

**DELHI PHARMACEUTICAL SCIENCES
& RESEARCH UNIVERSITY**

(The First Pharmacy University in India)

Pushp Vihar, Sector-III, M.B. Road, New Delhi-110017

School of Allied Health Sciences



Programme Structure

BBA in Community Healthcare (BBA-CH)

Program Structure, Course Curriculum And Scheme of Examination

Program Overview

This program focuses on developing the knowledge base, skill sets in planning, implementation, operational Management, problem solving, consultancy and entrepreneurship and professional experiences necessary for success in a variety of health-related fields. Among the most attractive features of the Community Health program is its flexibility to create a custom degree plan based upon your personal interests and career goals. Through this rigorous program, graduates are able to manage hospitals and healthcare organizations globally, both in the public and the private sectors, thus meeting the demand for quality healthcare management.

Program Outcomes: After completion of the program, the students would be able to:

PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions and would enhance their administrative competence and decision making, when facing the challenges of the hospital and healthcare industry.

PO2. Effective Communication: Speak, read, write and listen in person and through electronic media to promote knowledge through applied and conceptual research relevant to hospital and healthcare management and to disseminate this knowledge through publications for furtherance of healthcare development.

PO3. Creativity • We are living in an era, where the work force is being replaced by Robots everywhere. Now, if we desire not to be replaced, a management graduate should be highly creative and out of box thinker.

PO4. Social Interaction: Elicit views of others and mediate disagreements while applying skills in planning and managing hospitals and healthcare organizations to help reach conclusions in group settings.

PO5. Effective Citizenship: Demonstrate empathetic social concern towards national development, and the ability to act with an informed awareness of community related healthcare issues and hospital policies.

PO6. Positive Attitude Positive Attitude will make a person optimistic and helps to avoid negative thoughts. Developing this attitude within our graduates will help them to see the brighter side of their career and life.

PO7.Ethics: Recognize ethical issues, ethical and social responsibility towards healthcare providers, patients and society, to justify the moral judgement concerning community health practices

PO8.Environment and Sustainability: Get Responsible towards the wellbeing of environment, the patients, healthcare professionals and the community by reducing toxicity of hospital waste, minimizing the use of hazardous chemicals, recycling and realising the importance of sustainable designs and building techniques to create true healing environment.

Program Specific Outcomes: After completion of the program, graduates should be able to

- Utilize critical thinking and problem solving skills to analyze community health needs.
- Acquire basic management skills in the area of health care delivery and be able to identify community health problems and learn to work to resolve these operational problems in the delivery of hospital and healthcare services..
- Understand the latest concepts and techniques of management / leadership skills and their applications in making the administrative roles of the graduates effective and efficient.
- Be able to work as a leading partner in health care teams and acquire proficiency in communication skills.
- Students will be able to integrate appropriate technology and software skills.
- Students will understand the diverse socioeconomic, behavioural, sociocultural, biological, environmental, philosophical, and historical factors that influence health, rehabilitation, and human movement.
- Use appropriate strategies for effective planning, implementation and evaluation of institutional and community based health and family welfare program.
- Develop skills with the focus on strategic responsibility for training and development of human resource for health care delivery.
- Explain the legal and regulatory environment in healthcare and implications for managers within the field
- Apply scientific approach to reduce cost of care through better material and money management.

Semester-I

Semester	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
I	BBA 101	Human Biology-I	3	1	-	4	20	80	100
	BBA 102	Introduction to Community and Public Health	3	1	-	4	20	80	100
	BBA 103	Principles of Management	3	1	-	4	20	80	100
	BBA 104	Introduction to Pharmacology	3	1	-	4	20	80	100
	BBA 105	Fundamentals of Epidemiology and Biostatistics	3	1	-	4	20	80	100
	BBA 106	Organizational Behaviour	3	1	-	4	20	80	100
	BBA 107	Computer Applications Lab	-	-	4	2	50*	-	50
	BBA 108	Yogic Sciences	2	-	-	0	00*	-	00
Total			20	6	4	26	170	480	650

*Evaluation to be conducted by internal faculty/examiner.

Semester-II

Semester	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
II	BBA 201	Human Biology-II	3	1	-	4	20	80	100
	BBA 202	Marketing management	3	1	-	4	20	80	100
	BBA 203	Human Resource management	3	1	-	4	20	80	100
	BBA 204	Introduction to Health Policy	3	1	-	4	20	80	100
	BBA 205	Fundamentals of Financial Management	3	1	-	4	20	80	100
	BBA 206	Social and Behavioural Health	3	1	-	4	20	80	100
	BBA 207	Oral & written Communication Skills	2	-	-	2	50*	-	50*
Total			20	6	-	26	170	480	650

*Evaluation to be conducted by internal faculty/examiner.

Semester-III

Semester	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
III	BBA 301	Health Psychology	3	1	-	4	20	80	100
	BBA 302	Health Education, Communication and Planning	3	1	-	4	20	80	100
	BBA 303	Population Sciences	3	1	-	4	20	80	100
	BBA 304	Environment Health and Safety	3	1	-	4	20	80	100
	BBA 305	Healthcare Logistics and Supply Chain Management	3	1	-	4	20	80	100
	BBA 306	Public Health Economics	3	1	-	4	20	80	100
Total			18	6	-	24	120	480	600

Semester-IV

Semester	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
IV	BBA 401	Communicable Diseases	3	1	-	4	20	80	100
	BBA 402	Occupational Health	3	1	-	4	20	80	100
	BBA 403	Community Health Nutrition	3	1	-	4	20	80	100
	BBA 404	Operations Research	3	1	-	4	20	80	100
	BBA 405	Healthcare Insurance	3	1	-	4	20	80	100
	BBA 406	Summer Project Report on Public Health Practices	-	-	8	4	100*	-	100
Total			15	5	8	24	200	400	600

***Evaluation to be conducted by internal faculty/examiner.**

***Evaluation and gradings will be done for Summer Internship Report (done after 4th semester)**

Semester-V

Semester	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
V	BBA 501	Non-Communicable diseases	3	1	-	4	20	80	100
	BBA 502	Fundamentals of Quality in Healthcare	3	1	-	4	20	80	100
	BBA 503	Laws and Ethics in Public Health	3	1	-	4	20	80	100
	BBA 504	Disaster Management	3	1	-	4	20	80	100
	BBA 505	Health Services Management	3	1	-	4	20	80	100
	BBA 506	Overview of National Health Programs	3	1	-	4	20	80	100
Total			18	6	-	24	120	480	600

***Evaluation to be conducted by internal faculty/examiner.**

Semester-VI

	Paper Code:	Subject	Periods			Credit Units	Evaluation scheme		
			L	T	P		Internal*	External	Total
VI	BBA 601	Health Survey and Research Methodology	3	1	-	4	20	80	100
	BBA 602	Project Thesis				6		150	150
		Internal Assessment				6	150		150
		Viva-voce				4		100	100
Total			3	1		20	170	330	500

SEMESTER – I

Human Biology-I

BBA 101

Contacts: 3L + 1T

Credits: 4

Course Overview:

The course aim is to provide basic concept and knowledge on anatomy and physiology with respective systems, structures and functions of different system and organs.

Course Outcomes

At the end of the course, students will be able to:

- Understand basic terminologies used in anatomy and physiology.
- Describe the structures and functions of different system of human body.
- Describe the structures and the functions of the cells, tissues, organ system and types and relation to each other and the physiological homeostasis.

Course content

UNIT – I

GENERAL INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY

- **General Anatomy:** Definition of anatomical terminologies such as anterior, posterior, superior, inferior, proximal, extension, flexion, abduction, distal, sagittal, (coronal, palmar, dorsal and ventral)
- Components of human cell, tissue, organ and their functions.
- Overview of structural organization of human body
- **General Physiology:** Nomenclature of different components of animal cells and their function Different tissue of body and their characteristic • Definition of body fluids and electrolyte balance, classification and their composition.

UNIT - II

GASTRO INTESTINAL SYSTEM

Anatomy of G.I. System:

- Nomenclature of different parts of gastro intestinal tract
- Position of salivary glands and pancreas
- Identification of position lobes and structure of liver
- Basic concept of peritoneal folds.

Physiology of G.I. system

- Digestive system processes and regulation
- Function of different glands involved in digestion i.e. tonsils, buccal glands, salivary glands, gastric glands, pancreas, liver etc.
- Peristalsis and regurgitation.

UNIT - III

MUSCULOSKELETAL SYSTEM

Anatomy of Musculo-skeletal System

- Introduction of Musculo-skeleton system,
- Name and identification of appendicular and axial skeleton
- Different types of joints and their characteristics.
- Function of musculoskeletal system.
- Classification of muscles: Cardiac muscle, skeleton muscle & smooth muscle.

Physiology of Musculo skeletal System

- Muscle contraction and excitation
- Movement of different joints i.e. shoulder, hip, knee, ankle, elbow, wrist, etc.
- Cellular respiration, dehydration and contraction.

UNIT - IV

NERVOUS SYSTEM

Anatomy of Nervous System

- Different components of nervous system
- Identification of different parts of brain and coverings
- Extent and covering of spinal cord
- Main tracts of spinal cord
- Cranial nerves and their area of supply.

Physiology of Nervous system

- Function of different parts of brain and spinal cord and its coverings
- Function of different cranial nerves, Function of special senses
- Function of sympathetic and parasympathetic nervous system
- Physiological aspects of meningitis, encephalitis and epilepsy.

UNIT - V

RESPIRATORY SYSTEM

Anatomy of Respiratory System

- Functional anatomy of the Respiratory System.
- Identification of paranasal air sinuses, larynx, trachea and bronchus
- Identification of different parts of lungs and pleura and bronchial tree.

Physiology of Respiratory System

- Function of nose, paranasal sinuses, nasopharynx, trachea, bronchus and alveoli of the lungs
- Gases exchanges and transport of gases in blood
- Lungs volume and change in volume in different respiratory activities
- COPD, Dyspnea, PND and Orthopnoea
- Mechanism of coughing.

Text & References

1. Chiras, D.D. (2012). Human Biology. Jones and Bartlett Publishers.
2. Harrison, G.A., Tanner, J.M., Pilbeam, D.R. and Bahor, P.T. (1976). Human Biology, Oxford University Press, London.

Introduction to Community and Public Health

BBA 102

Contacts: 3L + 1T

Credits: 4

Course Overview:

The aim of the course is to clarify the students on history, development and application of public health,

Course outcomes

At the completion of the course students will be competent to

- Describe the history, concept, definition, scope and limitation of public health
- Educate the student on major public health problems existing in India.

Course Contents

UNIT-I- Concept of health and health determinants

- Health: Concept & Definition, Dimensions of health,
- Determinants of health (including epidemiological triad),
- Concept of Wellbeing, iceberg phenomenon, spectrum of health
- Indicators of health
- Healthcare structure in India, Primary healthcare, Elements and principles of primary healthcare, Functions of Subcentres, PHC, CHC.

UNIT-II- Concept of diseases

- Natural History of disease, burden of diseases
- Causation theory: Germ theory
- Overview of Communicable and non communicable diseases.
- diseases
- Injuries: domestic and industrial
- Reproductive tract infections
- Mental health and drug abuse
- Malnutrition

UNIT – III-Overview of Public Health

- Definition of Public health,
- Historical development of public health from global to Indian context,
- Concept of burden of disease and role of public in controlling disease,
- Differentiate between public health, community health, community medicine and clinical medicine,
- Scope of public health
- **UNIT-IV: Disease prevention and control**
- Preventive health and level of prevention
- Role of public health in disease prevention and control

Text & References

1. Oxford textbook of Public Health Ed. Roger Detels, James McEwen, Robert Beaglehole, and Heizo Tanaka Oxford University Press (OUP) 4th Edition: 2002.
- 2) Public Health at the Crossroads – Achievements and Prospects. Robert Beaglehole and Ruth Bonita 2nd Edition Cambridge University Press
- 3) Maxcy-Rosenau-Last Public Health & Preventive Medicine, Fourteenth Edition Ed Robert Wallace, MD, et al.
- 4) Epidemiology and Management for Health Care: Sathe, et al. Popular Prakashan, Mumbai,
- 5) International Public Health: Diseases, Programs, Systems, and Policies by Michael Merson, Robert E Black, Anne J Mills - Jones and Bartlett Publishers.
- 6) Park's Text Book of Preventive and Social Medicine, K Park, Bansaridas Bhanot Publishing House

Principles of Management

BBA 103

Contacts: 3L + 1T

Credits: 4

Course Overview:

The aim of the course is to make understand about the Management Concepts, applications of Concepts in Practical aspects of business and development of Managerial Skills.

