#### 1 YEAR TRANSITIONAL BRIDGING COURSE

#### IN OCCUPATIONAL THERAPY (tBSOT)

#### **INTRODUCTION:**

Occupational therapy is about helping people do the day-to-day tasks that occupy their time, sustain themselves, and enable them to contribute to the wider community. It is these opportunities to "do" that occupational therapy provides that prove important and meaningful to the health of people. They work with individuals who have conditions that are mentally, physically, developmentally, socially or emotionally disabling

The basic educational degree which was previously awarded in occupational therapy was BSc (occupational Therapy) which includes all the field related subjects but core subjects and research was not taught .However, as per the requirements of HEC it is now upgraded in to BS (Occupational Therapy) four years bachelors . Students with the degree of Bsc need an upgrading course of one year which includes the subjects their degree is deficient of .

#### **SEMESTER 1**

Course Code	Name Of Subjects	Credits	Taught In DPT KMU
RS304	ENGLISH-I	3(3-0)	Semester 1
RS305	PAKISTAN STUDIES	2(2-0)	Semester 1
RS306	INTRODUCTION TO COMPUTER	2(2-0)	Semester 1
RS502	PHARMACOLOGY- I	3(3-0)	Semester 5
RS603	BIOSTATICS- I	3(3-0)	Semester 7
RS701	SCIENTIFIC INQUIRY & RESEARCH METHODOLOGY	3(2-1)	Semester 9
RS503	PROSTHETIC AND ORTHOTICS	2(2-0)	Semester 5
		18	

#### **SECOND SEMESTER**

Course	Name Of Subjects	Credit	Taught In DPT KMU
Code			

RS355	ISLAMIC STUDIES	2(2-0)	Semester 2
RS354	ENGLISH II	3(3-0)	Semester 2
RS554	HUMAN GROWTH, DEVELOPMENT & COMMUNITY BASED REHABILITATION	2(2-0)	Semester4
RS653	BIOSTATICS II	3(3-0)	Semester 8
RS553	TEACHING METHODOLOGY & COMMUNITY MEDICINE	3(3-0)	Semester 6
	RESEARCH PROJECT	4	
		18	

## **SEMESTER I**

- ENGLISH I
- PAKISTAN STUDIES
- INTRODUCTION TO COMPUTER
- PHARMACOLOGY I
- BIOSTATICS I
- SCIENTIFIC INQUIRY & RESEARCH METHODOLOGY
- PROSTHETIC AND ORTHOTICS

# **ENGLISH I (FUNCTIONAL ENGLISH)**

**CREDIT 3 (3-0)** 

#### Objectives:

Enhance language skills and develop critical thinking.

