketing Management
MKT 470 Marketing Research

(b) Four of the following courses:

MKT 410 Personal Selling
MKT 415 Sales Force Management
MKT 420 Supply Chain Management
MKT 425 Direct Response and Internet Marketing
MKT 430 Retail Management
MKT 435 Business-to-Business Marketing

C. C. Finance

(a) Two of the following courses:

FIN 421	Financial Analysis and Valuation
FIN 431	Financial Policies and Control
FIN 432	Corporate Financial Strategy
FIN 441	Investments
FIN 459	Financial Derivatives

(b) Two of the following courses:

FIN 415	Financial Accounting
FIN 417	Advanced Financial Accounting
FIN 425	Management of Financial Institutions
FIN 436	Financial Management of Multinational Corporations
FIN 446	Advanced Topics in Portfolio Management and Investment Strategy
FIN 458	Law and Finance
FIN 462	International Trade and Commercial Policy
FIN 464	International Finance
FIN 470	Advanced Real Estate Analysis
FIN 489	Real Estate Capital Markets

D. Development Studies

E. MIS

F. Hospital Management

G. Land & Agriculture

These course will be developed by the respective universities keeping in view their resources and market need.

COMPULSORY COURSES IN ENGLISH FOR BS (4 YEAR) IN BASIC & SOCIAL SCIENCES

ENGLISH I (Functional English)

Objectives: Enhance language skills and develop critical thinking.

Course Contents

Basics of Grammar; Parts of speech and use of articles; Sentence structure, active and passive voice; Practice in unified sentence; Analysis of phrase, clause and sentence structure ; Transitive and intransitive verbs ; Punctuation and spelling

Comprehension

Answers to questions on a given text

Discussion

General topics and every-day conversation (topics for discussion to be at the discretion of the teacher keeping in view the level of students)

Listening

To be improved by showing documentaries/films carefully selected by subject teachers

Translation skills

a. Urdu to English

b. Paragraph writing

Topics to be chosen at the discretion of the teacher

c. Presentation skills

Introduction

Note: Extensive reading is required for vocabulary building

Recommended books:

1. **Functional English**
 - a) Grammar
 1. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 1. Third edition. Oxford University Press. 1997. ISBN 0194313492
 2. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press. 1997. ISBN 0194313506
 - b) Writing
 1. Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 20-27 and 35-41.
 - c) Reading/Comprehension
 1. Reading. Upper Intermediate. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 453402 2.
 - d) Speaking

ENGLISH II **(Communication Skills)**

Objectives: Enable the students to meet their real life communication needs.

Course Contents

- a. **Paragraph writing**
Practice in writing a good, unified and coherent paragraph
- b. **Essay writing**
Introduction
- c. **CV and job application**
Translation skills
Urdu to English
- d. **Study skills**
Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension
- e. **Academic skills**
Letter/memo writing, minutes of meetings, use of library and internet

f. Presentation skills

Personality development (emphasis on content, style and pronunciation)

Note: documentaries to be shown for discussion and review

Recommended books:

Communication Skills

a) Grammar

1. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press 1986. ISBN 0 19 431350 6.

b) Writing

1. Writing. Intermediate by Marie-Christine Boutin, Suzanne Brinand and Françoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 0 19 435405 7 Pages 45-53 (note taking).
2. Writing. Upper-Intermediate by Rob Nolasco. Oxford Supplementary Skills. Fourth Impression 1992. ISBN 0 19 435406 5 (particularly good for writing memos, introduction to presentations, descriptive and argumentative writing).

c) Reading

1. Reading. Advanced. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1991. ISBN 0 19 453403 0.
2. Reading and Study Skills by John Langan
3. Study Skills by Richard Yorky.

ENGLISH III
(Technical Writing and
Presentation Skills)

Objectives: Enhance language skills and develop critical thinking

Course Contents

a. Presentation skills

b. Essay writing

Descriptive, narrative, discursive, argumentative

c. Academic writing

How to write a proposal for research paper/term paper
How to write a research paper/term paper (emphasis on style, content, language, form, clarity, consistency)

d. Technical Report writing

e. Progress report writing

Note: Extensive reading is required for vocabulary building

Recommended books:

Technical Writing and Presentation Skills

a. Essay Writing and Academic Writing

1. Writing. Advanced by Ron White. Oxford Supplementary Skills. Third Impression 1992. ISBN 0 19 435407 3 (particularly suitable for discursive, descriptive, argumentative and report writing).
2. College Writing Skills by John Langan. Mc=Graw-Hill Higher Education. 2004.
3. Patterns of College Writing (4th edition) by Laurie G. Kirszner and Stephen R. Mandell. St. Martin's Press.

b. Presentation Skills

c. Reading

1. The Mercury Reader. A Custom Publication. Compiled by northern Illinois University. General Editors: Janice Neulib; Kathleen Shine Cain; Stephen Ruffus and Maurice Scharton. (A reader which will give students exposure to the best of twentieth century literature, without taxing the taste of engineering students).

PAKISTAN STUDIES

Introduction/Objectives

- Develop vision of historical perspective, government, politics, contemporary Pakistan, ideological background of Pakistan.
- Study the process of governance, national development, issues arising in the modern age and posing challenges to Pakistan.

Course Outline

1. Historical Perspective

- a. Ideological rationale with special reference to Sir Syed Ahmed Khan, Allama Muhammad Iqbal and Quaid-i-Azam Muhammad Ali Jinnah.
- b. Factors leading to Muslim separatism
- c. People and Land
 - i. Indus Civilization
 - ii. Muslim advent
 - iii. Location and geo-physical features.

2. Government and Politics in Pakistan

Political and constitutional phases:

- a. 1947-58
- b. 1958-71
- c. 1971-77
- d. 1977-88
- e. 1988-99
- f. 1999 onward

3. Contemporary Pakistan

- a. Economic institutions and issues
- b. Society and social structure
- c. Ethnicity
- d. Foreign policy of Pakistan and challenges
- e. Futuristic outlook of Pakistan

Books Recommended

1. Burki, Shahid Javed. *State & Society in Pakistan*, The Macmillan Press Ltd 1980.
2. Akbar, S. Zaidi. *Issue in Pakistan's Economy*. Karachi: Oxford University Press, 2000.
3. S.M. Burke and Lawrence Ziring. *Pakistan's Foreign policy: An Historical analysis*. Karachi: Oxford University Press, 1993.
4. Mehmood, Safdar. *Pakistan Political Roots & Development*. Lahore, 1994.
5. Wilcox, Wayne. *The Emergence of Banglades.*, Washington: American Enterprise, Institute of Public Policy Research, 1972.
6. Mehmood, Safdar. *Pakistan Kayyun Toota*, Lahore: Idara-e-Saqafat-e-Islamia, Club Road, nd.
7. Amin, Tahir. *Ethno - National Movement in Pakistan*, Islamabad: Institute of Policy Studies, Islamabad.
8. Ziring, Lawrence. *Enigma of Political Development*. Kent England: WmDawson & sons Ltd, 1980.
9. Zahid, Ansar. *History & Culture of Sindh*. Karachi: Royal Book Company, 1980.
10. Afzal, M. Rafique. *Political Parties in Pakistan*, Vol. I, II & III. Islamabad: National Institute of Historical and cultural Research, 1998.

11. Sayeed, Khalid Bin. *The Political System of Pakistan*. Boston: Houghton Mifflin, 1967.
12. Aziz, K.K. *Party, Politics in Pakistan*, Islamabad: National Commission on Historical and Cultural Research, 1976.
13. Muhammad Waseem, *Pakistan Under Martial Law*, Lahore: Vanguard, 1987.
14. Haq, Noor ul. *Making of Pakistan: The Military Perspective*. Islamabad: National Commission on Historical and Cultural Research, 1993.

ISLAMIC STUDIES

(Compulsory)

Objectives:

This course is aimed at:

- 1 To provide Basic information about Islamic Studies
- 2 To enhance understanding of the students regarding Islamic Civilization
- 3 To improve Students skill to perform prayers and other worships
- 4 To enhance the skill of the students for understanding of issues related to faith and religious life.

Detail of Courses

Introduction to Quranic Studies

- 1 Basic Concepts of Quran
- 2 History of Quran
- 3 Uloom-ul -Quran

Study of Selected Text of Holly Quran

- 1 Verses of Surah Al-Baqra Related to Faith (Verse No-284-286)
- 2 Verses of Surah Al-Hujrat Related to Adab Al-Nabi (Verse No-1-18)
- 3 Verses of Surah Al-Mumanoon Related to Characteristics of faithful (Verse No-1-11)
- 4 Verses of Surah al-Furqan Related to Social Ethics (Verse No.63-77)
- 5 Verses of Surah Al-Inam Related to Ihkam (Verse No-152-154)

Study of Selected Text of Holly Quran

- 1 Verses of Surah Al-Ihzab Related to Adab al-Nabi (Verse No.6,21,40,56,57,58.)
- 2 Verses of Surah Al-Hashar (18,19,20) Related to thinking, Day of Judgment
- 3 Verses of Surah Al-Saf Related to Tafakar, Tadabar (Verse No-1,14)

Seerat of Holy Prophet (S.A.W) I

YLife of Muhammad Bin Abdullah (Before Prophet Hood)

- 4 Life of Holy Prophet (S.A.W) in Makkah
- 5 Important Lessons Derived from the life of Holy Prophet in Makkah

Seerat of Holy Prophet (S.A.W) II

- 1 Life of Holy Prophet (S.A.W) in Madina
- 2 Important Events of Life Holy Prophet in Madina
- 3 Important Lessons Derived from the life of Holy Prophet in Madina

Introduction To Sunnah

- 1 Basic Concepts of Hadith
- 2 History of Hadith
- 3 Kinds of Hadith
- 4 Uloom –ul-Hadith
- 5 Sunnah & Hadith
- 6 Legal Position of Sunnah

Selected Study from Text of Hadith

Introduction To Islamic Law & Jurisprudence

- 1 Basic Concepts of Islamic Law & Jurisprudence
- 2 History & Importance of Islamic Law & Jurisprudence
- 3 Sources of Islamic Law & Jurisprudence
- 4 Nature of Differences in Islamic Law
- 5 Islam and Sectarianism

Islamic Culture & Civilization

- 1 Basic Concepts of Islamic Culture & Civilization
- 2 Historical Development of Islamic Culture & Civilization
- 3 Characteristics of Islamic Culture & Civilization
- 4 Islamic Culture & Civilization and Contemporary Issues

Islam & Science

- 1 Basic Concepts of Islam & Science
- 2 Contributions of Muslims in the Development of Science
- 3 Quranic & Science

Islamic Economic System

- 1 Basic Concepts of Islamic Economic System
- 2 Means of Distribution of wealth in Islamic Economics
- 3 Islamic Concept of Riba
- 4 Islamic Ways of Trade & Commerce

Political System of Islam

- 1 Basic Concepts of Islamic Political System
- 2 Islamic Concept of Sovereignty
- 3 Basic Institutions of Govt. in Islam

Islamic History

- 1 Period of Khlaft-E-Rashida
- 2 Period of Ummayyads
- 3 Period of Abbasids

Social System of Islam

- 1 Basic Concepts Of Social System Of Islam
- 2 Elements Of Family
- 3 Ethical Values Of Islam

Reference Books:

1. Hameed ullah Muhammad, "Emergence of Islam" , IRI, Islamabad
2. Hameed ullah Muhammad, "Muslim Conduct of State"
3. Hameed ullah Muhammad, 'Introduction to Islam
4. Mulana Muhammad Yousaf Islahi,"
5. Hussain Hamid Hassan, "An Introduction to the Study of Islamic Law" leaf Publication Islamabad, Pakistan.
6. Ahmad Hasan, "Principles of Islamic Jurisprudence" Islamic Research Institute, International Islamic University, Islamabad (1993)
7. Mir Waliullah, "Muslim Jrisprudence and the Quranic Law of Crimes" Islamic Book Service (1982)
8. H.S. Bhatia, "Studies in Islamic Law, Religion and Society" Deep & Deep Publications New Delhi (1989)
9. Dr. Muhammad Zia-ul-Haq, "Introduction to Al Sharia Al Islamia" Allama Iqbal Open University, Islamabad (2001)

Note: One course will be selected from the following six courses of Mathematics.

COMPULSORY MATHEMATICS COURSES FOR BS (4 YEAR)

**(FOR STUDENTS NOT MAJORING IN
MATHEMATICS)**

1. MATHEMATICS I (ALGEBRA)

Credit Hrs: 3 + 0

Prerequisite(s): Mathematics at secondary level

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of algebra to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Preliminaries: Real-number system, complex numbers, introduction to sets, set operations, functions, types of functions. *Matrices:* Introduction to matrices, types, matrix inverse, determinants, system of linear equations, Cramer's rule.

Quadratic Equations: Solution of quadratic equations, qualitative analysis of roots of a quadratic equations, equations reducible to quadratic equations, cube roots of unity, relation between roots and coefficients of quadratic equations.

Sequences and Series: Arithmetic progression, geometric progression, harmonic progression. *Binomial Theorem:* Introduction to mathematical induction, binomial theorem with rational and irrational indices. *Trigonometry:* Fundamentals of trigonometry, trigonometric identities.

Recommended Books:

1. Dolciani MP, Wooton W, Beckenback EF, Sharron S, *Algebra 2 and Trigonometry*, 1978, Houghton & Mifflin,
2. Boston (suggested text)
3. Kaufmann JE, *College Algebra and Trigonometry*, 1987, PWS-Kent Company, Boston
4. Swokowski EW, *Fundamentals of Algebra and Trigonometry* (6th edition), 1986, PWS-Kent Company, Boston

2. MATHEMATICS II (CALCULUS)

Credit Hrs: 3 + 0

Prerequisite(s): Mathematics I (Algebra)

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of calculus to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Preliminaries: Real-number line, functions and their graphs, solution of equations involving absolute values, inequalities. *Limits and Continuity:* Limit of a function, left-hand and right-hand limits, continuity, continuous functions.

Derivatives and their Applications: Differentiable functions, differentiation of polynomial, rational and transcendental functions, derivatives.

Integration and Definite Integrals: Techniques of evaluating indefinite integrals, integration by substitution, integration by parts, change of variables in indefinite integrals.

Recommended Books:

1. Anton H, Bevens I, Davis S, *Calculus: A New Horizon* (8th edition), 2005, John Wiley, New York
2. Stewart J, *Calculus* (3rd edition), 1995, Brooks/Cole (suggested text)
3. Swokowski EW, *Calculus and Analytic Geometry*, 1983, PWS-Kent Company, Boston
4. Thomas GB, Finney AR, *Calculus* (11th edition), 2005, Addison-Wesley, Reading, Ma, USA

3. MATHEMATICS III (GEOMETRY)

Credit Hrs: 3 + 0

Prerequisite(s): Mathematics II (Calculus)

Specific Objectives of the Course: To prepare the students, not majoring in mathematics, with the essential tools of geometry to apply the concepts and the techniques in their respective disciplines.

Course Outline:

Geometry in Two Dimensions: Cartesian-coördinate mesh, slope of a line, equation of a line, parallel and perpendicular lines, various forms of equation of a line, intersection of two lines, angle between two lines, distance between two points, distance between a point and a line.

Circle: Equation of a circle, circles determined by various conditions, intersection of lines and circles, locus of a point in various conditions.

Conic Sections: Parabola, ellipse, hyperbola, the general-second-degree equation

Recommended Books:

1. Abraham S, Analytic Geometry, Scott, Freshman and Company, 1969
2. Kaufmann JE, College *Algebra and Trigonometry*, 1987, PWS-Kent Company, Boston
3. Swokowski EW, *Fundamentals of Algebra and Trigonometry* (6th edition), 1986, PWS-Kent Company, Boston

4. COURSE FOR NON-MATHEMATICS MAJORS IN SOCIAL SCIENCES

<i>Title of subject:</i>	:MATHEMATICS
<i>Discipline</i>	:BS (Social Sciences).
<i>Pre-requisites</i>	:SSC (Metric) level Mathematics
<i>Credit Hours</i>	:03 + 00
<i>Minimum Contact Hours</i>	: 40
<i>Assessment</i>	: written examination;
<i>Effective</i>	: 2008 and onward

Aims : To give the basic knowledge of Mathematics and prepare the students not majoring in mathematics.

Objectives: After completion of this course the student should be able to:

- Understand the use of the essential tools of basic mathematics;
- Apply the concepts and the techniques in their respective disciplines;
- Model the effects non-isothermal problems through different domains;

Contents :

1. *Algebra Preliminaries*: Real and complex numbers, Introduction to sets, set operations, functions, types of functions. *Matrices*: Introduction to matrices, types of matrices, inverse of matrices, determinants, system of linear equations, Cramer's rule. *Quadratic equations*: Solution of quadratic equations, nature of roots of quadratic equations, equations reducible to quadratic equations. *Sequence and Series*: Arithmetic, geometric and

harmonic progressions. *Permutation and combinations*: Introduction to permutation and combinations, *Binomial Theorem*: Introduction to binomial theorem. *Trigonometry*: Fundamentals of trigonometry, trigonometric identities. *Graphs*: Graph of straight line, circle and trigonometric functions.

2. *Statistics: Introduction*: Meaning and definition of statistics, relationship of statistics with social science, characteristics of statistics, limitations of statistics and main division of statistics. *Frequency distribution*: Organisation of data, array, ungrouped and grouped data, types of frequency series, individual, discrete and continuous series, tally sheet method, graphic presentation of the frequency distribution, bar frequency diagram histogram, frequency polygon, cumulative frequency curve. *Measures of central tendency*: Mean median and modes, quartiles, deciles and percentiles. *Measures of dispersion*: Range, inter quartile deviation mean deviation, standard deviation, variance, moments, skewness and kurtosis.

Books Recommended:

1. Swokowski. E. W., '*Fundamentals of Algebra and Trigonometry*', Latest Edition.
2. Kaufmann. J. E., '*College Algebra and Trigonometry*', PWS-Kent Company, Boston, Latest Edition.
3. Walpole, R. E., '*Introduction of Statistics*', Prentice Hall, Latest Edition.
4. Wilcox, R. R., '*Statistics for The Social Sciences*',

INTRODUCTION TO STATISTICS

Credit hrs: 3(3-0)

Unit 1. What is Statistics?

Definition of Statistics, Population, sample Descriptive and inferential Statistics, Observations, Data, Discrete and continuous variables, Errors of measurement, Significant digits, Rounding of a Number, Collection of primary and secondary data, Sources, Editing of Data. Exercises.

Unit 2. Presentation of Data

Introduction, basic principles of classification and Tabulation, Constructing of a frequency distribution, Relative and Cumulative frequency distribution, Diagrams, Graphs and their Construction, Bar charts, Pie chart, Histogram, Frequency polygon and Frequency curve,

Cumulative Frequency Polygon or Ogive, Histogram, Ogive for Discrete Variable. Types of frequency curves. Exercises.

Unit 3. Measures of Central Tendency

Introduction, Different types of Averages, Quantiles, The Mode, Empirical Relation between Mean, Median and mode, Relative Merits and Demerits of various Averages. properties of Good Average, Box and Whisker Plot, Stem and Leaf Display, definition of outliers and their detection. Exercises.

Unit 4. Measures of Dispersion

Introduction, Absolute and relative measures, Range, The semi-Inter-quartile Range, The Mean Deviation, The Variance and standard deviation, Change of origin and scale, Interpretation of the standard Deviation, Coefficient of variation, Properties of variance and standard Deviation, Standardized variables, Moments and Moments ratios. Exercises.

Unit 5. Probability and Probability Distributions.

Discrete and continuous distributions: Binomial, Poisson and Normal Distribution. Exercises

Unit 6. Sampling and Sampling Distributions

Introduction, sample design and sampling frame, bias, sampling and non sampling errors, sampling with and without replacement, probability and non-probability sampling, Sampling distributions for single mean and proportion, Difference of means and proportions. Exercises.

Unit 7. Hypothesis Testing

Introduction, Statistical problem, null and alternative hypothesis, Type-I and Type-II errors, level of significance, Test statistics, acceptance and rejection regions, general procedure for testing of hypothesis. Exercises.

Unit 8. Testing of Hypothesis- Single Population

Introduction, Testing of hypothesis and confidence interval about the population mean and proportion for small and large samples, Exercises

Unit 9. Testing of Hypotheses-Two or more Populations

Introduction, Testing of hypothesis and confidence intervals about the difference of population means and proportions for small and large samples, Analysis of Variance and ANOVA Table. Exercises

Unit 10. Testing of Hypothesis-Independence of Attributes

Introduction, Contingency Tables, Testing of hypothesis about the Independence of attributes. Exercises.

Unit 11. Regression and Correlation

Introduction, cause and effect relationships, examples, simple linear regression, estimation of parameters and their interpretation. r and R^2 . Correlation. Coefficient of linear correlation, its estimation and interpretation. Multiple regression and interpretation of its parameters. Examples

Recommended Books

- 1 Walpole, R. E. 1982. "Introduction to Statistics", 3rd Ed., Macmillan Publishing Co., Inc. New York.
- 2 Muhammad, F. 2005. "Statistical Methods and Data Analysis", Kitab Markaz, Bhawana Bazar Faisalabad.

Note: General Courses from other Departments

Details of courses may be developed by the concerned universities according to their Selection of Courses as recommended by their Board of Studies.

General Courses

Respective Universities may develop the following general courses according to their available expertise as approved by Board of Studies.

1. Logic and Critical Thinking
2. International Relations and Current Affairs
3. World Civilization
4. Science, Society and Development
5. Administrative Ethics
6. Introduction to Sociology
7. Introduction to Psychology
8. Any other course as recommended by BoS.

RECOMMENDATIONS

- Universities should be asked to get these suggestions approved through their relevant statutory bodies and the Board of Study should be empowered to regularly review the contents and reading materials of the respective courses.
- To produce text books on Public Administration in Pakistan. Funds for text books may be generated through the universities
- HEC will be launching the Text Book containing the list of PA in Pakistan
- Minimum dedicated full time faculty is required for effective implementation of BS Program.
- A workshop for implementation of the recommendation of curriculum committee should be organized.
- The committee recommended that Public Administration as a minor subject may be introduced as major in other bachelor programs as an elective paper in B.A / B.Sc programs.
- To establish a national body to promote and ensure quality assurance in Public Administration programs on the pattern of other professional bodies such as Pakistan Engineering Council, Pakistan Bar Council and Pakistan Pharmacy Council.
- For effective implementation of effective scheme of studies summer schools should be organized every year for the faculty.
- HEC should include new specialized programs being offered by various universities in the list of management sciences to deal with equivalent issues. The new programs include Master of Public Policy, Master of Human Resource Management, Master of Health Administration, Mater's in Administrative Sciences.
- The HEC being an apex institution in the higher education sector while preserving the autonomy of universities should promote innovation and the disciplines such as public administration most needed by the society through its institutional mechanism. For example the Federal Public Service Commission may be pursued to approve 200 marks for public administration paper of CSS examination.

The meeting was concluded with a vote of thanks to the members of the committee for their active participation, HEC authorities, and Ms. Ghayyur Fatima for support.