Course Outcome

At the completion of the course students will be competent to

- Describe the history, concept, definition, scope and limitation of management
- Educate the student on major management strategies existing in India and abroad

Course Content

UNIT – I

Introduction to Management: Definition, Nature and Scope, Functions, Managerial Roles, Levels of Management, Managerial Skills, Challenges of Management; Evolution of Management- Classical Approach- Scientific and Administrative Management; The Behavioural approach; The Quantitative approach; The Systems Approach; Contingency Approach, IT Approach.

UNIT – II

Planning and Decision Making: General Framework for Planning - Planning Process, Types of Plans, Management by Objectives; Development of Business Strategy. Decision making and Problem Solving - Programmed and Non Programmed Decisions, Steps in Problem Solving and Decision Making; Bounded Rationality and Influences on Decision Making; Group Problem Solving and Decision Making, Creativity and Innovation in Managerial Work.

UNIT – III

Organization and HRM: Principles of Organization: Organizational Design & Organizational Structures; Departmentalization, Delegation; Empowerment, Centralization, Decentralization, Recentralization; Organizational Culture; Organizational Climate and Organizational Change.

Human Resource Management & Business Strategy: Talent Management, Talent Management Models and Strategic Human Resource Planning; Recruitment and Selection; Training and Development; Performance Appraisal.

UNIT – IV

Controlling: Control, Types and Strategies for Control, Steps in Control Process, Budgetary and Non- Budgetary Controls. Characteristics of Effective Controls, Establishing control systems, Control frequency and Methods.

Text & References

1. Management Fundamentals, Robert N Lussier, 5e, Cengage Learning, 2013.
2. Fundamentals of Management, Stephen P. Robbins, Pearson Education, 2009.
3. Essentials of Management, Koontz Kleihrich, Tata McGraw Hill.
4. Management Essentials, Andrew DuBrin, 9e, Cengage Learning, 2012.

Introduction to Pharmacology

BBA 104

Contacts: 3L + 1T

Credits: 4

Course Overview:

The aim of the course is to impart the basic concept and knowledge on Pharmacology and Biochemistry.

Course outcomes

At the end of the course, students will be able to:

- Describe medical pharmacological related terminologies and the actions, reactions and the side effect of important drugs.
- Identify the various adverse effects of commonly used drugs and enumerate the name of emergency drugs, their procedure of administration and mode of actions.
- Understand the basic concepts and acquire the basic knowledge of pharmacology

Course Content

UNIT – I

Introduction to Pharmacology: Definition, scope of pharmacology and its relation with other medical disciplines, terminologies used in pharmacology, Classification of drugs, Routes of drug administration.

UNIT – II

Pharmacokinetics: Introduction, Process of drug movement, Drug absorption, distribution, biotransformation and excretion (ADME) and factors affecting ADME, Physiologic processes affecting pharmacokinetic and pharmacokinetic variables.

UNIT – III

Pharmacodynamics: Principle, Types of drug action, Mechanisms of drug action, Drug receptors and receptor regulation, concepts of agonists, antagonists, partial agonist and inverse agonist drugs.

UNIT – IV

Factors modifying drug action. Rational use of medicines. Adverse drug effects: types of adverse drug reactions, drug dependence, teratogenicity.

UNIT – V

General concepts of anti-microbial therapy: principle, choice, combined use of antimicrobials and its public health implications, failure of antimicrobial therapy. Drug resistance

UNIT – VI

Important Drugs and their Actions

Concept of essential drugs and its implementation, Criteria for selection of essential drugs, Problems in implementation. National Drug Policy, Drug Act, Standard Treatment Guidelines disease.

UNIT – VII

New drug development: approaches to drug discovery, preclinical studies, and clinical trials. Drugs used in different mentioned diseases: Drugs Used in TB, Malaria, Diarrhoea, Common infections, HIV/AIDS, COPD, Diabetes, Hypertension, Pain, Depression

Text & References

1. Clinical Pharmacology by Lawrence

2. Basic and Clinical Pharmacology by Katzung

3. WHO model list of essential drugs

https://www.who.int/medicines/publications/essentialmedicines/18th_EML.pdf

4. Promoting rational use of drugs

<https://www.who.int/activities/promoting-rational-use-of-medicines>

5. Standard treatment guidelines

https://www.who.int/medicines/technical_briefing/tbs/10-PG_Standard-Treatment-Guidelines_final-08.pdf

Fundamentals of Epidemiology and Biostatistics

BBA 105

Contacts: 3L + 1T

Credits: 4

Course Overview:

Epidemiology is the basic science and cornerstone of the public health. By applying the concepts learned in this course to epidemiological study designs and issues, students will understand the practice of epidemiology as it relates to real life and makes for a better appreciation of public health programs and policies. The Biostatistics course introduces basic concepts of statistical inference and intends to teach bio-statistical methods and concepts used in the health sciences, emphasizing interpretation and concepts.

Course Outcome

At the completion of the course students will be competent to

- Describe the history, concept, definition, scope and limitation of epidemiology and biostatistics
- Understand the important issues related to epidemiology and role of biostatistics

Course content

UNIT – I

Basic concepts and ethics of epidemiology, Measures of exposure and outcome: History of Epidemiology, Emergence of modern epidemiology, Measures of Exposures, Types of exposures, Sources of exposures, Measures of outcome. Measures of exposure effect, relative and absolute measures of effect. Communicable and non-communicable diseases.

UNIT – II

Disease registries, International classification of diseases. Measures of disease frequency: Prevalence, Incidence, Risk, Odds of disease, Incidence time, Relationship between prevalence, rate and risk, measures of disease occurrence, direct and indirect method of standardization, cumulative rate, cumulative risk, proportional incidence. Confidence intervals and significance tests for measures of occurrence and effect.

UNIT – III

Data, Primary and secondary data, Variables , Type of study design: Introduction to statistics, Measures of central tendency and dispersion, Observational study, Intervention studies, Cohort studies, case-control studies, cross-sectional studies, Prospective and retrospective study.

UNIT – IV

Validity and reliability of measures of exposure and outcome: Sensitivity, Specificity, positive predictive value and negative predictive value, Intra and Interobserver reliability, Kappa statistic.

UNIT – V

Central tendency, dispersion and distribution of data, Statistical inference, sampling and presentation of data.

Text & References

1. Leon Gordis (2019). Epidemiology. 6th Edition.
2. Fundamentals of Epidemiology and Biostatistics: DeeptiShyam Sunder (2019), CBS Publishers & Distributors.
3. Beaglehole, Bonita R, Kjellstrom T. Basic Epidemiology, World Health Organization, Publishers, Philadelphia Geneva.
4. Epidemiology for District Health Managers. World Health Organization, Geneva.
5. Mausner Judith and Bahn K (1974): Epidemiology: An introductory Text, W. B. Saunders

Organizational Behaviour

BBA 106

Contacts: 3L + 1T

Credits: 4

Course Overview:

Students study the behaviour of individuals and groups as part of the social and technical system in the pharmaceutical ecosystem. They examine individual and group behaviour, communication, conflict and various management styles, motivational techniques and coordination in the work environment and apply these concepts to the development of an organization's human resources.

Course Outcome

At the completion of the course students will be competent to

- Describe the history, concept, definition, scope and limitation of organizational behaviour
- Understand the aspects and issues related to organizational behaviour

Course Content

Unit-I

Introduction to Organization Behaviour

Nature Scope and Purpose – Definition of Organization Behavior, Need, Importance and Emergence of Organizational Behavior — Frame Work – Organizational Behavior Models

The Individual - Foundations of Behaviour, Ability, Personality, Learning. Group and Interpersonal Behaviour, Decision Making, Values, Attitudes, Perception, Applications of Attributes. Individual Values and Ethics-Self-Concept, Self-Esteem and Self-Efficacy-Locus of Control-Abilities and Performance

The Group – Foundations of Group Behaviour, Defining and Classification of Groups, Group Decision Making, Understanding Teams – Types of Teams, Teams and Groups Concepts, Group Dynamics, Emergence of Informal Leaders and Working Norms –Interpersonal Relations – Communication – Control, Team Building

Unit-II

Leadership and Motivation

Meaning – importance – leadership approaches – theories – trait theories, Behavior theories, leaders Vs managers, contemporary issues in leadership., Power and politics - power centers – Organizational politics-tactics. Motivation – concepts, significance, theories: natural, incentive, behaviourist, socio cultural theory, content and cognitive (process) theories., thematic apperception test, attribution theory, approach avoidance, employee motivation- job characteristics model

Unit-III

Organization Dynamics: Culture and Design

Definition of Organizational Culture, Characteristics of Culture, Strong and Weak types of Culture, Changing Organizational Culture, Differences in Culture and Climate, Assessing Organizational Citizenship Behaviour. Organizational Design - Definition of Organization, Importance of Organising Process, Organization Design Process, Internal Contingency Factors: Technology, External Contingency Factor: Environment and Information processing.

Unit-IV

Organizational Strategy and Technology

Introduction, Definition of Strategy, Components of Organizational Strategy, Vision and Mission, Strategy Management Process, Organizational Strategy Implementation, Organizational Issues, Innovation Process, Project Groups, Technology Opportunity, Technological Concepts, Introduction of New Technologies in Organizations.

Unit-V

Conflicts, Negotiations & Stress Management

Definition, Transitions in conflict thought, functional Vs dysfunctional conflict, the conflict process. Consequence of Conflict-Stress, Emergence of Stress, Causes-Copying mechanisms, psychosomatic disorders, consequences, managing stress. Negotiating and Resolution- Conflict Management, managing interpersonal and Inter-group conflict-negotiation tactics, change.

Text and References

1. Organizational Behaviour Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, 16th edition
2. Organizational Behaviour by Stephen P. Robbins
3. Organizational Behaviour by Fred Luthans
4. Hersey, P and Blanchard, K: Management of Organizational Behaviour
5. Behavioural Processes in Organization by D. M. Pesonjee, T. V. Rao and Udai Pareek

Computer Application

BBA 107

Contacts: 3L + 1T

Credits: 02

Course Overview:

The course will expose the students to the developments in computer technology and will help the students understand the application of information technology in the healthcare system.

Course Outcome

At the completion of the course students will be competent to

- Understand the applications and utilization of computers
- Understand basic computational techniques and their application for healthcare.

Course content

UNIT - I

Introduction to Windows: Application in Windows – word processing (MS Word) – Spreadsheet (MS Excel) – Presentation (MS Power Point) – Relational databases (MS Access).

UNIT - II

Introduction to Databases: Application of Databases – Parts of Databases – Types of Databases – Role of Social Media in today's scenarios-presenting of data-Social Media and Data-Big Data Introduction.

UNIT – III

Awareness on the application of IT in Various functions of Hospital/Public health departments; Working knowledge of commonly used software in health services, Application of statistical tools through SPSS in the areas of Health services.

Text and References

1. Computer System Architecture Morris Man, Pearson, 3rd Edition.
2. Ad. Computer Architecture Kaithwang, Tata McGraw-Hill.
3. Digital Computer Electronics Malvino, Tata McGraw-Hill,4th Edition
4. Micro Computer Systems Yu Cheng Liu &Glann Gibson
5. Digital Electronics By Bartee, Mc-Graw-Hill
6. Introduction to Digital Computer Design V. Rajaraman&Radhakrishnan, PHI
7. Computer Organization and Architecture W. Stalling, Pearson, 8th Edition
8. Intel Micro Processors Barry Brey, Pearson, 7th Edition
9. Computer Organization & Design Pal Chaudhary,PHI, 3rd Edition
10. Foundations of computing 3rd Edition Pradeep K. Sinha &Priti Sinha

Yogic Sciences

Paper Code- YGS 108

Contacts: 2L

Course Overview:

Credits: 00

The students will be able to appreciate the role of yoga in their day to day life. The course has focus on basic concept of yoga, ashtanga yoga and its effect, various kinds of asanas and pranayama and different aspects of mudra.