#### **Course Contents**

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

#### Comprehension

Answers to questions on a given text

#### Discussion

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

#### Listening

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

#### **Translation skills**

• Urdu to English

#### Paragraph writing

Topics to be chosen at the discretion of the teacher

#### **Presentation skills**

Introduction

Note: Extensive reading is required for vocabulary building

#### Recommended books:

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

# PAKISTAN STUDIES (COMPULSORY)

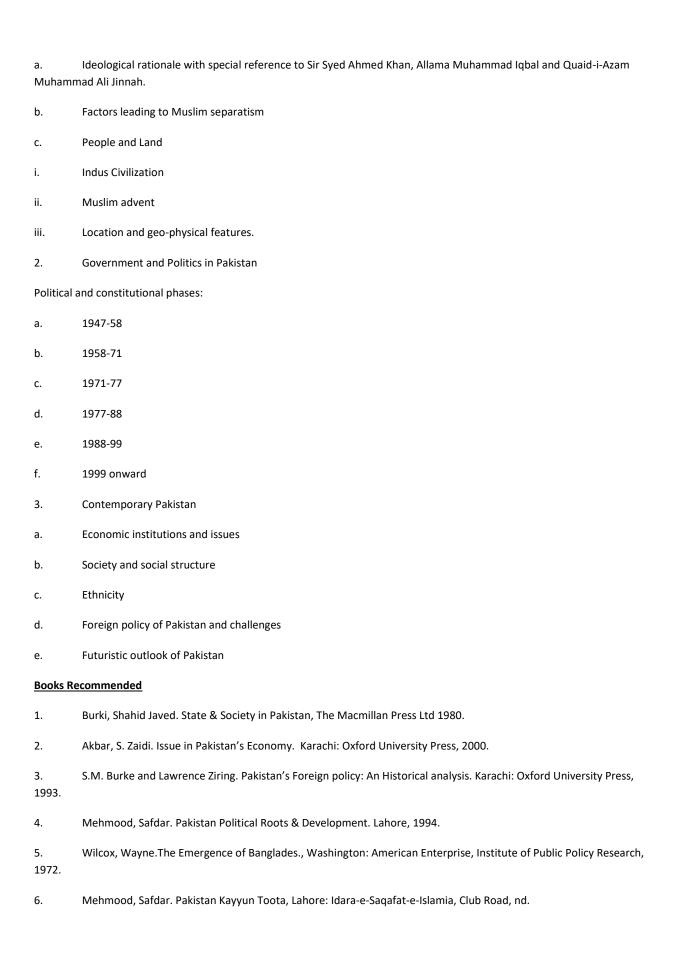
**CREDIT HOURS 2 (2-0)** 

#### Introduction/Objectives:

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

#### **Course Outline**

1. Historical Perspective



- 7. Amin, Tahir. Ethno National Movement in Pakistan, Islamabad: Institute of Policy Studies, Islamabad.
- 8. Ziring, Lawrence. Enigma of Political Development. Kent England: WmDawson & sons Ltd, 1980.
- 9. Zahid, Ansar. History & Culture of Sindh. Karachi: Royal Book Company, 1980.
- 10. Afzal, M. Rafique. Political Parties in Pakistan, Vol. I, II & III. Islamabad: National Institute of Historical and cultural Research, 1998.
- 11. Sayeed, Khalid Bin. The Political System of Pakistan. Boston: Houghton Mifflin, 1967.
- 12. Aziz, K.K. Party, Politics in Pakistan, Islamabad: National Commission on Historical and Cultural Research, 1976.
- 13. Muhammad Waseem, Pakistan Under Martial Law, Lahore: Vanguard, 1987.
- 14. Haq, Noor ul. Making of Pakistan: The Military Perspective. Islamabad: National Commission on Historical and Cultural Research, 1993.

# INTRODUCTION TO INFORMATION AND COMMUNICATION TECHNOLOGIES CREDIT HRS 3(2-1) INTODUCTION TO COMPUTER

#### **Course Description:**

This is an introductory course on Information and Communication Technologies. Topics include ICT terminologies, hardware and software components, the internet and world wide web, and ICT based applications.

- Basic Definitions & Concepts
- Hardware: Computer Systems & Components
- Storage Devices , Number Systems
- Software: Operating Systems, Programming and Application Software
- Introduction to Programming, Databases and Information Systems
- Networks
- Data Communication
- The Internet, Browsers and Search Engines
- The Internet: Email, Collaborative Computing and Social Networking
- The Internet: E-Commerce
- IT Security and other issues

Project Week

Review Week

#### **Text Books/Reference Books:**

• Introduction to Computers by Peter Norton, 6th International Edition (McGraw HILL)

- Using Information Technology: A Practical Introduction to Computer & Communications by Williams Sawyer, 6th Edition (McGraw HILL)
- Computers, Communications & information: A user's introduction by Sarah E. Hutchinson, Stacey C. Swayer
- Fundamentals of Information Technology by Alexis Leon, Mathewsleon Leon press

## **PHARMACOLOGY I**

CREDIT 3(3-0)

#### **Course Description:**

This course covers the basic knowledge of pharmacology including administration, physiologic response and adverse effects of drugs under normal and pathologic conditions. Topics focus on the influence of drugs in rehabilitation patient/client management. Drugs used in iontophorosis and phonoporosis will be discussed in detail.

#### **GENERAL PRINCIPLES OF PHARMACOLOGY;**

- Basic Principles of Pharmacology
- Phrmacokinematics; Drug Administration, Absorption, and Distribution
- Pharmacokinematics; Drug Elimination
- Drug Receptors

#### PHARMACOLOGY OF THE CENTRAL NERVOUS SYSTEM;

- Central Nervous System Pharmacology, General Principles
- Sedative-Hypertonic and Anxiety Agents
- Drugs used to treat affective Disorders; Depression and Manic-Depression
- Antipsychotic Drugs
- Antiepileptic Drugs
- Pharmacologic Management of Parkinson Disease
- General Anesthetics
- Local Anesthetics

#### DRUGS AFFECTING SKELETAL MUSCLE;

• Skeletal Muscle Relaxants

#### DRUGS USED TO TREAT PAIN AND INFLAMMATION

- Opioid Analgesics
- Nonsteroidal Anti-Inflammatory Drugs (NASID)
- Pharmacologic Management of Rheumatoid Arthritis and Osteoarthritis
- Patient-Controlled Analgesia

#### **AUTONOMIC AND CARDIOVASCULAR PHARMACOLOGY**

- Introduction to Autonomic Pharmacology
- Cholinergic Drugs
- Adrenergic Drugs
- Antihypertensive Drugs
- Treatment of Angina Pectoris
- Treatment of Cardiac Arrhythmias
- Treatment of Congestive Heart Failure
- Treatment of Coagulation Disorders and Hyperlipidemia

#### Recommended text book

- Pharmacology in Rehabilitation (3rd Edition)By Charles D. Ciccone
- Pharmacology ,Richard A, Harvey ,2nd Eddition ,Lippincott's
- Mutlianthore text book of Pharmacology and Therapeutics, M.Cheema, A vol 1 and Vol 2

# BIOSTATISTICS I CREDIT HRS: 3 (3-0)

#### What is Statistics?

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

#### **Presentation of Data**

Introduction, basic principles of classification and Tabulation, Constructing of a frequency distribution, Relative and Cumulative frequency distribution, Diagrams, Graphs and their Construction, Bar charts, Pie chart, Histogram, Frequency polygon and Frequency curve, Cumulative Frequency Polygon or Ogive, Historigram, Ogive for Discrete Variable. Types of frequency curves. Exercises.

#### **Measures of Central Tendency**

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

#### **Measures of Dispersion**

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

#### **Probability and Probability Distributions.**

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

#### **Sampling and Sampling Distributions**

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

#### **Recommended Books**

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

# SCIENTIFIC INQUIRY & RESEARCH METHODOLOGY 3(2-1)

**CREDIT** 

#### **Course Description:**

This course includes discussion on basic quantitative methods and designs, including concepts of reliability and validity, interpretation of inferential statistics related to research designs, co relational statistic & designs, interclass correlation coefficients, and critical appraisal of the literature.

#### **Research Fundamentals:**

- Rehabilitation Research
- Theory in Rehabilitation Research
- Research Ethics

#### Research Design:

- Research Problems, Questions, and Hypotheses
- Research Paradigms
- Design Overview
- Research Validity

#### **Experimental Designs:**

- Group Designs
- Single-System Design

#### Non experimental Research:

- Overview of Non experimental Research
- Clinical Case Reports
- Qualitative Research
- Epidemiology
- Outcomes Research
- Survey Research

#### Measurement:

- Measurement Theory
- Methodological Research

#### Data Analysis:

- Statistical Reasoning
- Statistical Analysis of Diffrences; The basics
- Statistical Analysis of Diffrences; Advanced and special Techniques

- Statistical Analysis of Relationships; The basics
- Statistical Analysis of Relationships; Advanced and special Techniques