Course Outcome

At the completion of the course students will be competent to

- Learn basics and techniques of Yoga

Course Content

Module I : Introduction of Yoga

- Etymology of Yoga
- Concept of Chitta and Chitta Bhumis
- General introduction to four paths of Yoga
- Importance of Nadi& Chakra in Yoga

Module II :Ashtanga Yoga: Purpose, Significance and Effects

Eight limbs of Yoga as per Yogasutra of Patanjali – Discipline/self restraint (Yama), Observance (Niyama), Posture (Asana), Restraint of breath/exercises of life force (Pranayama), Abstraction of senses/Introversion-of attention (Pratyahara), Concentration (Dharna), Meditation(Dhyana) and Super conscious state/illumination (Samadhi)

Module III : Asana and Pranayama

- Introduction of Asanas
- Benefits and Contra-indication of Asanas
- Define and understand the concept of Prana Pranayama
- Benefits and Contra-indication of Pranayama
- Physiological effect of Pranayama

Module IV :Shatkarma, Mudra and Bandh

- Introduction of Mudra

- Benefits and Contra-indication of Mudra
- Introduction of Bandh
- Benefits and Contra-indication of Bandh
- Introduction of Shatkarma
- Benefits and Contra-indications of Shatkarma

Module V :

- Yoga Nidra (The Conscious Dynamic Sleep)
- Meditation Technique
- Cause of Pain (Dukha) according to Yog Sutra of Patanjali
- Yogic lifestyle (Ahara, Vihar, Achar, Vichar),
- Yogic attitudes (Maitri, Karuna, Mudita and Upeksha) and practices for Mental Wellbeing.

Practical

Asana - SukshmaVyayam (Joints Movement)

Backward Bending Asanas

- Sarpasana (snake pose)
- Bhujangasana (cobra pose)
- ArdhaShalabhasana (half locust pose)
- Shalabhasana (locust pose)
- Dhanurasana (bow pose)
- Kandharasana (shoulder pose)

Forward Bending Asanas

- Paschimottanasana (back stretching pose)
- JanuSirshasana (head to knee pose)
- PadaHastasana (forward bending pose)

Meditation Asanas

- Sukhasana (easy pose)
- Padmasana (lotus pose)

Vajrasana Group of Asanas

- Vajrasana (thunderbolt pose)
- Padadhiraana (breath balancing pose)
- ShashankBhujangasana (striking cobra pose)
- Ustrasana (camel pose)

Digestive/Abdominal Asanas

- Pawanmuktasana
- Uttanpadasana (raised legs pose)
- Nukasana (boat pose)

Standing Asanas

- AkarnaDhanurasana (bow and arrow pose)
- Tadasana (palm tree pose)
- TiryakaTadasana (swaying palm tree pose)
- Kati Chakrasana (waist rotating pose)
- Dwikonasana (double angle pose)
- Trikonasana (triangle pose)

Spinal Twisting Asanas

- BhuNamanasana (spinal twist prostration pose)
- ShavaUdarakarshanasana (universal spinal twist)
- ArdhaMatsyendrasana (half spinal twist)

Balancing Asanas

- EkPadaPranamasana (one-legged prayer pose)
- Natarajasana (Lord Shiva's pose)

Relaxation Asanas

- Shavasana (corpse pose)

Advanced Asanas

- Chakrasana (wheel pose)
- Brahmacharyasana (celibate's pose)

Pranayama

- Narishodhan (psychic network purification)
- Ujjayi (psychic breath)
- Kapalbhata (frontal brain cleansing breath)
- Bhastrika (bellows breath)
- Bharamri (humming bee breath)
- Surya Bhedi (vitality stimulating breath)
- Chandra Bhedi
- Sheetali (cooling breath)

Bandh

- JalandharaBandh(throat lock)
- Uddiyan Bandh (abdominal contraction)
- Moola Bandh (perineum contraction)
- Maha Bandh (great lock)

Mudra

- Giyan Mudra (chin mudra)
- Hridaya Mudra (heart gesture)
- Bhoochri Mudra (gazing into nothing)
- Yoga Mudra (Attitude of psychic union)
- Shambhavi Mudra (eyebrow centre gazing)

Shat-karma

- Kapalbhata
- Neti, Jala (nasal cleaning with water)
- Agnisara (activating the digestive fire)

Reference Books

1. Asana Pranayama Mudra Bandha by Swami SatyanandaSaraswati. Publisher: Yoga Publication Trust, Munger, Bihar, India
2. Karma Yoga, Bhakti Yoga, Raja Yoga, JnanaYoga by Swami Vivekananda
3. Yoga Nidra by Swami SatyanandaSaraswati. Publisher: Yoga Publication Trust, Munger, Bihar, India

4. Yoga Sutras of Patanjali by Swami Venkateshananda Publisher: MotilalBanarsidass Publishers Private Limited, New Delhi, India
5. Hatha Yoga by Swami Sivananda. Publisher: The Divine Life Society, Uttarakhand, India
6. Gheranda Samhita by Swami NiranjananandaSaraswati. Publisher: Yoga Publication Trust, Munger, Bihar, India

SEMESTER-II

Human Biology-II BBA 201

Contacts: 3L+1T

Credits: 04

Course Overview:

This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It includes human anatomy of sense organs, urinary system, reproductive system, cardiovascular system and endocrine system.

Course Outcome:

At the end of the course, students will be able to:

- Understand the structures and functions of sense organs
- Describe the structures and functions of different system of human body.
- Describe the structures and the functions of endocrine glands.

Course content:

Unit 1: Sense Organs:

Elementary knowledge of structures and functions of Eyeball, Ear, Nose, tongue and Skin

Unit 2: Urinary System:

- Structures and functions of various organs of Urinary system: Kidney, ureter, Urinary bladder, Urethra.
- Structure and functions of nephron.
- Physiology of urine formation, Composition of urine, Glomerular Filtration Rate.

Unit 3: Reproductive System:

- Structures and functions of Female reproductive organs: Uterus, Ovary, Uterine tubes, vagina.
- Ovarian cycle, ovulation and fertilization.
- Structures and functions of Male reproductive organs: Testis, spermatic cord, epididymis, vas deferens, seminal vesicles, ejaculatory ducts, prostate.
- Spermatogenesis

Unit 4: Cardiovascular system

- Composition and functions of blood.
- Heart – anatomy of heart, blood circulation, blood vessels, structure and functions of artery, vein and capillaries
- Conduction system of heart and heartbeat, cardiac output, cardiac cycle.
- Blood pressure- Apparatus used and measurement of blood pressure.
- Lymphatic organs and tissues, lymphatic vessels, lymph circulation and functions of lymphatic system.

Unit 5: Endocrine Glands

Structures and functions of Endocrine glands: Pituitary gland, Thyroid gland, Parathyroid gland, Adrenal glands, Thymus gland, Pancreas.

Text & References

1. Essentials of Medical Physiology by K. Sembulingam and P. Sembulingam. Jaypeebrothers medical publishers, New Delhi.
2. Anatomy and Physiology in Health and Illness by Kathleen J.W. Wilson, Churchill Livingstone, New York
3. Text book of Medical Physiology- Arthur C, Guyton and John.E. Hall. Miamisburg, OH, U.S.A. Principles of Anatomy and Physiology by Tortora Grabowski. Palmetto, GA, U.S.A.
4. Textbook of Human Histology by Inderbir Singh, Jaypeebrothers medical publishers, New Delhi.

Marketing Management
BBA 202

Contacts: 3L + 1T

Credits: 04

Course Overview:

This subject will provide an exposure to the conceptual framework of marketing in healthcare. This learning will enable the students to understand the need, relevance and necessity of marketing in today's competitive market environment, facilitates them operationalizing and implementing marketing as an integral function in a Healthcare scenario.

Course Outcome:

- To provide the students exposure to modern marketing concepts, tools, and techniques, and help them develop abilities and skills required for the performance of marketing functions in healthcare.

- To give the insight into the application of marketing principles in various situations in healthcare management.

Course Content:

Unit 1: Introduction to Marketing: - Meaning - concept - functions - marketing Planning & implementation marketing Programmes - Marketing environment – Micro and Macro.

Unit 2: Market Segmentation and consumer behaviour – Influencing factors, Decision process - Marketing Research - Marketing information system

Unit 3: Product: - Meaning - Product planning - policies - positioning - New product

Unit 4: Pricing: - Pricing objectives – Setting and modifying the price – Initiating price changes and responding to price changes

Unit 5: Promotion: Promotion Mix - Advertisement - Message - copy writing - Media strategy -sales promotion - Personal selling and publicity.

Unit 6: Physical Distribution and Strategies: - Distribution Mix - Managing channel - intermediaries - transport and warehousing

Text & References:

1. Marketing Myopia by Theodore Levitt, HBR September-October 1975
2. Phillip Kotler, Kevin Lane Keller Marketing management, 15th edition. Pearson Education India.
3. Marketing management by Kotler, Keller, Koshy &Jha, 14th edition
4. Marketing Management by RajanSaxena; 5th edition Publisher: Tata McGraw-Hill Marketing
5. Management by Ramaswamy V S and Namakumari; 5theditionPublisher: S Macmillan India Ltd.

6. Douglas J. Dalrymple, William L. Cron, Thomas E. DeCarlo. (2004), "Sales Management", John Wiley & Sons, New Jersey, USA.
7. Ralph W. Jackson, Robert D. Hisrich (1996), "Sales and Sales Management", Prentice Hall, New Jersey, USA.
8. Manfred Krafft, Murali K. Mantrala (2010), "Retailing in the 21st century: Current and future trends", Springer, New York, USA
9. Roman G. Hiebing Jr., Scott w. Cooper (2004), "The successful marketing plan: A discipline and comprehensive approach", Tata McGraw-Hill, USA.

**Human Resource Management
BBA 203**

Contacts: 3L + 1T

Credits: 04

Course Overview:

The course aims at developing the skills of managing people in the healthcare industry. It introduces concepts of human resource management in the context of organization, organizational characteristics, learning organization, human resource planning, recruitment and selection, job analysis and evaluation, training and development performance appraisal, career planning, and managing employees relations.

Course Outcome:

- Provide an understanding of the dimensions of the management of human resources, with particular reference to HRM policies and practices in India.
- Explain the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.

Course Content:

Unit 1: Overview of HRM

Introduction of HRM, Overview of HRM, Scope of HR, Nature of HR, Need for HR Planning, Roles and Responsibilities of HR Manager, Challenges Issues in HRM.

Unit 2: Human Resource Planning, Training and Development

Recruitment and Selection, placement, and planning staffing. Job Analysis & Design- job description- job specification- job enlargement- job enrichment

Appraising & Managing Performance-different methods- Traditional and modern--Potential appraisal -Succession planning, Promotion procedure and policies, Employee Training & Development

Unit 3: Wages and compensation and employee grievances

Wages and compensation -Employee Remuneration, - Non financial rewards, Employee grievance Handling-Counselling and mentoring, Downsizing separation processes, Turnover retirement, Layoff discharge, Voluntary Retirement Schemes (VRS)

Unit 4: Industrial Relations

History- Purpose-Scope-Objectives, Relationship of Industrial Relations with Employee Relations, The Role of Government in Industrial Relations

Unit 5: Trade unions

History of Trade Unions -Structure, Trade Unions functions, Trade Unions ACT 1926, Collective bargaining, Workers participation in Management, managing employee Safety and Health

Text & References:

1. Human Resource Management, Ashwatthapa. 8th edition.
2. Human Resource Management – Gary Dessler
3. Fundamentals of Human Resource Management, 9th Edition
4. David A. DeCenzo (Coastal Carolina University), Stephen P. Robbins
5. Human Resource Management Text and Cases (Paper Codeback)- VSP RAO
6. Hospital Administration And Human Resource Management R.C. Goyal
7. Designing and Managing Human Resource Systems- UdaiPareek& T. V. Rao (Oxford& IBH Pub. Co. Ltd., New Delhi)

Introduction To Healthcare system and Policies
BBA 204

Contacts: 3L + 1T

Credits: 04

Course Overview:

The aim of the course is to provide deep insight about health care environment. This course focused on the management and organization, health, service delivery, and policy reforms for improving quality and affordability of health care in India.

Course Outcome:

- Provide information about the background objectives, action plan, targets, operations, achievements and constraints of various National Health Policies in the country.
- Understand the concepts underlying the design of health programs
- Explain basic approaches to design health programmes, with a focus on low resource settings.

Course content

Unit-I

Defining health system, Objectives of health systems, Functions of health systems, Community services in rural, urban and school health, Improvement in rural sanitation, Health promotion and education in school.

Unit-II

Organization and Management of Public Health Care Delivery System, Health system at National level, State level, District level, Block level, Concept and basic principle of primary healthcare system, secondary and tertiary healthcare system

Unit-III

Health policy planning efforts in India, Important committees and their recommendations, Salient features of: National health policy 2017, National population policy 2000, National nutrition policy 1993, Policy for children 2013, National policy for improvement of woman 2001.