#### **Being a Consumer**

- Locating the Literature
- Evaluating Evidence One Article at a time
- Synthesizing Bodies of Evidence

#### **Implementing Research:**

- Implementing a Research Project
- Publishing and Presenting Research

#### **PRACTICAL**

- Literature review
- Preparation, presentation and defence of research proposal
- Poster presentation

#### **RECOMMENDED TEXTBOOK:**

- Essentials of clinical research By Stephan P. Glasser
- Rehabilitation Research (Principles and Applications) 3rd Edition By Elizabeth Domholdt

### **PROSTHETIC & ORTHOTIC**

CREDIT 2(2-0)

#### **Course Description:**

This course intends to study prosthetic and orthotic management as applied to a variety of patient populations across a life span. It also addresses the considerations of various pathologies and medical, surgical management to formulate appropriate patient examinations, evaluation, diagnosis, prognosis and intervention that are consistent with physical therapy practice guidelines. Principles of normal biomechanics, pathomechanics, physiology and Pathophysiology will be a major focus for evaluation, intervention and education of the vascular, neuromuscular, and / or musculoskeletal compromised patient who may utilize prosthetic or orthotic devices. Basic principles of mechanical physics and material characteristics will be applied.

#### **Detailed Course Outline:**

#### **ORTHOTICS**

#### Introduction to Orthotics

- Basic Terminology
- Historical Background
- Factors In Prescription Orthotics
- Nomenclature of Orthotics
- Biomechanical Principles
- Materials Used in Orthotics Manufacturing
- Methods of Construction

#### **Foot Orthoses**

- Shoe Style
- Parts of Shoes
- Special Purpose Shoes
- Foot Examination
- Orthotics Interventions
- Fabrication Options
- Pediatric Foot Orthoses
- Guideline for Prescription Foot Orthoses

#### **Ankle Foot Orthoses**

- Plastic Ankle Foot Orthoses
- Lather Metal Ankle Foot Orthoses
- Composite Materials
- Weight Relieving Ankle Foot Orthoses
- Support (Fabric , Leather, Gel And Air )
- Contracture Reducing Ankle Foot Orthoses

• Guidelines for Prescription Ankle Foot Orthoses

#### Knee Ankle Foot Orthoses and Knee Orthoses

- Plastic Metal Knee Ankle Foot Orthoses
- Knee Immobilizer
- Supra- Condylar Knee Ankle Foot Orthoses
- Weight Relieving Orthoses, Fracture Orthoses
- Lather Metal Knee Ankle Foot Orthoses
- Knee Orthoses
- Guidelines For Prescription Knee Ankle Foot Orthoses

#### Orthoses for Paraplegia And Hip Disorders

- Paraplegia
- Standing Frames
- Orthoses Designed For Ambulation
- Functional Electrical Stimulation
- Specific Devices for Paraplegia
- Hip Orthoses
- Guidelines for Prescription

#### **Evaluation Procedures for Lower Limb Orthoses**

- Need of Evaluation
- Static Evaluation
- Dynamic Evaluation
- Gait Disorders with Orthoses Usage

#### **Trunk and Cervical Orthoses**

- Trunk Orthoses
- Trunk Orthoses Evaluation

- Scoliosis and Kyphosis Orthoses
- Scoliosis And Kyphosis Orthoses Evaluation
- Cervical Orthoses
- Cervical Orthoses Evaluation
- Guideline For Prescription

#### **Upper Limb Orthoses**

- Hand And Wrist Hand Orthoses
- Forearm And Elbow Orthoses
- Shoulder Orthoses, Fabrication Option
- Upper limb Orthoses Evaluation (Hand, Wrist, Fingers, Shoulder and Elbow)
- Guideline For Prescription

#### Orthoses For Burns And Other Soft Tissue Disorders

- Importance of Orthoses for Burns and Other Soft Tissue Disorders
- Orthoses for Burn Management
- Orthoses for Patients with Soft Tissues Problem Associated With Neuromuscular Disorders