Unit-IV

National AIDS control and prevention policy 1992, National policy on older persons 1999, National environmental policy 2006,

Unit-V

Overview of National Health Mission : Goals, strategies and outcome of NHM, Components under NRHM 2005 and NUHM, Indian public health standards,

Text & References

1. Government of India, Ministry of Health and Family Welfare. Annual Report (Various Years).
2. Government of India. 1946. Report of the Health Survey and Development Committee (Bhore Committee), Volume 1,2,3, and 4. Delhi: Manager of Publications.
3. Government of India. 1961. Report on Health Survey and Planning Committee (Mudaliar Committee). New Delhi: Ministry of Health.
4. Government of India. 1973. Report of the Committee on Multi-Purpose Workers under Health and Family Welfare Programme (Kartar Singh Report). New Delhi: Ministry of Health and Family Planning.
5. Government of India. 1975. Compendium of Recommendations of Various Committees on Health Development 1943-75. New Delhi: Ministry of Health and Family Welfare.
6. Rao, S., Rao, K. S. (2017). Do We Care? India's Health System. India: Oxford University Press.
7. India's Healthcare Industry: Innovation in Delivery, Financing, and Manufacturing. (2014). India: Cambridge University Press.
8. Park Textbook of Preventive and Social Medicine, K Park, 21 st Edition, 2011, ISBN-14: 9788190128285, BanarsidasBhanot Publishers.
9. Understanding health policy: A clinical approach, 5th edition by Thomas S. Bodenheimer and Kevin Grumbach.

Fundamentals of Financial Management
BBA 205

Contacts: 3L + 1T

Credits: 04

Course Overview:

Enable the students to understand the basic concept of Corporate Finance, practical applications of time value of money and evaluating long term investment decisions. Develop analytical skills to select the best source of capital, its structure on the basis of cost of capital. Helps the future managers in understanding the recent trends of primary and secondary market and develop skills for application of various financial services.

Course Outcome:

- To provide the concepts and foundations of managing finance in business enterprises.
- To provide the concepts and foundations of managing finance in business enterprises.
- To orient the students regarding financial management practices in Indian companies and Global enterprises.

Course Contents:

Unit 1: Introduction to Finance & Corporate Finance

Finance & its scope, Financial Decisions, Sources of Finance, Time Value of Money, Profit maximization vs. Wealth maximization, Functions of Finance Manager in Modern Age, Corporate Finance Introduction:– Nature and Scope . Concept of Risk and Return.

Unit 2: Time value of Money

Compounding, Continuous Compounding, Effective Rate of Interest, Discounting – Single Cash Flows & Series of Cash Flows, Annuity – Future Value and Present Value, Present Value of Growing Annuity, Perpetuity – Present Value, Growing Perpetuity – Present value, Equated Annual Instalments, Valuation of bonds and shares.

Unit 3: Investment Decision:

Capital Budgeting Decisions: Discounting and Non discounting techniques, Calculation of Net present value (NPV) and IRR. Replacement decisions. ARR. Excel Application in Analyzing Projects.

Unit 4: Dividend Decisions:

Dividend Decision: Factors affecting Dividend Policy, Forms of Dividends, Types of Dividend Policies, Dividend Models: Walter and Gordon Model, Miller- Modigliani(MM) Hypothesis .

Unit 5: Indian Financial System

Role of Financial Institution, Primary and Secondary Market, Venture Capital, Mutual Funds.
Introduction to Derivatives.

Text & References:

1. Khan and Jain - Financial Management (Tata McGraw Hill, 7th Ed.)
2. Pandey I M - Financial Management (Vikas, 11th Ed.)
3. William Hakka BettnerCarcello- Financial and Management Accounting (TMH-16th Ed.)
4. Sheebakapil- Fundamental of financial management (Wiley, 2015)
5. Prasanna Chandra - Fundamentals of Financial Management (TMH, 9th Ed.)
6. V. Rajesh Kumar, "Financial Management", Mc Graw Hill Education.
7. Singh and Srivastava- Business Finance (Prayagpustakbhavan 3rd Ed.)

Social and Behavioral Health

BBA - 206

Contacts: 3L + 1T

Credits:04

Course Overview: Enable the students to understand the basic concept of social and behavioural health. The course aims at introduction of Socio-economic determinants of health their importance. It introduces major theories of behavior change and models Social Welfare policies and Programs.

Course Outcome:

- To introduce society and social and behavioural health
- To understand the concept of socio-economic determinants of health
- factors affecting human behavior
- Apply socio-behavioural model in designing public health interventions

Course Content

Unit I: Introduction to society and social and behavioral health:

Society- types of society, Family - types, Functions of family, Role of family in health and disease, Social institutions - marriage, political, religious, economic; Social mobility, Social change - planned and unplanned, Social pathology in relation to public health, Social problems - Crime; Slums, Delinquency, Alcoholism, Drug addiction, Prostitution, Beggary, Mental disorders, Domestic and gender violence, Child abuse, Female infanticide.

Unit II: Introduction to social and behavioral health: Socio-economic determinants of health, Importance of social, psychological, cultural and behavioral factors in public health: Social epidemiology; Social ecological web, applied medical anthropology.

Unit III: Health and illness behavior:

Health and illness behavior in developing countries, Social and cultural context of health, Social reaction to diseases, Comparative health cultures, Health disparities, Diversity and cultural competencies.

Unit IV: Theories of Behavior Change:

Defining theories of Behavior change, Key elements (Threat, fear, response efficacy, self efficacy, barriers, benefits, subjective norms, attitudes, intentions, cues to action, reactance) and process of behavior change, Major theories of behavior change and models and their applications in public health with examples.

Field visit: Perception & self efficacy assessment in relation to WASH programme

References:

1. Essentials of health behavior: Social and behavioral theory in public health by Mark Edberg. Jones and Bartlett publishers (2013)
2. Health Psychology. Theory, Research and Practice, Third Edition by David F. Marks, Michael Murray, Brian Evans, Emeé Vida Estacio. Sage Publications (2011)
3. Theories of Behaviour Change : World Bank; documents.worldbank.org

Oral and Written Communication Skills

BBA207

Contacts: 2L

Credits: 02

Course Overview:

This course is designed to facilitate the students to communicate effectively by emphasizing on practical communication through refurbishing their existing language skills and also to bring one and all to a common take-of level

Course Outcome:

- To enable students to be an integral part of corporate communication network.

Course Content:

Unit 1: Definition and Process of communication. Essentials of Effective communication. Barriers to communication. Role of communication in Organizational Effectiveness.

Unit 2: Interpersonal, intrapersonal, Group and Mass Communication
Verbal Communication – Interviews, Public Speech, Group Discussion, Presentations, Seminars and Conference, Non Verbal Communication/ Body Language – Elements in Non- Verbal Communication

Unit 3:

Types of personalities- The Assertive personality-Personality Tests; Goal setting and achievement
Communication Styles: Introduction, The Communication Styles Matrix EQ and IQ, Aptitude tests, Creative problem solving/Innovative thinking, Transactional analysis

Unit 4: Time management, Managing change, Conflict management; Managing meetings, Attitude; Diversity management, Leadership and team building, Personal impact, Corporate etiquettes

Unit 5: Written Communication – Complexity of the Topic, Amount of Discussion Required, Shades of Meaning, Formal Communication, writing formal Emails, Letters, Advertisements etc.

Unit 6: Human behaviour and communication, its role in public health problems and solutions;

Evidence based advocacy; Negotiation Skills and Consensus building

Text & References:

1. SharanJ.Gerson and Steven M.Gerson – “Technical Writing – Process and Product” – Pearson Education – 2000.
- 2 Raymond V.Lesikar, John D. Pettit and Mary E.Flatley – Lesikass Basic Communication Tata McGraw Will 8th Edition – 1999.
3. Stevel. E. Pauley, Daniel G.Riordan – Technical Report Writing Today – AITBS Publishing & Distributors, India 5th edition – 2000.
4. Robert L.Shurter, Effective letters in business Third Ed. 1983.
5. Communication Skills by VasanthaPatri
- 6 McGraith – Basic Managerial Skills for all Prentice Hall of India – 6th Edition 2002.
- 7 Halliday, M.A. K R .Hasan, Cohesion in English, Longman, London 1976.

Semester III

Health Psychology

BBA 301

Contacts: 3L + 1T

Credits: 4

Course Overview

The aim of the course is provide student the deep insight about health psychology concept and various models, student get also learn about health promotion and healthcare system.

Course Outcome: At the end of the course, students will be able to:

- The course is based on the biopsychosocial model of health and illness
- Understand the major theories that guide the field of health psychology
- Demonstrate knowledge of the seminal empirical foundations for our current knowledge of health psychology
- Understand and be able to articulate the role of health promotion and illness prevention

Course content

Unit-I

Health Psychology:

Concept, Assumptions, Models (Biomedical and Biopsychosocial)

Unit-II

Theories:

Social Cognitive Theory, Theory of Planned Behavior, Health Belief model, Protection – motivation theory, Trans – theoretical model of behavior change, Self-regulatory model, latest trends.

Unit-III

Health Promotion and Illness Prevention:

Health and Behavior; Changing health habits; Cognitive behavioural approaches to health behavior change.

Text & References

1. Ogden, J. (2012). Health Psychology. McGrawhill Foundation
2. Morrison, V., & Bennett, P. (2009). Introduction to Health Psychology (2nd Ed) Pearson

Education Limited, New York.

3. Sarafino, E. P. (1994). Health Psychology, Biopsychosocial interactions. John Wiley & Sons,
New York.
4. Taylor,S.E., (2009). Health Psychology (9th Ed). New Delhi: Tata McGraw-Hill
Publishing
Company Ltd.
5. Ayers, S., Baum, A., McManus, C., Newman, S., Wallston,K., Weinman,J., &West,R.
(2007).
Cambridge Handbook of Psychology, Health and Medicine (2nd Ed). Cambridge
University
Press
6. Brannon, L., McNeese, J. F., &Updegraff, J. A. (2014). Health Psychology an introduction
to
behavior and health (8th Ed). Delhi: Cengage Learning
7. Lyons, A.C. & Chamberlain, K. (2006). Health Psychology A Critical Introduction.
Cambridge University Press
8. Straub, R.O. (2014). Health Psychology a Biopsychosocial Approach (4th Ed). Worth
Publishers A Macmillan Higher Education Company

Health Education, Communication and Planning

BBA 302

Contacts: 3L + 1T

Credits: 4

Course Overview

The course gives students an understanding of health communication at individual, group, community and national levels, as well as their critical thinking around the social determinants of health approaches to health interventions. To introduce different models of communication for use in health promotion activities and community based activities.

Course Outcome:

At the end of the course, students will be able to:

- Assess the health promotion and education needs of the community in different settings
- Development and implementation of health behavior change strategies and health communication programs targeting the individual, group, and community;
- Plan, conduct and evaluate training programmes for building capacities of human resources at different levels in health and related sectors

Course Content

Unit-I

Basics of Health Communication and Health Education

Communication Process, Functions and Types, Barriers to communication, Mass communication, Doctor patient communication, Community Participation – Concepts and Types;

Unit II:

Health Communication & its functions

Concepts & approach of Health Education & Promotion, Models & contents of health education, Practice of Health education – Audio-visual aids, Process of curriculum development, Types of evaluation and evaluation methods.

Unit-III

Information, Education and Communication (IEC) Strategies

IEC situation assessment – methods of data collection, Different Mediums of communication and their advantages & disadvantages, Education material development and dissemination;

IEC program planning, implementing, monitoring and evaluating; District infrastructure of IEC

Unit-IV

Behaviour Change Communication

Factors influencing behavior, Phases of Behavior Change, Developing effective behavior change communication, Target Audience Segmentation.

Text and References

1. Park, K., & Park, K. (2015). Text Book of Preventive and Social Medicine, M/s. Epidemiology of chronic non-communicable diseases and conditions. 23rd ed. Jabalpur. M/s Banarsidas Bhanot publishers.
2. Ahmed Manzoor. Community Participation: The Heart of Primary Health Care, International council for education, Essex.
3. Bhat Anil. Community-involvement in Primary Health Care, Public systems group, IIM.
4. Behaviour Change through Mass communication, AIDS control and prevention Project, Family Health International, USAID

Population Sciences

BBA 303

Contacts: 3L + 1T

Credits: 4

Course Overview

This course intends to teach global population trends and patterns, population and health, enhance the technical skill and knowledge regarding use of demographic data for policy analysis, program strategies and priorities. It would cover measures and indicators of nuptiality, fertility, mortality and migration and migrant health issues and provide skills in making population estimation and projection.