#### **Goal Setting And Treatment Plan**

- Long Term Goals
- Short Term Goals
- Treatment Planning
- Criteria for Discharge
- Care of Orthoses

#### **PROSTHETICS**

#### Early Management

- Clinic Team Approach to Rehabilitation
- Amputation Surgery: Osteomyoplastic Reconstructive Technique

- Postoperative Management
- Pain Management
- Skin Disorders and Their Management
- Psychological Consequences of Amputation

#### Rehabilitation of Adults With Lower-Limb Amputations

- Partial Foot and Syme's Amputations and Prosthetic Designs
- Transtibial Prosthetic Designs
- Transfemoral Prosthetic Designs
- Hip Disarticulations and Transpelvic Prosthetic Designs
- Basic Lower-Limb Prosthetic Training

#### Rehabilitation of Adults with Upper-Limb Amputations

- Body-Powered Upper-Limb Prosthetic Designs
- Upper-Limb Externally Powered Prosthetic Designs
- Training Patients with Upper-Limb Amputations

#### Beyond the Basics

- Special Considerations with Children
- Rehabilitation Outcomes
- Adaptive Prostheses for Recreation
- Future Prosthetic Advances and Challenges
- Future Surgical and Educational Advances and Challenges

#### Recommended Text Books

- Prosthetics and Patient Management: A Comprehensive Clinical Approach By: Kevin Carroll; Joan Edelstein
- Orthotics a comprehensive clinical approach By: Joan E Eldestein& Jan Bruckner

#### **SECOND SEMESTER**

- ISLAMIC STUDIES
- ENGLISH II
- HUMAN GROWTH, DEVELOPMENT & COMMUNITY BASED REHABILITATION
- BIOSTATICS II
- TEACHING METHODOLOGY & COMMUNITY MEDICINE
- RESEARCH PROJECT

# ISLAMIC STUDIES/ ETHICS (COMPULSORY) CREDIT 2 (2-0)

#### **Objectives:**

This course is aimed at:

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

#### **Detail of Courses**

#### **Introduction to Quranic Studies**

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

#### Study of Selected Text of Holly Quran

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

#### Study of Selected Text of Holly Quran

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

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

- 1) Life of Muhammad Bin Abdullah ( Before Prophet Hood)
- 2) Life of Holy Prophet (S.A.W) in Makkah
- 3) Important Lessons Derived from the life of Holy Prophet in Makkah

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

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

#### Introduction To Sunnah

- 1) Basic Concepts of Hadith
- 2) History of Hadith
- 3) Kinds of Hadith
- 4) Uloom –ul-Hadith

- 5) Sunnah & Hadith
- 6) Legal Position of Sunnah

Selected Study from Text of Hadith

#### Introduction To Islamic Law & Jurisprudence

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

#### **Islamic Culture & Civilization**

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

#### **Islam & Science**

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

#### **Islamic Economic System**

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

#### **Political System of Islam**

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

#### **Islamic History**

1) Period of Khlaft-E-Rashida

2)	Period of Ummayyads
3)	Period of Abbasids
Social Sy	ystem of Islam
1)	Basic Concepts of Social System of Islam
2)	Elements of Family
3)	Ethical Values of Islam
Referen	ce Books:
1)	Hameed ullah Muhammad, "Emergence of Islam", IRI, Islamabad
2)	Hameed ullah Muhammad, "Muslim Conduct of State"
3)	Hameed ullah Muhammad, 'Introduction to Islam
4)	Mulana Muhammad Yousaf Islahi,"
5)	Hussain Hamid Hassan, "An Introduction to the Study of Islamic Law" leaf Publication Islamabad, Pakistan.
6) Islamaba	Ahmad Hasan, "Principles of Islamic Jurisprudence" Islamic Research Institute, International Islamic University, ad (1993)
7)	Mir Waliullah, "Muslim Jrisprudence and the Quranic Law of Crimes" Islamic Book Service (1982)
8)	H.S. Bhatia, "Studies in Islamic Law, Religion and Society" Deep & Deep Publications New Delhi (1989)
9)	Dr. Muhammad Zia-ul-Haq, "Introduction to Al Sharia Al Islamia" Allama Iqbal Open University, Islamabad (2001)
ENG	GLISH II (FUNCTIONAL ENGLISH) CREDIT 3(3-0)
<u>Object</u>	ives:
Enable t	the students to meet their real life communication needs.
Course (	<u>Contents</u>
Paragrap	oh writing
Practice	in writing a good, unified and coherent paragraph
Essay wr	riting

Introduction
CV and job application
Translation skills
Urdu to English
Study skills
Skimming and scanning, intensive and extensive, and speed reading, summary and précis writing and comprehension
Academic skills
Letter/memo writing, minutes of meetings, use of library and internet
Presentation skills
Personality development (emphasis on content, style and pronunciation)
Note: documentaries to be shown for discussion and review
Recommended books:
Communication Skills
a) Grammar
1. Practical English Grammar by A.J. Thomson and A.V. Martinet. Exercises 2. Third edition. Oxford University Press 1986. ISBN 0 19 431350 6.
b) Writing
1. Writing. Intermediate by Marie-Chrisitine Boutin, Suzanne Brinand and Francoise Grellet. Oxford Supplementary Skills. Fourth Impression 1993. ISBN 019 435405 7 Pages 45-53 (note taking).
2. Writing. Upper-Intermediate by Rob Nolasco. Oxford Supplementary Skills. Fourth Impression 1992. ISBN 0 19 435406 5 (particularly good for writing memos, introduction to presentations, descriptive and argumentative writing).

Reading. Advanced. Brian Tomlinson and Rod Ellis. Oxford Supplementary Skills. Third Impression 1991. ISBN 019

3. Study Skills by Riachard Yorky.

Reading

c)

2.

453403 0.

Reading and Study Skills by John Langan

#### **COMMUNITY BASED REHABILITATION**

#### **Course Description:**

This course intends to give the physiotherapy students basic knowledge about various types of disabilities existing in special children. The knowledge ranges from physically handicapped to intellectually disabled children. It also gives information about various existing approaches for the effective rehabilitation and teaching methods

#### INTRODUCTION

- Forming a New Life
- The Study of Human Development
- Theory and Research
- Physical Development during the First Three Years
- Cognitive Development during the First Three Years
- Psychosocial Development during the First Three Years

#### **EARLY CHILDHOOD**

- Physical and Cognitive Development in Early Childhood
- Psychosocial Development in Early Childhood
- Physical and Cognitive Development in Middle Childhood
- Psychosocial Development in Middle Childhood

#### **ADOLESCENCE**

- Physical and Cognitive Development in Adolescence
- Psychosocial Development in Adolescence
- Physical and Cognitive Development in Young Adulthood
- Psychosocial Development in Young Adulthood

#### MIDDLE ADULTHOOD

Physical and Cognitive Development in Middle Adulthood

- Psychosocial Development in Middle Adulthood
- Physical and Cognitive Development in Late Adulthood
- Psychosocial Development in Late Adulthood
- Dealing with Death and Bereavement

#### **HEALTH IN THE COMMUNITY**

- Handicap and the community
- Nutrition and mal nutrition
- Breast feeding
- Immunization
- Oral rehydration

#### NORMAL BODY FUNCTION

- Normal development
- Growth and weight of children

#### **CONDITIONS AND TREATMENTS**

- Cerebral palsy in children
- Down syndrome
- Mental handicap
- Hydro-cephalus
- Spin bifida
- Poliomyelitis
- Blindness
- Deafness
- Strokes
- Spinal cord injuries
- Amputation

#### **MANAGEMENT OF PATIENTS**

- Assessment and recoding
- Fits
- Contractures
- Pressure sores
- Urine and bowel management
- Chest infection
- Feeding children with cerebral palsy
- Toy making workshop
- Welfare assistance