Course Objectives:

The objectives of this course are to: Discuss basic techniques and concepts in population sciences

- Explain students the fundamentals of population sciences
- Explain students the fundamentals of population studies and its links with health
- Apply practical knowledge and skills of demographic and health data sources.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Describe the impact and consequence of population growth on society.

CO2: Estimate the knowledge of population policy, population measures, population dynamics. **CO3:** Discuss population composition and characteristics; and basic concepts in population dynamics.

CO4: Analyze the causes of population growth and government's efforts to check it.

CO5: Interpret the causes of urbanization and its related problems.

Course Content:

Unit-I

Population Fundamentals

Science of demography, Demographic cycle, Population trends and demographic indicators, Factors affecting population, Demography and Family Planning and its role in population policy of India.

Unit-II

Demographic Studies

- Fundamentals of population studies and its links with health.
- Methods of demographic data collection, sources of data, population census, population composition, world population growth, growth of Indian population, morbidity, mortality, ageing, migration/ urbanization, population projections life tables.

Unit-III

Family Planning

Fertility and fertility factors, Family planning, Population policies & programmes and National Population Policy, Family planning 2020 India commitment

Unit-IV

Population Growth and Problems

Population growth, reasons for sudden growth in population, problems emerging out of that. Rural-urban distribution of growth pattern, population growth and related problems.

Unit-V

Population Policy

Health planning in terms of Family planning, Health services, Vital processes. Policies and programmes influencing demographic processes in the context in India's population. Demographic dividend-Concept, scope and applications.

Text and References

1. Asha Bhende and Tara Kanitkar. Principles of population Studies, Himalaya Pub Houses,
2. John Weeks, Population, Wordsworth pub, 1994.
3. S.N.Singh, M.K.Premi, P.S.Bhatia. Population Transition In India, B. R. Publishing Corporation.
4. P.B. Desai. Population in the context of India's development, UGC – UNFPA project.
5. Peter Cox. Demography, Cambridge University Press
6. K.B. Pathak, F. Ram. Techniques of Demographic Analysis, Himalaya Publishing Houses.
7. Health Monitor, Foundation for Research in Health S.
8. International Institute for Population Sciences. National Family Health Survey – 1, 2 and 3, Mumbai.
9. K. Srinivasan. Basic graphic Techniques and Applications, Sage Publications, 1998

Environment Health and Safety

BBA 304

Contacts: 3L + 1T

Credits: 4

Course Overview

The course examines health issues, scientific understanding of causes, and possible future approaches to control the major environmental health problems in industrialized and developing countries. It includes how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.

Course Objectives: The objectives of this course are to:

- Provide the comprehensive knowledge in issues related to environment affecting health, sanitation and means of sustainable development.
- Describe the history of hygiene and environmental health and its development in the country.
- Explain the significance of environmental health and the basic components and purpose of environmental health planning.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Define the major environmental agents i.e. environmental chemical, biological, and physical agents that cause adverse effects on human health and their sources.

CO2: Discuss the transport and fate of environmental agents in the environment, and identify the carriers or vectors (air, water, soil, and food) that promote the transfer of these agents from the environment to the human.

CO3: Describe the toxico-kinetics and toxico-dynamics of environmental agents in the body, including the effect of route of entry (inhalation, ingestion, absorption).

Course content

Unit-I

Environment

Definition, Concept, Components

Unit-II

Environmental Pollution

Air pollution: Pollutants and their resources, effects on human health, air pollution control legislation.

Noise pollution: sources and effects, control measures.

Water pollution: sources, classification of water pollutants, Sewage and agricultural run – off, inorganic pollutants suspended solids and sediments, radioactive materials, purification of water and waste water treatment.

Industrial Pollution: Types, Causes of Industrial Pollution, Industrial Pollutants, Central Pollution Control Board (CPCB) guidelines

Unit-III

Environmental health impact assessment

Climate Change & Health, Lifestyle and dietary effects on health and food safety, Management of environmental hazards.

Unit-IV

Waste management

Biomedical Waste management: classification, methods of treatment and disposal-compositing, sanitary land filling, thermal process, recycling and reuse, Hazardous waste management: sources, treatment and waste disposal.

Unit-V

Development & Environmental issues

Environmental Ethics, Global Warming, Climate Change, Ozone Depletion, Acid Rain etc

Text and references:

1. Environmental and Health Impact Assessment of Development Projects: A edited by Robert G. H. Turnbull, Elsevier Sciences Publication
2. Moeller, D. W. (2004). Liquid waste. Environmental health. 3rd Edn., Harvard University press, Combridge, MA., ISBN–10: 0-674-01, 494-4.
3. Levy, B. S. (Ed.). (2006). Occupational and environmental health: recognizing and preventing disease and injury. Lippincott Williams & Wilkins.
4. Environmental Chemistry, B.K.Sharma, Krishna Prakashan Media.
5. Environmental Science by S C Santra, Publisher: : New Central Book Agency Calcutta , 2001
6. Perspectives in Environmental Health -Vector and Water Borne Diseases Mukhopadhyay Aniruddha, De A K
7. Park, K., & Park, K. (2015). Text Book of Preventive and Social Medicine, M/s. Epidemiology of chronic non-communicable diseases and conditions. 23rd ed. Jabalpur. M/s Banarsidas Bhanot publishers.

Healthcare Logistics and Supply Chain Management

Paper Code- BBA 305

Contacts: 3L + 1T

Credits: 4

Course Overview:

The course emphasizes on developing requisite knowledge and skills in logistics, managing inventory, equipment, and drug supplies in the hospitals; describes methods of procurement, storage and distribution of drugs.

Course Objective: To make student conversant with purchase management, inventory management and stores management.

Course outcomes: On completion of this course, the students will be able to:

CO1: Understand the procedures of logistics and supply chain management material management and purchase management.

CO2: Describe role and importance of inventory, logistics and supply management in health care.

CO3: Evaluate various techniques of inventory management including ABC, VED etc and calculating Re-order level, buffer stock and Economic Order Quantity.

CO4: Interpret the processes of stock verification, condemnation and disposal.

Course Content:

Unit-I Introduction to Logistics and supply chain management

Introduction to logistics, inventory and supply chain management in health care, Roles of logistics, inventory and supply chain in health care institutions, Operational issues and problems in logistics, inventory and supply chain management.

Unit 2: Introduction to Material Management and Purchase Management

Scope, importance and objectives of materials management, Material Cycle. Procurement procedure, Tendering system, Modes of tenders, Types of purchase orders.

Unit 3: Inventory Management

Types of Inventory, Inventory Control, Lead Time, Buffer stock, Re-order level, Economic Order Quantity, Inventory ordering systems.

Inventory Control Costs – Purchase, cost, shortage cost, inventory carrying cost, inventory acquisition cost.

Inventory Control Techniques like ABC, VED, FSN, SAP and MUSIC-3D, National List of Essential Medicines

Unit 4: Stores Management

Functioning of stores, types of hospital stores, layout and planning of hospital stores, preservation of material, duties of storekeeper and officer-in charge; Jan Aushadhi Stores; Material Codification, Process of Stock Verification, Pilferage, resource mobilization, Stock distribution systems, criteria and methods of stock condemnation and disposal.

Text and References:

1. Inventory Control and Management, 2nd Edition by Donald Waters. ISBN: 9781118585214.
2. Essentials of Inventory Management by Max Muller. ISBN: 978-0814416556
3. Inventory Strategy: Maximizing Financial, Service and Operations Performance with
4. Inventory Strategy by Edward H. Frazelle. ISBN: 978-0071847179.
5. Supply Chain Strategy 1st Edition by Edward Frazelle. ISBN: 063-9785330219.
6. Inventory Accuracy: People, Processes, & Technology 1st Edition by David J. Piasecki. ISBN: 978-0972763103.
7. Inventory Management Explained: A focus on Forecasting, Lot Sizing, Safety Stock, and Ordering Systems by David J. Piasecki. ISBN: 978-0-9727631-1-0.
8. Hospital Stores Management- An Integrated Approach, by Dr. Gupta Shakti, Jaypee Brothers.
9. Material Management by Dr. Pawan Arora, Global India Publication Pvt Ltd
10. Handbook of Materials Management, P. Gopalkrishnan, Eastern Economy Edition

Public Health Economics

BBA 306

Contacts: 3L+1T

Credits: 04

Course Overview: The Purpose of this course is to apply macro and micro economic concepts and tools for analyzing business problems and making accurate decisions pertaining to the business firms. The emphasis is given to tools and techniques of micro economics.

Course Objectives:

- Describe basic concepts of health economics.
- Describe basic economic concepts, such as supply, demand, free & chained markets and price elasticity.
- Demonstrate management of organizational costs within the economic environment of various health care industries.
- To develop an understanding of healthcare market and the relationship between economics health development

Course Outcomes:

On completion of this course, the students will be able to:

- **CO1:** Describe about the basic economic concepts,.
- **CO2:** Assessing supply, demand, free & chained markets and price elasticity
- **CO3:** Demonstrate management of organizational costs within the economic environment of various health care industries.
- **CO4:** Apply economic tools to assess implications of various healthcare financing and delivery models.

Course content:

Unit-I: Nature and scope of Economics

Fundamental Concepts – Scarcity & Choice, Macroeconomics & Microeconomics, Economic Agents Consumer, Producer & government, Market – Free market mechanism and chained Market Mechanism.

Unit -II: Healthcare Market

Demand for Healthcare: Need, Want & demand, Healthcare as an investment, Determinants of demand – Price factors (opportunity cost), Patient factors & Physician factors – Supplier Induced Demand; Insurance and demand for healthcare.

Unit-III: Costs

Classification of costs on the basis of traceability, cost behavior, controllability and selection among alternatives; Total, Average and Marginal costs.

Unit-IV: Health Expenditure

Public Expenditure on Health, Expenditure and Allocations under Five-Year Plans, its SWOT analysis, National Health Accounts

References:

1. Ceri J Phillips. Health Economics- An introduction for health professionals, Blackwell publishing.
2. Clewer Ann and D Perkins. Economics for healthcare management, Prentice Hall.
3. Folland S, A.C. Goodman, and M. Stano, The economics of health & Healthcare, Prentice Hall
4. Principles of Health Economics for developing countries, The World bank.

Semester IV

Communicable Diseases

Paper Code- BBA 401

Contacts: 3L + 1T

Credits: 4

Course Overview:

This course imparts overview of infectious diseases and their impact on population. Students are also oriented about infectious disease control programs including their epidemiology, biology, pathogenesis, pathology, management and prevention.

Course Objectives: The objectives of this course are to:

- Provide students with an understanding of the scope of the public health issues with regard to communicable diseases in India.
- Discuss the pathology, pathogenesis, pathology, clinical manifestation, mode of transmission, prevention and control of diseases.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Explain the biological principles required to understand the distribution of infectious diseases of public health importance.

CO2: Apply the current research to solve public health problems.

CO3: Describe the methods for the prevention and control of disease.

CO4: Apply the biological principles in attacks on diseases of public health significance.

CO5: Analyze the effects of various disease control, elimination and eradication programs running in our country.

Course content:

Unit 1: Introduction

General overview of communicable diseases, impact of communicable diseases on developing countries. classification of diseases, modes of evolution of disease stages, burden of communicable diseases, disease cycle/ transmission

Unit 2: Communicable diseases

Biology, pathogenesis and pathology, clinical presentation, of common infections - ARI's including pneumonia, measles, mumps, rubella, Tuberculosis, leprosy,

Intestinal : Diarrhoea, typhoid, polio, hepatitis,

Contact : STDs, AIDS and Meningococcal meningitis

Vector borne : Plague, rabies, malaria and filaria, JE, dengue

COVID-19, SARS, MERS, influenza,

Epidemic patterns, Modes of transmission, outbreak investigation and surveillance, schedules, adverse reactions, contraindications, vaccine efficacy), Examine factors contributing to the persistence of infectious diseases, Understand reasons for emergence and re-emergence of infectious diseases

Unit 3: National Communicable diseases Program

Integrated Disease Surveillance Programme (IDSP), Revised National Tuberculosis Control Programme (RNTCP), Malaria Eradication Program National Leprosy Eradication

Programme (NLEP), National Vector Borne Disease Control Programme, National AIDS Control Programme (NACP), Pulse Polio Programme, National Viral Hepatitis Control Program, National Rabies Control Programme, Guinea worm Eradication Program.

Unit 4: Public health approaches to prevent diseases

Risk factor approach to prevent communicable diseases, Comprehend the Population based/public health approaches to prevention of common risk factors

Text and References:

1. Dutta, A. (2001). Infectious diseases and immunization. *Indian Journal of Pediatrics*, 68(2), 140-140.
2. World Health Organization. (2018). Antimicrobial resistance and primary health care: brief (No. WHO/HIS/SDS/2018.57). World Health Organization.
3. Giesecke, J. (2017). *Modern infectious disease epidemiology*. CRC Press.
4. Duguid, J. P., Swain, R. H. A., & Marmion, B. P. (1978). *Medical microbiology: a guide to the laboratory diagnosis and control of infection*. Churchill Livingstone.
5. Davidson, S., Edwards, C. R. W., Bouchier, I. A. D., Haslett, C., & Chilvers, E. R. (1995). *Davidson's principles and practice of medicine*. Saunders.
6. Kasper, D. L., Braunwald, E., Hauser, S., Longo, D., & Jameson, J. L. *Harrison's (2004) Principles of Internal Medicine 16th Edition*. McGraw-Hill Professional.

Occupational Health

Paper Code - BBA 402

Contacts: 3L + 1T

Credits: 4

Course Overview:

The course examines health issues, scientific understanding of causes, and possible future approaches to control the major environmental and occupational health problems in industrialized and developing countries. It includes how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.

Course Objectives:

The objectives of this course are to:

- Provide the comprehensive knowledge in issues related to environment affecting health, sanitation and means of sustainable development.
- Teach basic concepts of Occupational Health & discuss about various occupational diseases and their prevention and demonstrate the contemporary issues surrounding occupational safety and health.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Define the major environmental agents i.e. environmental chemical, biological, and

physical agents that cause adverse effects on human health and their sources.

CO2: Discuss the transport and fate of environmental agents in the environment, and identify the

carriers or vectors (air, water, soil, and food) that promote the transfer of these agents from

the environment to the human.

CO3: Describe the toxico-kinetics and toxico-dynamics of environmental agents in the body,

including the effect of route of entry (inhalation, ingestion, absorption).

CO4: Identify and solve occupational safety and health problems.

CO5: Determine professional and ethical responsibility in occupational safety and health.

CO6: Design a system, process, or program to meet occupational safety and health needs.

Course content:

Unit 1: Introduction to occupational health

Definition & history of occupational health, Principles of occupational health & Ergonomics. Fundamentals of occupational Health. Prevention, promotion, access to health services, legal aspects.

Unit 2: Occupational Safety & Health:

Chemical and physical exposures, control of occupational exposures, injury control, Occupational health disorders and diseases, Occupational Services at workplace , Legislations related to occupational health and safety

Unit 3: Occupational Diseases

Definition; classification on the basis of physical agents, chemical agents, biological agents; occupational diseases of skin, respiratory system; occupational diseases due to microorganisms; Occupational Poisoning; Laws related to occupational health; recommendations of National institute for occupational safety and Health; Prevention of occupational hazards

Unit 4: Occupational health of working population of organized and unorganized sectors

Farmers, Industrial Workers, health workers, Commission on the Status of Women (CSW)

Text and references:

8. Moeller, D. W. (2004). Liquid waste. Environmental health. 3rd Edn., Harvard University press, Combridge, MA., ISBN-10: 0-674-01, 494-4.
9. Baxter, P., Aw, T. C., Cockcroft, A., Durrington, P., & Harrington, J. M. (2010). Hunter's diseases of occupations. CRC Press.
10. Julian Smedley Oxford Text Book Of Occupational Health(2nd edition)
11. Levy, B. S. (Ed.). (2006). Occupational and environmental health: recognizing and preventing disease and injury. Lippincott Williams & Wilkins.
12. Park, K., & Park, K. (2015). Text Book of Preventive and Social Medicine, M/s. Epidemiology of chronic non-communicable diseases and conditions. 23rd ed. Jabalpur. M/s Banarsidas Bhanot publishers.

Community Health Nutrition

Paper Code - BBA 403

Contacts: 2L

Credits: 2

Course Overview:

This course prepares professionals to apply nutrition principles in evidence-based interventions to promote healthy nutrition practices in populations and to focus on interactions between nutrition and health, including nutritional epidemiology, obesity prevention and intervention strategies for impacting health through nutrition.

Course Objective: The objectives of this course are to

- Explain the basics of human, community nutrition and issues related to food safety.
- Apply nutrition indicators for different public health purposes, including: estimating prevalence, monitoring and surveillance, and investigating diet and disease relationships.
- Use evidence-based knowledge to develop nutrition programs and interventions for diverse populations

Course Outcomes:

On completion of this course, the students will be able to

CO1: Outline the acquisition of public health nutrition knowledge and skills.

CO2: Analyze how to select information efficiently and effectively for public health practice.

CO3: Illustrate the administration of population-based food, nutrition and health services.

CO4: Determine interactions between nutrition and health, including nutritional epidemiology, obesity prevention and intervention strategies for impacting health through nutrition.

CO5: Apply epidemiological concepts of human nutrition in order to improve population health and reduce disease risk.

Course Content:

Unit 1: Basics of Nutrition

Classification of Foods by origin, chemical composition, predominant function & by nutritive value; Nutrients: Macro & Micro nutrients

Unit 2: Disease specific nutrition

Nutritional Requirements, Diet modifications during various diseased condition – diabetes, obesity, heart diseases, civil and kidney, TB, HIV etc, Deficiency disorders & dietary management – PCM, anaemia, goitre and vitamin & mineral deficiency.

Unit 3: Community nutrition

Nutritional problems in Public Health, Nutritional surveillance, Prevalence of under nutrition and malnutrition in India, Malnutrition infection and infestation, effect of malnutrition in infancies, pregnant and lactating mothers, Nutrition organization programmes – national,

international & voluntary organizations undertaken to combat malnutrition, policy & programmes for nutrition related issues and Balanced diet for preschool going children adolescents, pregnant and lactating mothers, old age & athletes.

Unit 4: Food Safety

General principles of Hygiene, importance of food borne illness, prevention of contamination, food intoxicants, food additives, food standards, importance of safe drinking water, purification methods, Food borne diseases, Prevention of Food Adulteration Act 1954 and National Nutrition Policy 1993.

Text & References:

1. Dr. M Swaminathan. Advanced textbook on food and Nutrition, Bangalore Publishing Co. Ltd., 1974
2. C Gopalan. Recent Trends in Nutrition, Oxford University Press, 1993.
3. E. Savage King. Nutrition for Developing Countries, Oxford University Press, 1992.
4. Dr. C. Gopalan. Nutrition problems and Programmes in South East Asia, WHO, 1987.
5. Sumati R. Mudambi, M.V. Rajagopal, V.R. Damodharan Fundamentals of food and Nutrition, Wiley Eastern Ltd. , 1982.
6. Nutritional Sciences: Sreelakshmi

Operations Research

Paper Code - BBA 404

Contacts: 3L + 1T

Credits: 4

Course Overview:

This course introduces the fundamentals of Operations Research Models including linear programming and applications and learn how to construct models appropriate to particular applications, develop optimal solutions, understand the theory behind solutions and translate solutions into directives for action. The course also aims to introduce quantitative methods and techniques for effective decisions-making; model formulation and applications that are used in solving public health problems.

Course Objectives: The objectives of this course are to:

- Provide basic OR approach to problem solving.
- Introduce important analytical tools for managerial decision making.
- Describe the concepts of resource allocation & health service planning.
- Identify and develop operational research models from the verbal description of the real system.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Learn different techniques managerial decision making.

CO2: Improve the objectivity of analysis and develop a comprehensive evaluation plan for healthcare services

CO3: Develop more effective approaches to programming.

CO4: Acquaint knowledge with respect to optimization in utilization of resources.

CO5: Understand and apply operations research techniques in healthcare operations.

Course Content:

Unit 1: Introduction

The Operation Research approach to problem-solving and decision-making, Definition, Scope and limitations of OR in managerial decision-making.

Unit 2: Introduction to Operation Research Techniques

Basics of: Linear Programming, Decision Tree Analysis, Queuing theory, PERT/CPM.

Unit 3: Operation Research Models

Basics of Replacement models, Assignment models (balanced problems), Inventory control models

Unit 4: Applications of Operation Research in Healthcare organizations

Resource allocation and health services planning, Deployment of health human power using Operation Research models.

Text and References:

1. Operations Research in Hospitals: Diagnosis and Prognosis, David H. Stimson, Ruth H. Stimson
2. Operations Research and Healthcare: A handbook of methods and Applications, Margaret L. Brandeau, Francois Sainfort, William P. Pierskalla
3. Patients hospitals and Operational Research, Taylor Francis
4. Operations Research by P. Rama Murthy
5. Operations Research: Methods, Models and Applications, Jay E. Aronson and Stanley Zions
6. Operations Research, Frederick S.Hillier and Gerald J. Lieberman, Tata McGraw Hill, 2005, New Delhi.
7. Operations Research – An Introduction”, Hamdy A Taha, Pearson Education, 2009, New Delhi.
8. Operations Research - Theory and Application, J.K.Sharma, Mac Millan India, 2003.
9. Quantitative Techniques in Management, N.D.Vohra, Tata McGraw Hill Publishing Co. Ltd, 2007.
10. Operations Research, R.Paneerselvam, Prentice Hall of India, 2008, New Delhi.

Health Insurance

Paper Code - BBA 405

Contacts: 3L + 1T

Credits: 4

Course Overview:

This course introduces the fundamentals of Health insurance models and applications and develops the concept of insurable risk and its identification; the uses of insurance in financial planning to deal with risk; analysis of property, liability, life, medical and disability insurance policies; annuities; employee benefit plans; business applications of life and disability insurance.

Course Objectives:

The objectives of this course are to:

1. Identify and explain the concept of insurable risk and the methods of avoiding, reducing or eliminating risk including the use of insurance.
2. Explain the legal and regulatory aspects of insurance.
3. Provide an overview of the taxation of annuities in life, medical and disability insurance.
4. Explain the use of employee benefits programs and business applications of individual life and disability insurance.
5. Interpret the criteria that may be used to evaluate and select insurance companies and agencies.
6. Explain the role of insurance in the overall financial planning process.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: Learn different techniques managerial decision making.

CO2: Improve the objectivity of analysis and develop a comprehensive evaluation plan for healthcare services

CO3: Develop more effective approaches to programming.

CO4: Acquaint knowledge with respect to optimization in utilization of resources.

CO5: Understand and apply operations research techniques in healthcare operations.

Course Content:

Unit – 1 Introduction and Regulations:

Meaning, Concept, history, current scenario and future of Health Insurance in India, Health Insurance regulation in the Indian Context- Health Insurance regulations (2013 & 2016), Common terminologies. New developments in Health Insurance in India, digital distribution channel in health insurance.

Unit- 2 Health Insurance Policies and Schemes:

Various policies issued in Health Insurance- Concept and features of Mediclaim – Individual and Family floater, Overseas Mediclaim policy, Disease Specific products, Government Sponsored Health Insurance Scheme in India- RSBY & Ayushman Bharat., Critical illness policy. Health Insurance proposal form, policy clauses, Preventive care and wellness program

Unit – 3 Health Insurance Underwriting:

Meaning and Need for underwriting, Risk identification and classification, evaluation and risk management in health insurance ,Underwriting medical risk factors, Methods of underwriting- judgment and numerical rating methods, underwriting manuals, Financial underwriting and medical underwriting, tele underwriting,

Unit – 4 Third Party Administrator and Group health Insurance:

Regulations of IRDA (TPA – Health Services Regulations), 2001. Scope of relationship between insurer and TPA. TPA's relationship with customers and hospitals for effective claim settlement. TPA role in claim settlement and reducing frauds,

Unit – 5 Claims Handling & Management:

Concepts: Intimation, admissibility, payment procedure and documents required for claims settlement in health insurance. Role of different stakeholders in claim settlement process in health insurance. Reasons and solution for high claim ratio, Role of IT in health insurance claims management.

Unit – 6 Frauds and Customer Service in Health Insurance:

Fraud and abuse in health insurance, Classification of frauds

References:

1. Balachandran, S (2010): Managing Change, Sangeeta Associates, Mumbai. (All Modules)
2. Gopalakrishna, C (2011): Social Security, Insurance and the Law - Shroff Publishers and Distributors, Mumbai. (All Modules)
3. Kumar, Dharmendra (2011): Thresholds in Indian Insurance - Macmillans (All Modules)
4. Noussia, Kyriaki (2007): History, Evolution and Legislative Framework of Marine insurance.(Module-1)
5. Planning Commission (2008): A Hundred Small Steps, Sage publications. (Module - 2)
6. Samarth, R. D. (1998): Operational Transformation of General Insurance Industry during the period 1950 to 1990 & Beyond (All Modules)
7. Black, Kenneth Jr. & Harold Skipper Jr. (2000): Life and Health Insurance, 13th edition, Prentice Hall (Module - 2)
8. Crews, Tena B (2009): Fundamentals of Insurance, South-Western Educational Publications (All Modules)

**Summer Project Report on Public Health Practices
Paper Code -BBA 406**

Credits:4

Summer/Internship Training Objective:

To provide on the job experience, as an understudy in a healthcare organization, to help the student understand systems and procedures and learn to make decisions considering the organization as an integral unit.

Duration: 4-6 Weeks

Format for Report Writing:

1. Abstract
2. Introduction
3. Aims & Objectives
4. Operational definitions
5. Significance of Study
6. Review of literature
7. Research methodology
8. Data Analysis
9. Results
10. Discussion
11. Conclusion
12. Recommendations
13. Limitations of study
14. Future prospects of study
15. References

Semester V

Non Communicable Disease

Paper Code - BBA 501

Contacts: 3L + 1T

Credits: 4

Course Overview:

This course imparts overview of non-infectious diseases and their impact on population. Students are also oriented about infectious disease control programs including their epidemiology, biology, pathogenesis, pathology, management and prevention.

Course Objectives:

The objectives of this course are to:

- Understand the risk factors for common NCDs, and methods of disease control and health promotion
- Discuss the pathology, pathogenesis, pathology, clinical manifestation, mode of transmission, prevention and control of diseases.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Explain the biological principles required to understand the distribution of non infectious diseases of public health importance.

CO2: Apply the current research to solve public health problems.

CO3: Describe the methods for the prevention and control of disease.

CO4: Apply the biological principles in attacks on diseases of public health significance.

CO5: Analyze the effects of various disease control, elimination and eradication programs running in our country.

Course content:

Unit 1:

Epidemiology of NCDs, risk factors, global status, prevention and control, global initiatives

Unit 2:

National strategies for control of NCDs (epidemiology, cardinal signs, clinical and diagnostic features (with special emphasis on biochemical parameters), treatment (emphasize pharmacological component) prevention and control

- a. Diabetes
- b. Cardiovascular diseases
- c. Asthma and COPD
- d. Cancer
- e. Musculo-skeletal conditions

3. Tobacco control Programmes, obesity and other risk factors for NCDs

4. Unintentional Injuries- prevention and control; global and national strategies

Unit 3:

Introduction to mental health, health promotion, National Mental health policy of India
Epidemiology of Major Mental Disorders burden of mental health morbidities, psycho-social,
etiology of mental and behavioural disorders; depression, schizophrenia, Alzheimer's,
Parkinson's, senile dementia, suicides

Unit 4:

National Programme for Prevention and Control of Deafness (NPPCD), National Mental
Health Programme, National Programme for Control of Blindness & Visual Impairment,
National Programme for the Health Care for the Elderly (NPHCE), National Oral Health
programme

Reference:

- 1) World Health Organization (2016). Global Report on Diabetes. WHO Press, Switzerland
- 2) National Centre for Disease Control Director General of Health Services Ministry of
Health
and Family Welfare, GOI 2017. Training Module for Medical Officers for Prevention,
Control and Population Level Screening of Hypertension, Diabetes and Common Cancer
(Oral, Breast and Cervical). National Programme for Prevention and Control of Cancer,
Diabetes, Cardiovascular Diseases and Stroke
- 3) World Health Organization 2014: GLOBAL STATUS REPORT on Non-communicable
Diseases 32
- 4) World Health Organization 2013: Global Action Plan for the Prevention and Control of
Non
Communicable Diseases, 2013-2020, WHO, Geneva, Switzerland
- 5) Standard Treatment Guidelines: Hypertension Screening, Diagnosis, Assessment, and
Management of Primary Hypertension in Adults in India- Quick Reference Guide May
2016
Ministry of Health and Family Welfare, Government of India
- 6) Prevention of cardiovascular disease: guidelines for assessment and management of total
cardiovascular risk: World Health Organization. ISBN 978 92 4 154717 8 (NLM
classification: WG 120) © World Health Organization 2007

Fundamentals of Quality in Healthcare

Paper Code - BBA 502

Contacts: 3L + 1T

Credits: 4

Course Overview:

The course provides basic concepts of quality in health care and approaches and skills to implement sustainable quality assurance program. Various quality improvement approaches, role of standards, use of quality improve tools; methods of quality assessment are discussed in the course.

Course Objective: The objectives of this course are to:

- Understand the concept of quality and its relation to healthcare scenario.
- Identify the elements that are part of the quality measuring process in the healthcare industry
- Describe, distinguish and use the several techniques and quality management tools.
- Evaluate the principles of quality management and to explain how these principles can be applied in healthcare.
- Identify the key aspects of the quality improvement cycle and to select and use appropriate tools and techniques for controlling, improving and measuring quality.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Analyze the concepts and measures of health care quality and patient safety leading to a greater emphasis on quality measurement and improvement of care.

CO2: Demonstrate an understanding of tools used in quality measurement and improvement and assess the healthcare delivery models.

CO3: Compile data to support quality and performance measurement decision-making processes for health care entities.

CO4: Design the principles of quality management for improving outcomes in hospitals and integrate quality improvement and evaluation strategies with systems such as Six Sigma, Lean Management etc

CO5: Analyze changes to implement in healthcare delivery to make it safe, timely, effective, equitable, efficient, and patient-centred.

Course Content:

Unit1: Basics of Quality Management

- Definition of quality, Principles of quality, Need for focus on quality in healthcare;
- Dimensions of quality in primary healthcare;
- Different Quality Frameworks, Quality Control Circles;
- Cost and Quality: Prevention Costs, Appraisal costs, Internal & External failure costs

Unit 2: Quality Approaches:

- Quality Control, Quality Assurance, QA cycle,
- Total Quality Management: Principles of Edward Deming, Joseph Juran & Philip Crosby;
- Types and process of Benchmarking; Outcome Management Model
- Clinical and Medical Audit – its need and methodology,

Unit 3: Quality Management Tools and Techniques

Cause Effect Analysis and Pareto Analysis

Unit 4: Accreditation

Benefits of Hospital Accreditation, Quality Council of India (QCI), Overview of National Accreditation Board for Hospitals & Healthcare Providers (NABH) – its Accreditation procedure and Assessment criteria, Joint Commission International (JCI), ISO 9001

Unit 5: Patient Safety

Principles and Types of Patient Safety; Nosocomial Infections, Control and prevention of Nosocomial Infections; Medical Errors and their prevention.

Text and References:

1. Raandi Schmidt J. Trumbo and R. Jonson, Quality in Health Care Sector – ASQC Quality – Press.
2. Quality Improvement in Health Care, 2nd Ed, Nelson Thrones
3. Health Care Quality Management: Tools and Applications by Thomas K. Ross. ISBN: 978-1-118-50553-3.
4. Introduction to Healthcare Quality Management, Second Edition by Patrice L. Spath. ISBN-13: 978-1567935936.
5. Promising Care: How We Can Rescue Health Care by Improving It by Donald M. Berwick. ISBN: 978-1-118-79588-0.
6. The Healthcare Quality Book: Vision, Strategy, and Tools, 2nd Edition 2nd Edition by Elizabeth R. Ransom, Maulik S. Joshi, David B. Nash, Scott B. Ransom. ISBN-13: 978-1567933017.
7. Quality Management in Hospitals by S. K. Joshi
8. Total Quality Management – Aswathappa – Himalaya Books House
9. Quality Management – P. C. Tripathy
10. Hospital Quality Assurance: Risk Management & Program evaluation, Jesus J. Pena
11. Donald E. Lighter and Douglas C Fair: Quality Management in Health Care – Principles and Methods, Jones and Bartlett publishers, second edition.
12. Daigh RD. Financial implications of a quality improvement process.
13. McLaughlin CP and Kalauzny AD. Total quality management in health, Healthcare management review.
14. Hospital Infection Control – By S.A. Tabish – Academa, New Delhi

Laws and Ethics in Public Health

Paper Code - BBA 503

Contacts: 3L + 1T

Credits:4

Course Overview:

The course provides a forum for discussion and deliberation about ethical issues in the practice of public health (including the conduct of research) in developing countries. It equips students to identify and analyze critical ethical issues and to consider systematically the ethical responsibilities of all parties involved.

Course Objectives: The objectives of this course are to:

- Acquaint the students with various legal aspects concerning type and character of the health care organizations and its duties towards patients and its employees.
- Familiarize the students in matters of liability of medical negligence and medical malpractice.
- Impart the skills needed to assess external and internal healthcare policies to influence organizational design and delivery of healthcare services.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Understand public health laws and ethics in relation to healthcare.

CO2: Explain how laws and regulations affect the structure and operation of healthcare organizations, including corporate law, tort law, fraud and abuse laws, etc

CO3: Determine how law protects patient rights and regulates patient-provider relationships, including informed consent, medical malpractice, confidentiality, treatment termination, advance directives, human reproduction, and obligations to provide care.

CO4: Analyze the impact of changing health care regulations on processes and services;

CO5: Demonstrate laws that promote health policy values and goals and comprehend the consequences of not adhering to the laws.

Course Content:

Unit 1: Ethics in healthcare:

Code of Ethics, Ethical Committee, Ethics and Law, Basic issues, process of developing and implementing ethics and values in an institution, code of conduct, Hippocrates Oath.

Unit 2:Public Health laws and ethics:

Public health regulations in Indian context, Public health information and privacy, Public Health laws in global economy, Parental rights and the rights of mentally unsound patients.

Unit 3: Laws in relation to healthcare profession:

Consumer Protection Act and its applications in healthcare, W.B Clinical Establishment Act 2000, Workman Compensation Act, Central births and registration act, issuance of birth and

death certificate, PCPNDT Act, abortion, MTP Act, Biomedical Waste Management and Handling Rule (1998).

Unit 4: Legal liabilities in healthcare:

Compulsory & voluntary duties of a medical practitioner towards the patient, Doctor patient relationship. Medical Negligence, Confidentiality, informed consent, professional misconduct, Criminal, civil and tortuous liability, absolute and vicarious liability.

Unit 5: Ethics in research:

Ethical approval for clinical trials, Stem cell banking, The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954

Text and References:

1. Health Care Ethics by Benedict Ashley, 2006, Georgetown University Press.
2. Ethical Foundations of Health Care: ...by Jane Singleton and Susan Goodinson-McLaren, 1995, Mosby Medical
3. Cross-Cultural Perspectives in Medical Ethics by Robert Veatch, 1997, Harvard University Press
4. An Introduction to Medical Ethics: Patient's Interest First by Arthur Siew Ming Lim, 2008, World Scientific
5. Ethics Under the Knife: Patient Care and Disservice in the Medical Industry by Matt Koepke
6. Principles of biomedical ethics by Tom Beauchamp, 1979
7. Medical Ethics: Accounts of Ground-Breaking Cases by Gregory Pence, 19
8. Bioethics: Principles, Issues, and Cases by Lewis Vaughn, 2009
9. Medical Law and Ethics by Bonnie Fremgen, 2002
10. Medical Law and Ethics by Jonathan Herring, 2006
11. Medical ethics in the ancient world by Paul Carrick, 2001
12. Resolving Ethical Dilemmas: A Guide for Clinicians by Mieczysław Klimaszewski, 1995
13. Textbook of Healthcare Ethics by Erich Loewy, 1989
14. Encyclopedia of Bioethics by Warren Reich
15. Doing Right: A Practical Guide to Ethics for Medical Trainees and Physicians by Philip C. Hébert, 2009
16. Kuchhel, M.c, 2003, Marcentile Law; Vikas Publishing Private Ltd. New Delhi
17. Pathak, Legal Aspect of Business, TMH
18. P.L Mallick – Industrial Law – Eastern Book Company – Lucknow.
19. Bio-Medical Waste Management Handling Rule 1998.
20. Law & Ethics in Nursing & Health Care, Nelson Thrones
21. Park & Park-Preventative & Social Medicine.

Disaster Management

Paper Code - BBA 504

Contacts: 3L + 1T

Credits:4

Course Overview: The Course provides basic conceptual understanding of disasters.

2. To understand approaches of Disaster Management
3. To build skills to respond to disaster

Course Objective:

The course will uplift about:

1. Understand and appreciate the specific contributions of the Red Cross/Red Crescent movement to the practice and conceptual understanding of disaster management and humanitarian response and their significance in the current context.
2. Recognize issues, debates and challenges arising from the nexus between paradigm of development and disasters.
3. Critically evaluate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.
4. Respond to disaster risk reduction initiatives and disasters in an effective, humane and sustainable manner.

Course outcomes:

At the successful completion of course the student will gain:

1. Knowledge and understanding of the disaster phenomenon, its different contextual aspects, impacts and public health consequences.
2. Knowledge and understanding of the International Strategy for Disaster Reduction (UNISDR)
and to increase skills and abilities for implementing the Disaster Risk Reduction (DRR) Strategy.
3. Ensure skills and abilities to analyse potential effects of disasters and of the strategies and methods to deliver public health response to avert these effects

Course content :

UNIT I: Introduction, Definition of Disaster, Emergency; Type of Disasters, Disaster Codes, Incident Management Team (IMT), Community partners,

UNIT II: Communication, Notification of Disaster situation, Disaster/emergency announcement, Internal and External Information

UNIT III: Emergency Patient Management-Triage, First aid center, Assessment and transportation of injured persons, Categorization of casualties, Disaster Tags, Evacuation

UNIT IV: Disaster plan of a hospital- Basic Requirements, Components of disaster plan : pre-hospital and hospital; Organization and Structure of Management in the Hospital, Alarm and Mobilization, internal disaster plan-evacuation of hospital

UNIT V: Staff Responsibilities- General, hospital administrator, Clinicians, Chief Nursing Officer, Chief of Security, Facility Manager, Food Service Manager, Pharmacy Incharge, Front Desk Staff, Information,

Reference Books:

1. ShailendraK.Singh : Safety & Risk Management, Mittal Publishers
2. J.H.Diwan : Safety, Security & Risk Management, APH
3. Stephen Ayers &Garmvik: Text Book of Critical Care, Holbook and Shoemaker

Health Service Management

Paper Code - BBA 505

Contacts: 3L + 1T

Credits: 4

Course Objective:

To acquire specific knowledge on project and NGO management.

1. To understand the Project management Dimensions, Planning and its implementation of projects.
2. To enhance skills and techniques of project evaluation / Resource Mobilization.
3. To understand the basic concepts and principles involved in managing NGOs.
4. To understand the Human resource management in NGO's.
5. To enhance knowledge on project proposal writing and maintenance of the accounts in NGO's.

Course outcomes:

At the successful completion of course the student will gain:

- (i) NGO management,
- (ii) Project management Dimensions, Planning and its implementation,
- (iii) skills and techniques of project evaluation / Resource Mobilization.

UNIT-I FOUNDATION OF MANAGEMENT AND NGO'S UNDERSTANDING

Management: Meaning, Definition, Concepts, Objectives and Functions of NGO's Types, Functions, Approaches and Models, Vision, Mission and Goals in NGOs, Role of NGO's in Community Development. Self Study: Types of NGO's.

UNIT -II LEGAL FRAME WORK FOR ESTABLISHING NGO'S

Legal rational structure of Non-profits, Trusts and Societies with Special reference to Trust and Society Registration Acts, Foreign contributions and Regulation Act (FCRA),

UNIT -III HUMAN RESOURCE MANAGEMENT IN NGO'S AND CSR

ACTIVITIES Leadership in the NGO's Context – Practice of Human resources Management in NGO's - Human resources management and role of creating change agents – Staffing, recruiting, induction and training- CSR Activities: Definition, concepts and need - Concentration areas

UNIT -IV PROJECT MANAGEMENT

Concept, Definition, Objectives, principles, Scopes, Importance and Methodology, Micro and Macro Level Planning, Project Dimensions: Identification, Need assessment, Problem Tree, Formulation Project Proposal, Project Appraisal, Technical, Economic and Financial Feasibility, Self Study, Importance of Project Planning.

UNIT –V PROJECT MANAGEMENT IN NGO'S

Concept, Meaning, Definition and Types of projects, Projects Implementation and Management, Project Planning Matrix, Project Cycle Management, Identification and Formulation of Details Projects Report (DPP) with reference to Action AID and Save the Children,

Self Study: Prepare a proposal on child issues. Note: Students are expected to Practice of PRA technique in any rural area.

Text Books

- 1) Clark John. (1991). Voluntary Organizations: Their Contribution to Development. London: Earth Scan.
- 2) Jain R.B. (1995). NGO's in Development Perspective. New Delhi: Vivek Prakasan
- 3) Sakararan and Rodrigues. (1983). Handbook for the Management of Voluntary Organization. Madras: Alfa

References

1. Behera M. C. (2006). Globalizing Rural Development. New Delhi: Sage.
2. Chowdhry Paul. (1973). Administration of Social Welfare Programmes in India. Bombay: Somaiy.
3. Emmanuvel. S. Fernando. (1999). Prospect from Problems. Mumbai: St. Francis Xavier's Church.
4. Ginsbery Leon. H. (2001). Social Work Evaluation – Principles and Methods. Singapore: Allyn and Bacon.
5. Jack Rothman, John John E. Tropman. (2001). Strategies of Community Intervention. Illinois: P.E. Peacock.
6. Joel S.G.R Bhoose. (2003). NGO's and Rural Development Theory and Practice. New Delhi: Concept.
7. Julie Fisher. (2003). Non-Governments – NGO's and the Political Development of the Third World. New D

National Health Programs

Paper Code - BBA 506

Contacts: 3L + 1T

Credits: 4

Course Overview:

The course aims to develop requisite knowledge and understanding of Indian health systems and policies, health programs, health sector reforms and experiences. Overall the course provides national perspective of health systems and program, and their historical background.

Course Objectives: The objectives of this course are to:

- Provide information about the background objectives, action plan, targets, operations, achievements and constraints of various National Health Programs in the country.
- Understand the concepts underlying the design of health programs
- Explain basic approaches to design health programmes, with a focus on low resource settings.

Course Outcomes: On completion of this course, the students will be able to

CO1: Demonstrate a thorough understanding and comprehension of public health programs and policies.

CO2: Determine planning, implementation, and evaluation of health programs for individuals and populations.

CO3: Analyze essential services that public health programs provide to protect and improve the health of populations.

CO4: Determine the elements to improve health outcomes and systems.

CO5: Design the methods of assessing the health impact of different programs.

Course content:

Unit 1: Key Health Committees

Bhore committee, Mudliar committee, Mukherjee committee, Chaddah committee, Jungalwala committee, Kartar Singh Committee, Srivastava committee

Unit 2: Reproductive, Maternal, Neonatal, Child and Adolescent health

Janani Shishu Suraksha Karyakaram (JSSK), Rashtriya Kishor Swasthya Karyakram(RKSK), Rashtriya Bal SwasthyaKaryakram (RBSK), Universal Immunisation Programme, Mission Indradhanush / Intensified Mission Indradhanush, Janani Suraksha Yojana (JSY), Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA), NavjaatShishu Suraksha Karyakram (NSSK), National Programme for Family planning

Unit 3: National Nutritional Programmes

National Iodine Deficiency Disorders Control Programme, MAA (Mothers' Absolute Affection) Programme for Infant and Young Child Feeding, National Programme for Prevention and Control of Fluorosis (NPPCF), National Iron Plus Initiative for Anaemia Control, National Vitamin A prophylaxis Programme, Integrated Child Development Services (ICDS), Mid-Day Meal Programme

Unit 4: Health system strengthening programs

Salient features of Ayushman Bharat Yojana, Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), National Health Mission (NRHM and NUHM).

Text and References

1. GOI 2005, National Rural Health Mission: Meeting People's Health needs in rural areas, Framework for implementation, 2005-2012, MoHFW.
2. GOI 2005, Report of National Commission on Macroeconomics and Health, MoHFW.
3. Kishore, J. (2012). National health programmes of India: National policies and legislations related to health. Peer-reviewed, Official Publication of the Indian Academy of Geriatrics, 165.
4. GOI, MoHFW, Annual Report of various years.

Semester VI

Health Survey and Research Methodology

Paper Code- BBA 601

Contacts: 3L + 1T

Credits:4

Course overview:

The course introduces the concepts of research, ethical principles and challenges and the elements of the research process within quantitative, qualitative, and mixed methods approaches. The rigorous curriculum prepares students to become leading public health professionals capable of addressing current global health problems with multidisciplinary, evidence-based approaches. Students will use these theoretical learnings to review literature relevant to their field or interests.

Course Objectives: The objectives of this course are to:

- Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.
- Impart knowledge for enabling students to develop data analytics skills and meaningful interpretation to the data sets so as to solve the organizational problems.
- Describe the participants in conducting research work and formulating research synopsis and report.

Course Outcomes: On completion of this course, the students will be able to:

CO1: Analyze research and evaluation studies from the literature in terms of the appropriateness of their research questions, designs, methodologies, results and conclusions

CO2: Develop comprehensive evaluation plans for an intervention or program.

CO3: Define a research problem or an evaluation issue and design and carry out a study to address that problem/issue using appropriate research and analytic methods and analytical issues.

CO4: Illustrate data analysis and statistical issues in design of experiments, as well as the techniques and terminology commonly used to elicit and communicate evidence concerning scientific hypotheses.

CO5: Learn to interpret strength of statistical arguments made by researchers, and how to weigh statistical and clinical evidence in assessing a scientific hypothesis.

Course Content:

Unit 1: Basics of Research

Definitions & uses of research in healthcare, Steps Involved in Research Process, Variables in research, Formulation of research problems, writing research questions, Development of conceptual framework.

Unit 2: Sampling & Research Designs

Sampling, Sampling Procedure, types of Sampling Techniques, reliability & validity in research, Research Designs- Non-experimental & experimental research designs. Research designs for a range of questions in health,

Unit 3: Review of Literature & Hypothesis

Sources of literature review, Writing literature review, Hypothesis- Meaning and types of hypothesis

Unit 4: Health Survey and Data Collection

Overview of survey research, Pre survey formative research, Survey design- design effect, Sample surveys, Conduct of Survey, Describe the steps involved in planning and conducting a research project, mode of survey, Different methods of data collection- Observation method, interview method, Questionnaire and schedule

Unit 5: Project proposal and research report writing

Need assessment, Rationale for project, Proposal work plan; Structure and Components of Research Report, Types of Reports, Layout of Research Report, Method of writing a research report.

Unit 6: Research Ethics & Reference Writing

Ethics in health research, confidentiality and privacy, informed consent, vulnerable subjects and special treatments; reference writing using endnote

Text and References:

1. Gummesson, E. Qualitative methods in Management Research, Sage publications
2. Grundy F and Reinke W A, Health Practice Research and formalize Managerial Methods, Geneva, WHO
3. Designing and conducting Health surveys, Jossey Bass Publishers.
4. Varkevisser, C. M., Pathmanathan, I., & Brownlee, A. T. (2003). Designing and conducting health systems research projects (Vol. 1). IDRC.
5. John Creswell (2013). Research Design: Qualitative, Quantitative, and mixed methods approaches. Fourth edition, Sage Publications
6. Kothari, C.R., 1990. Research Methodology: Methods and Techniques. New Age International. 418p
7. Ulin P, Robinson E, Tolley E. (2005), Qualitative Methods in Public Health : A field guide for Applied Research, Jossey Bass Pub
8. Russell Bernard H., Gery W. Ryan (2010), Analyzing Qualitative Data: Systematic Approaches, SAGE Publications.
9. Coley, Soraya M. and Scheinberg, Cynthia A. (2008) Proposal Writing. Effective Grantsmanship. Thousand Oaks, CA: Sage.

Project Thesis
Paper Code BBA 602

Credits: 16

Internship Objective:

To impart the practical knowledge through research methods, help formulate a rigorous research problem related to hospital on the basis of their observation, help do an independent study, and encourage working in a team.

Pedagogy:

Identifying several situations amenable to dissertation work, writing a proposal and making a presentation to the Departmental Research Committee. - Reporting to the committee on the progress of research work periodically. - Making use of a variety of research methods. - Defending the inference before the Examining Committee.

Dissertation Report Contents:

Every student will do a detailed study on the topic selected for the dissertation, and is expected to prepare a two or three proposals which he intends to take up for the Dissertation. The Assigned guide will examine this and decide on the topic of dissertation. Report will comprise of following contents:

1. Abstract
2. Introduction
3. Aims & Objectives
4. Operational definitions
5. Significance of Study
6. Review of literature
7. Research methodology
8. Data Analysis
9. Results
10. Discussion
11. Conclusion
12. Recommendations
13. Limitations of study
14. Future prospects of study
15. References