#### Recommended books:

- Introduction to Special Education By: Allen and Beacon, (1992), A Simon & Superter Comp. Needham Heights
- Exceptional Children, Howard, W.l. (1988); Columbus, Merill.
- Exceptional Children and Adults, Patton, J.R. (1991); Boston Scott Foresmen and Co.
- Exceptional Children in Focus by: Patton J.R. (1991); New York, Macmillan pub. Co
- Community based rehabilitation worker manual, marion loveday, global health publication

#### **BIOSATISTICS II**

#### **Hypothesis Testing**

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

**CREDIT HRS: 3 (3-0)** 

#### **Testing of Hypothesis-Single Population**

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

#### **Testing of Hypotheses-Two or more Populations**

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

#### **Testing of Hypothesis-Independence of Attributes**

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

#### **Regression and Correlation**

Introduction, cause and effect relationships, examples, simple linear regression, estimation of parameters and their interpretation. r and R2. Correlation. Coefficient of linear correlation, its estimation and interpretation. Multiple regression and interpretation of its parameters. Examples

#### **Recommended Books**

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

# TEACHING METHODOLOGY & COMMUNITY MEDICINE CREDIT 3 (3-0)

#### **COURSE DESCRIPTION**

The course is organized to introduce the concept of health care and management issues in Health Services. It will help them in assuming a leadership role in their profession and assume the responsibility of guidance. It will help them assume wider responsibilities at all levels of health services. It will help them in improving their performance through better understanding of the total function of the institution.

#### **CONTENTS OF THE COURSE:**

- Types of health services, public, private, scientific, traditional health system.
- Organization of public services in health, central, provincial and local levels.
- Burden of disease, concept of health needs for care,
- Levels of health care, primary, secondary and tertiary,
- Planning of health services,
- Organization of health services,
- Implementation and evaluation of health services,
- Management of resources in health services,
- Financial management.
- Health education and social cultural concept in health,
- Ethics in Health Services.
- Theories of learning facilitations
- Cognitive, Psychomotor domain & effective domain
- Bloom taxonomy

# **COMMUNITY MEDICINE**

#### **Course Description:**

This course is designed for the physiotherapists in order to develop strong knowledge background regarding the community health and well being. It also gives knowledge about issues in community health and policies and procedures for their effective management..

#### **History of Community Medicine**

Definition, concept of Health & illness of diseases

Natural History of diseases, levels & prevention

Environmental sanitation & Medical entomology

water
waste disposal
Environmental problems & pollution
Genetics
Prevention of genetic diseases
Genetic counseling
General Epidemiology
Descriptive epidemiology
Time
Place
Person
ii) Analytical epidemiology
a) Case control
b)Cohort studies
iii)Experimental Epidemiology randomized control trial
Systemic epidemiology
i)Vector borne diseases
ii)Water borne diseases
iii)Air born diseases
iv)Contact diseases
v)Diseases of major public health
importance alongwith national
health programmes wherever
Applicable
Non-communicable diseases:
i)Diabetes
ii)Hypertension
iii) Heart diseases
IV) Blindness

M.C.H. and family welfare
Programmes
Health care delivery in the community
National Health Policy
National Health programmes including
Rehabilitation, Evaluation of Health
Programmes, Helath Planning Organization,
Structure of Health care system in the
Country including P.H.C. district level
State level and central level.
ii) P.H.C. Organization and Function
iii) Role of Non Governmental Organization
Health Education
i) Principles of Health Promotion
ii) Methods, approaches and media for
I.E.C (Information, Education & Communication)
Medical and Health/Information system
Mental Health
Nutrition
TEXT BOOKS
1-Textbooks of Community Medicine, by Prof. H. A. Siddique
(2nd Edition).
2- Parks text book of preventive & social medicine –K Park

v) Accidents

vi) Geriatric problems

Occupational Health problems: