

**UNIVERSITY OF PUNE  
DEPARTMENT OF ANTHROPOLOGY**

**SYLLABUS FOR  
M.A./M.Sc. PROGRAMME IN ANTHROPOLOGY  
SEMESTER III & IV**

**(SEMESTER PATTERN WITH CREDITS SYSTEM)**

**REVISED SYLLABUS EFFECTIVE FROM THE ACADEMIC  
YEAR 2009-2010**

**UNIVERSITY OF PUNE**  
**DEPARTMENT OF ANTHROPOLOGY**  
**COURSE STRUCTURE**

**Semester III**

AN 301: Medical Anthropology: Health, Culture and Society  
AN 302: Developmental Anthropology  
AN 303: Social-Cultural Change  
AN 304: Recent Trends In Anthropology  
AN 305: Biological Anthropology Practicals –II  
AN 306: Population Genetics  
AN 307: Applied Biological Anthropology  
AN 308: Dissertation - Part I

**Semester IV**

AN 401: Medical Anthropology: Approaches, Public Health Policies and Programmes  
AN 402: Complex Societies and Urban Development  
AN 403: Demography  
AN 404: Tribal and Rural Development  
AN 405: Bio-Social Gerontology  
AN 406: Growth and Nutrition  
AN 407: Medical Genetics  
AN 408: Dissertation – Part II

**Note:**

- 1. All courses except dissertation in semester III and IV are optional and carry 3 credits each.**
- 2. Dissertation courses are compulsory and carry 4 credits.**

# **SEMESTER III**

## **AN 301: Medical Anthropology: Health, Culture and Society (3 Credits)**

### **Course Objectives:**

- To Introduce Students to the Field of Medical Anthropology
- To Give an Overview of the Determinants of Health
- To Give an Overview of Basic terms and Concepts in Medical Anthropology.

### **Unit 1- Medical Anthropology**

- Origin
- Scope
- Definitions

### **Unit 2- Health, culture and ecology**

- Ecological approach as conceptual orientation
- Ecological conditions, cultural practices and biological adaptations
- Epidemiology and ecology

### **Unit 3- Ethnomedicine**

- Concept of ethnomedicine
- Ethnomedicine as cultural institution
- Disease etiology, classification and diagnosis
- Natural, supernatural and social agents of illness
- Ethnomedical therapy
- Ethnomedical specialists
- Preventive measures

### **Unit 4- Medical aspects of social system**

- Illness as sanction
- Illness as deviance
- Health and illness as indicators of social systems performance
- Concept of sick role

### **Unit 5- Health, disease and illness**

- Conceptual differences health, disease and illness
- Concept of health by World Health Organization
- Cross-cultural variation in the understanding of the concepts of health and disease

### **Unit 6- Determinants of health**

- Life style
- Nutrition
- Genetic
- Environment

## Unit 7- Epidemiology

- Historical aspects, definition, aim and uses
- Descriptive epidemiology
- Determinants of disease, Natural history of disease
- Epidemiology of infectious and non- infectious diseases
- Epidemiological principles in prevention and control disease

## Unit 8- Medical pluralism

- Ayurved
- Homeopathy
- Unani
- Naturopathy
- Sidha
- Medical pluralism and health seeking behaviour
- Professionalization of traditional medicine

## Unit 9- Gender and health

- Concept of gender
- Social structure and gender discrimination
- Reproductive health of men and women
- Adolescence health
- Health Issues of the elderly

## Unit – 10 Reading and Seminar Topics

### Text Books

Beaglehole & Bonita	1993	‘Basic Epidemiology’, WHO Publication, Geneva.
Davidson, E.	1995	‘Principles and Practice of Medicine’, Pearson Professional Ltd., London
David, E.	1984	‘Foundation of Epidemiology’, Oxford University Press, New York
Deodhar & others	1971	‘Basic Preventive and Social Medicine’, Pune.
Foster	1978	‘Medical Anthropology’, John Willey & Sons, New York.
Helman, C	2000	‘Culture, Health and Illness’, 4 <sup>th</sup> Ed. Reed Educational and Publishing Ltd.
Kakar, S.	1982	‘Shamans, Mystic and Doctors’, Oxford university Press.
Kleinman, A.	1980	‘Patients and Healers in the Context of Culture’, University Of California Press
Lad, Vasant	1994	‘Ayurveda: The Sciences of Self Healing’, Motilal Banarasidas, New Delhi.
Leslie,	1977	‘Asian Medical Systems: A Comparative Study’, University of California Press. London.
Park & Park	1994	‘Textbook of Preventive and Social Medicine’,

- McElory & Tomnserd 1985 Banarasidas Bhanot, Jabalpur.  
 'Medical Anthropology: Ecological Perspective',  
 Westview Press, London.
- Shivshankar 1993 'The System of Ayurveda', Prince Publications, New  
 Delhi.
- Essays in Medical Anthropology, The Mankind Quarterly, Monograph Number Two,  
 K Park, Suit 520 – 1629 K St. N.W. Wahington, D.C.  
 Preventive and Social Medicine, Bansaridas Bhanot  
 Publishing House
- Sathe , P.V. Sathe, A.P., 1991. Epidemiology and Management for Health Care:  
 Popular Prakashan, Mumbai,
- David E., et. al. 1984. Foundations of Epidemiology Oxford University  
 Press, New York,
- Last, J.M., Spasoff, R.A. 2001. A Dictionary of Epidemiology, Oxford University  
 Harris, S. S. and Press, New York, 4th Ed.,  
 Thuriaux, M.C. (Eds):
- Dr. C. Gopalan, , 1987. Nutrition problems and Programmes in South East  
 Asia: World  
 Health Organization, New Delhi

## **AN 302: Developmental Anthropology (3 Credits)**

### **AIM**

This course focuses on the concept of development, the scope of developmental anthropology, and the role of anthropologists in development process. The course discusses various paradigms of development, along with the agencies mechanisms involved therein.

### **Unit -1 Introduction**

- The Three Approaches in the Anthropology of Development.
- The Discourse of Development
- Populism, Anthropology and Development
- The Entangled Social Logical Approaches

### **Unit – 2 Socio-anthropology of Development**

- Socio-Anthropology of Development
- Definition Scope and Subject Matter
- Comparativism
- Action
- Populism

### **Unit-3 Theories, models and approaches of development**

- Modernization Model
- Modernization and Top Down Governance
- Critique Of Modernization as a Dependency Paradigm
- The Bottom-up approach as a Multiplicity Model
- The Culturologist Approach
- Multiplicity paradigm and people's Participation
- Paradigm of Participatory Development

### **Unit - 4 Agencies Of Development**

- Government agencies – Role of Welfare State in Development
- Non Government Organizations (NGO's)
- Community Based Organizations (CBO')
- International Development and funding agencies, United Nations development efforts, International cooperation in the field of development

### **Unit – 5 Impediments to Development**

- Cultural Impediment
- Social Impediment
- Economic Impediment
- Political Impediment
- Religious Impediment
- Psychological Impediment
- Natural Impediment
- Administrative Impediment
- Corruptional Impediment
- Educational Impediment
- Health Impediment
- Terroristic Impediment
- Ecological Impediment
- Communicational Impediment
- Naxal Impediment

## Unit – 6 Reading and Seminar

### Text Books

Gardner, K. & Lewis	1996	‘Anthropology, development and the post-modern challenge’, Pluto press, London.
Grillo, R. & Rew, A.	1985	‘Social Anthropology and development policy’, Tavistock publication, London.
Malhotra, R. (ed.)	1992	‘Anthropology of development’, Mittal publications, New Delhi.
Mukherjee, R.	1991	‘Society culture development’, Sage publication, New Delhi.
Saraswati, Baidyanath	1997	‘Integration of endogenous cultural dimensions into development’, Indira Gandhi National Centre for Arts.
Sharma, S.L.	1986	‘Development: Socio-cultural dimensions’, Rawat publications, Jaipur.

### Recommended Books

Misra, S.N.	1986	‘Panchayat Raj, Bureaucracy and rural development’, Indian Institute of Public Administration, New Delhi.
Misra, R.P.	1985	‘Development issues of our time’, Concept publication company, New Delhi.
Negi & Gaikwad	1989	‘Socio-cultural dynamics of tribal development’, Tribal Research & Training Institute, Pune.
Pathy, Jagannath	1988	‘Ethnic minorities in the process of development’, Rawat publication, Jaipur
Vorhies and others	1989	‘The politics of hunger’, Hillsdale College Press, Michigan.

### Reference Books

Dunn, P.D.	1978	‘Appropriate technology’, Schochen books, New York.
------------	------	---

- Rogers, Everell 1976 'Communication and development: Critical perspectives', Sage publication, London.
- Saksena & Tiwari 1998 'Perspectives in tribal development', Bharat book centre.
- Shore & Wright (ed.) 1997 'Anthropology of Policy: Critical perspectives on Governance and Power'.
- Vatsyayan, Kapila 1996 'Interface of cultural identity and development', Indira Gandhi National Centre for Arts.

## **AN 303: Social-Cultural Change (3 Credits)**

### **AIM**

The course discusses various processes leading to change in the existing configuration of any socio-cultural system. The course introduces students to the analysis of various factors and processes, which play a definite role in the process of sociocultural change.

### **Topic Units**

#### **Unit 1- Dynamics of Culture**

- Culture and Social dynamics
- Importance of Studying culture and social change
- Distinction between Social Change and Cultural Change
- Stability and Change

#### **Unit 2- Nature and dynamics of Change**

- Evolutionary and Diffusionistic Perspective of Change
- Dialectical and Conflict Model of Change
- Equilibrium Models of Change : Structure – Functionalism
- Parsonian Differentiation Model

#### **Unit 3 – Factors and Processes of Change**

- Cultural lag;
- Factors: Economic, Technological, Demographic, Ideational, etc.
- Concept of Innovation; Diffusion Innovation;
- Acculturation, Assimilation, Accommodation, Reinterpretation and Integration

#### **Unit – 4 Cyclic Theories of Change**

- Contributions of Oswald Spengler,
- Contributions of Arnold Toynbee,
- Contributions of Pitrim Sorokin,
- Contributions of Alfred Kroeber : Configuration of Culture growth

#### **Unit – 5 Social Cultural Changes in India**

- Urbanization, Industrialization, Sanskritization, Modernization, Westernization, Globalization in the context of India

#### **Unit – 6 Reading and Seminar Topics**

### **Text Books**

- Barnet H.G. 1953 *Innovation, The basis of culture change, McGrew Hill, New York*
- Moore W.E. 1965 Social Change, Foundation of Modern Sociology Series, Prentice Hall of India, Delhi.
- Rogers E.M. & Shoe maker F.F. 1962 Communication of Innovation, The Free Press, New York.
- Strasser & Randall 1981 An Introduction to theories of Social Change, Routledge & Kegan paul,

### **Recommended Books**

- Galt A. & Smith L. 1976 Models & Study of social change, John Wiley & Sons.
- Punekar U.B. 1974 Assimilation, Asia Publishing, Bombay
- Rao M.S.A. 1970 'urbanization And Social Change' Orient Longman, Delhi
- Singer, M. 1972 'When a Great Tradition Modernizes' Vikas Publicatios , New Delhi
- Smith Anthony 1973 The Concept of Social change, Routledge & Kegan paul, London

### **Reference Books**

- Ponsion J.A. 1969 The Analysis of social change reconsidered, Mouton and Company, The Hague.
- Srinivas M.N. 1966 Social Change in Modern India, Allied Publication, Bombay.
- Sundar Rajan 1986 Innovative Competence and Social Change' IPQ Publications
- Zaltzmann Gerald 1973 Process and Phenomenon of Social change, New York, Wiley, Inter Science.
- Zamara D.M. 1993 Perspectives on cultural change and development, Reliance Publishing House, Delhi.

## **AN 304: Recent Trends in Anthropology (3 Credits)**

### **Aim:**

The course focuses on the recent trends in anthropological thinking. The course also takes a review of the emerging interdisciplinary development in the field of anthropological sciences, combining anthropological perspectives with that of the biology, psychology, ecology, etc.

### **SYLLABUS**

#### **Unit 1: Post Modernism**

- Post-modernism as a reaction to modernism;
- Post-modernism as a theoretical perspective;
- Post-modernism as a methodological paradigm;
- Post-modernism and anthropology;
- Contributions and criticism.

#### **Unit 2: Systems Theory**

- Contributions of Talcott Parsons;
- Society as a dynamic system;
- Equilibrium and social integration;
- Contributions and criticism.

#### **Unit 3: Dialectical Anthropology**

- Dialectics – Classical tradition;
- Dialectics – Hegel and Marx;
- Dialectics anthropology as a perspective;
- Contributions and criticism.

#### **Unit 4: Symbolic Anthropology**

- The paradigm of symbolic anthropology;
- Contributions of Clifford Geertz, V. Turner and Mary Duglus;
- Methodological approach within symbolic anthropology;
- Contributions and criticism.

#### **Unit 5: Ethnomethodology**

- Phenomenological sociology and Ethnomethodology;
- Reflexivity, accountability, indexicality;
- Documentation method – Etcetra principle;
- Contributions and criticism.

#### **Unit 6: Ecological Anthropology**

- Definition of ecology, culture and ecology, human ecology;
- Man and adaptation, culture and natural environment, ecosystem, human ecological niche, ecological community;

- Environment and environmentalism: Exploitation of natural resources, deterioration and degradation of environmental quality, problem of ecological sustainability;
- Ecological movements: Contributions and criticism.

### **Unit 7: Psychological Anthropology**

- Nature and scope
- Definition of personality, basic personality and model personality;
- Contributions of Ruth Benedict and Margaret Mead;
- Contributions of Linton, Kardiner and Cora-du-Bois;
- Personality and National character studies;
- Contributions and criticism.

### **Unit 8: Reading unit and seminar topics**

#### **LIST OF BOOKS**

##### **Text Books**

Hardesty, Donald	1977	‘Ecological Anthropology’, John Wiley and Sons.
Hubinger, Vaclav	1996	‘Grasping the changing world: Anthropological concepts in the Post-modern Era’, Routledge, London
Parsons, Talcot	1951	‘The social system’, American publishing company Pvt. Ltd., New Delhi.
Schneider and others	1977	‘Symbolic Anthropology: A Reader in the study of symbols and meanings’, Columbia, University press.
Turner, Roy	1974	‘Ethnomethodology’, Penguin education, England

##### **Recommended Books**

Bennet, John	1979	‘The ecological transition: cultural Anthropology and human adaptation’, Pergamon press inc., Great Britain.
Douglas, Marry	1978	‘Cultural bias’, royal Anthropological institute of Great Britain and Ireland.
Garfinkel, H.	1967	‘Studies in Ethnomethodology’, Prentice hall inc., New Jersey.
Geertz, Clifford	1973	‘The interpretation of culture: Selected essays’, Basic boks Inc. publishers, New York.
Tax, S. & Freeman, L.	1977	‘Horizons of Anthropology’, Aldine publishing company, Chicago.

##### **Reference Books**

Chapple, Elliot	1980	‘Biological foundations of individuality and culture’, Robert E. Krieger publication, New York.
Gadgil & Guha	1997	‘This fissured Land: An ecological history of India’, Oxford University Press, New Delhi.
Ingham, John	1996	‘Psychological Anthropology Reconsidered’,

- Manganaro, Marc 1990 Cambridge University Press.  
'Modernist Anthropologist: From Fieldwork to text',  
Princeton University Press, New Jersey.
- Sperber, Dan 1975 'Rethinking Symbolism', Cambridge University Press.

## **AN 305: Biological Anthropology Practicals –II (3 Credits)**

### **Aim :**

This practical course provides knowledge of Scientific method and Techniques of Measurements on living individual measurement which is useful to get an idea of Nutritional status of Individual, age, sex and comparative community differences. Blood group techniques, Dermatoglyphics, Somatoscopic traits are also included in this course to study the Population Variation and their Inheritance.

### **SYLLABUS**

#### **Unit 1: Somatometry**

- Somatometry Use, Scope and Importance
- Introduction to the Instruments
- Different landmarks and their locations

#### **Unit 2: Selected measurements on Head**

- Maximum head length
- Head breadth
- Head circumference
- Morphological upper facial height
- Physiognomic upper facial height
- Nasal height
- Nasal breadth
- Mouth breadth
- Bigonialbreadth

#### **Unit 3: Selected measurements on rest of the body**

- Height vertex
- Sitting height
- Height acromion
- Height iliocristale
- Height dactyl ion
- Biacromial diameter
- Chest circumference
- Waist circumference
- Hip circumference
- Upper arm circumference
- Weight
- Skin fold thickness
- Bicep
- Triceps
- Sub-scapular
- Calculation of different Indices (CI, NI, BMI etc)

#### **Unit 4: Somatoscopy and**

- General Introduction, Use and Scope of Somatoscopy
- Hair color, eye color, skin color
- Hair type, pattern, whorl their number and direction
- Earlobe attachment, Tongue rolling folding
- Handedness, Hand clasping. Digital formula
- Inbite, overbite bite to bite

#### **Unit 5: Serology**

- Blood groups: anthropological importance, techniques, collection of sample, identification of ABO and Rh system,
- PTC taste sensitivity
- Use of Genetic Markers in population genetics

### Unit 6: Dermatoglyphics

- Relevance in Anthropological studies
- Techniques: printing, finger/palm pattern identification
- Basic Classification: Galton Henry/ Bhanu system
- Indices - Arch, whorl, Whorl-loop
- Dermatoglyphics and Diseases
- Population variation and significance of the study

### Unit – 7 Reading and Seminar Topics

#### LIST OF BOOKS

Frazer	1965	Human Anatomy', J.PA Churchill Ltd., London
Singh, IP. & 1&K Bhasin	1989	Anthropometry', Kamala Raj Enterprises, Delhi
Race & S anger	1954	Blood Groups in Man'
Weiner & Lourie	1969	£Human Biology, A Guide to Field Methods', IBP Handbook No. 9, Blackwell SciPub., Oxford.
Cummins H & Midlo C.	1951	Finger Prints, Palms and Soles' Dover Publications, New York, Philadelphia

## **AN 306: Population Genetics ( 3 credits)**

Aim:

The course provides the basics of population genetics, genetic polymorphism, and the important genetic markers in human populations, and biological consequences and consanguinity.

### **Unit 1: Population Genetics**

- Genetic Diversity in Humans;
- Definition and scope of population genetics, its relevance in anthropology; and
- Its relationship with and differences from other branches of human genetics, viz., formal genetics, developmental genetics, cytogenetics and molecular genetics.

### **Unit 2: Methods in Population Genetics and Genetic polymorphism**

- Mendelian population;
- Hardy-Weinberg law- statement, derivation and application;
- Factors affecting gene frequencies- mutation, migration, hybridization, genetic drift and selection.
- Genetic polymorphism –balanced, transient and neutral
- Biological consequences of consanguineous

### **Unit 3: Genetic Markers in Human populations: Classical Markers**

- Tasters/nontasters- Genetic, distribution
- Skin pigmentation – Melanin, normal, induced.
- Dermatoglyphics- Finger, palmar
- Colour blindness- Genetics, distribution
- ABO blood group and subtypes – inheritance.
- Bombay blood type gene frequencies.
- MNs system-inheritance, gene frequencies.
- Rh blood group system-Nomenclature.
- Kell and Duffy system-inheritance.
- ABH secretion-inheritance,
- Lewis antigens.
- Blood groups and diseases

### **Unit 4: Haemoglobin- Normal and Variant forms**

- Normal adult Haemoglobin HbA;
- HbA<sub>2</sub>
- Fetal Haemoglobin; and
- HbS

### **Unit 5: Plasma Proteins**

- Heredity and Genetic variation of
- Haptoglobins;
- Transferrins;
- Groups specific components; and
- Immunoglobulins.

## Unit – 6 Reading and Seminar Topics

### References:

- A.M. Winchester. 1985. Genetics. Oxford & IBH Publishing Co. New Delhi
- Arthur Guyton, John E. Hall 2000 Text book of Medical Physiology  
Curl Stern. 1965 Principles of Human Genetics. Euresia Publishing House, New Delhi.
- Gupta P.K. 2003 Elements of Biotechnology Rastogi Publications Meerut.
- Harlt, Daniel L. and Jones, 2001 Analysis of Genes and Genomes. James  
Elizabeth W. & Bertlet Publications
- James H.Mielke, Lyle w. 2005 Human Biological Variation.  
Konigsberg Jones H.  
Relethford
- Lerner K Lec and Lerner 2002. World of Genetics. Gale group Publication.  
Brenda Wilmoth
- Mange and Mange 1997. Human Genetics Rastogi Publications Meerut  
Basic
- Michael H. Crawford \*\*\*\*. Anthropological Genetics: Theory, Methods and Applications.
- Richard Robinson 2003. Genetics. The Macmillan Science Library, Vol. 2.
- Shargel Leon. 2005 Applied Biopharmaceutics and Pharmacokinetics.  
Mc Graw Hill Publications. New York.

## **AN:308 Applied Biological Anthropology (3 credits)**

Aim:

This course provides applied knowledge of anthropology in the field of architecture, ergonomics, kineanthropology and sports. The course shows diverse and integrated nature of anthropological work. The biological anthropological knowledge and methods can be applied for the human welfare.

### **Unit 1: Anthropology for Architecture**

- Sub-human Architecture (nest building behavior of animals and apes),
- Initial shelters- raw material, typology, size and dimensions.
- Shelter and society: hunting gathering pastoral nomadic, settled agriculturist and urban shelters, with reference to Mesolithic, Neolithic and Harappan and tribal settlements. Non domestic and Domestic settlements.
- Settlement Pattern: Geographical, Religious, Cultural and Ecological concepts.

### **Unit 2: Ergonomics**

- Human factor: Human and interaction with products, equipments and furniture. Anthropometry: static and dynamic measurements, ethnic differences, occupational and ecological factors.
- Kineanthropology and Ergonomics, Anthropology in the designing of defense and other equipments.

### **Unit 3: Sports Anthropology**

- Age, sex and population variation in the physiological characteristics of man.
- Human adaptability, Impact of smoking, air, water and sound pollution, alcoholism, drugs and occupational hazards on human health.
- History and development of Sports anthropology.
- Human physique and body composition and its role in sports participation and excellence.
- Physical work capacity and sports performance.
- Methods of studying human physique.

### **References:**

Bhasin V.	1990	Habitat, habitation and Health in the Himalayas, Kamala Raj Enterprises Delhi.
Heath D., Williams D.K	1981	Man at High altitude. Churchill Livingstone, Edinburgh.
Sheldon V.S.	1980	The varieties of human Physique.
Bendix, T	1986	Seated trunk posture at various seat inclinations in Human factor
Tichauer, E.R.	1986	The biomechanical basis of Ergonomics. New York Wiley.

Singh, S.P. and 1989 Kinanthropometry. Anthropology of Sports  
Malhotra P.

## **AN 309: Dissertation Part I (4 Credits )**

**The students will work on master's dissertation under the supervision of assigned faculty. In the dissertation Part I the students will focus the development of research design that will include theoretical perspective ,contextual framework, review of literature, development of tools data collection and 1<sup>st</sup> phased field work at the end of the semester Students will make seminar presentation based on the work done and submit written report.**

# **SEMESTER IV**

## **AN 401: Medical Anthropology: Approaches, Public Health Policies and Programmes (3 Credits)**

### **Course Objectives:**

To familiarize students with approaches in medical anthropology

Introduce concepts in public health

Provide an overview of national and international health policies and Programmes.

### **Unit 1- Medical Anthropology approach**

Culture

Contextualization

Etic and Emic

Cultural Relativism

### **Unit 2- Theoretical perspectives in medical anthropology**

Structural-functional approach

Cognitive-symbolic perspective

Marxist political-economy model

Transactional approach

Critical Anthropology perspective

Cultural Belief model

Explanatory model (EM)

### **Unit 3- Health planning and policies**

Basic concepts in public health planning

Evolution of public health planning in India

National health policies- 1983 and 2002

### **Unit 4- Health care delivery system in India**

- Structure of health care delivery system
- Primary healthcare approach
- Functional organization of the public health system –
  - Primary Health Centres
  - Sub – Centres (SCs)
  - Private health care sector

### **Unit 5- Health and environment**

Pollution and its effects on health

Air, water and noise pollution

Occupational health problems and programmes

### **Unit 6- International health programmes**

World Health Organization and its programmes

Millennium Development Goals- 2000

## Unit 7- Overview of National Health Programmes in India

HIV-AIDS Control Programme

Reproductive and Child Health (RCH phase I and RCH phase II)

National Tuberculosis Control Programme (NTP and RNTP)

National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke

National programmes for control of Cancer, Blindness and deafness

## Unit 8- Recent health initiatives

National Rural Health Mission

Aayush

Health research and bio-ethics

Legislative measures in health sector

## Unit – 9 Reading and Seminar Topics

### Text Books

Chesworth, J.	1996	'The ecology of health', Sage publication, London.
Dheer, D.	1991	'Introduction to health education', Friend publication.
Essac-cutor & Bristol	1979	'A manual of public health and community medicine', John Wright and Sons, Ltd. Great Britain.
Helman, C.G.	2000	'Culture, Health and Illness', 4 <sup>th</sup> Ed. Reed Educational and Publishing Ltd.
Mathur, I.	1995	'Health hazards, gender and society', Rawat publication, Delhi.
National Institute of Health & Family Welfare	1993	'Maternal & child health', New Delhi.
Ministry of Health & Family Welfare	1983	'National Health Policy', New Delhi.
Park & Park	1994	'Textbook of Preventive and Social Medicine', Banarasidas Bahnot, Jabalpur.
Sathe & Sathe	1991	1. "Health Care for All", Popular prakashan, Mumbai.
W.H.O.	1992	'Our planet our health', Geneva.
W.H.O.	1976	'Health hazards from new environmental pollutants', Geneva.
J. P. Gupta, A.K. Sood	2005	Contemporary Public Health- policy, Planning, Management, Apothecaries Foundation, New Delhi.
Michael Merson, Robert E Black, Anne J Mills - Jones and Bartlett Publishers		International Public Health: Diseases, Programs, Systems, and Policies - Jones and Bartlett Publishers
Roger Detels, James Mcewen, Robert Beaglehole, and Heizo Tanaka	2002.	Oxford textbook of Public Health Ed. Oxford University Press (OUP) 4 <sup>th</sup> Edition:
Robert Beaglehole and		Public Health at the Crossroads – Achievements and

**References, Links & Websites:**

1. <http://mohfw.nic.in/>
  - a. <http://mohfw.nic.in/np2002.htm> (National Health Policy - 2002)
  - b. <http://mohfw.nic.in/major1.html> (Major National Schemes & Programmes)
  - c. <http://mohfw.nic.in/dofw%20website/dofw.htm> (Family Welfare Activities)
  - d. <http://mohfw.nic.in/NRHM.htm> (National Rural Health Mission)
  - e. <http://mohfw.nic.in/NRHM/RCH/Index.htm> (Reproductive and Child Health)
    - i. RCH Phase I
    - ii. RCH Phase II
  - f. <http://nvbdc.gov.in/> (National Vector Borne Disease Control Programme)
    - i. <http://nvbdc.gov.in/iec.html>
    - ii. <http://nvbdc.gov.in/malaria-new.html>
    - iii. <http://nvbdc.gov.in/DENGU1.html>
    - iv. <http://nvbdc.gov.in/filariasis-new.html>
    - v. <http://nvbdc.gov.in/kala-new.html>
    - vi. <http://nvbdc.gov.in/je-new.html>
    - vii. <http://nvbdc.gov.in/RightAct.html>
    - viii. <http://nvbdc.gov.in/ums-new.html>
    - ix. <http://nvbdc.gov.in/Doc/drug-policy-08.pdf>
  - g. <http://www.tbcindia.org/>
    - i. <http://www.icmr.nic.in/pinstitute/trc.htm>
    - ii. <http://www.who.int/tb/en/>
    - iii. <http://www.stoptb.org/>
    - iv. <http://www.whoindia.org/EN/Index.htm>
    - v. <http://www.globalfundatm.org/>
    - vi. <http://www.stoptb.org/gdf/>
    - vii. <http://ntiindia.kar.nic.in/>
    - viii. <http://www.worldbank.org/>
    - ix. National Tuberculosis Control Programme (NTP)
      1. <http://www.tbcindia.org/history.asp>
    - x. Revised National Tuberculosis Control Programme (RNTCP)
      1. <http://www.tbcindia.org/documents.asp#>
      2. <http://www.tbcindia.org/perfor.asp>
  - h. [http://mohfw.nic.in/National Leprosy Eradication Programme/index\\_LEP.htm](http://mohfw.nic.in/National_Leprosy_Eradication_Programme/index_LEP.htm)
  - i. <http://www.nacoonline.org/NACO>
    - i. [http://www.usaid.gov/in/about\\_usaid/overview.htm](http://www.usaid.gov/in/about_usaid/overview.htm)
    - ii. [http://www.usaid.gov/in/our\\_work/program\\_areas/health.htm](http://www.usaid.gov/in/our_work/program_areas/health.htm)

- j. <http://www.mohfw.nic.in/NCCP/NCCP%20Main.htm> (National Cancer Control Programme)
- k. <http://mohfw.nic.in/default.htm> (National Programme for Control of Blindness)
- l. <http://www.mohfw.nic.in/Website/Contents%20of%20Website.htm> (National Programme for Prevention and Control of Deafness)
- m. <http://www.mohfw.nic.in/NPDCS.htm> (National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke)
- n. <http://www.mohfw.nic.in/National%20Programme%20for%20Tobacco%20Control.htm>
  - i. <http://www.mohfw.nic.in/INDIAN%20TOBACCO%20CONTROL%20ACT,%202003.pdf>
  - ii. <http://www.mohfw.nic.in/Notification%2015%20March%202008.PDF>
  - iii. <http://www.mohfw.nic.in/Order%20-%20Monitoring%20Committee%20to%20check%20violation%20of%20Section%205%20of%20COTPA,%202003.pdf>
- o. <http://www.mohfw.nic.in/Mental%20Health.pdf>

Journals:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Medical Anthropology</li> <li>2. Anthropology and Medicine</li> <li>3. Human Organisation</li> <li>4. Social Science and Medicine</li> <li>5. Culture, Health &amp; Sexuality</li> <li>6. Studies in Family Planning</li> <li>7. International Family Planning Perspectives</li> <li>8. Reproductive Health Matters</li> <li>9. Journal of Public Health Policy</li> <li>10. Health Policy</li> <li>11. Health Education Research</li> <li>12. Transactions of the Royal Society of Tropical Medicine and Hygiene</li> <li>13. Health Policy &amp; Planning</li> <li>14. Tropical Medicine and International Health</li> <li>15. Lancet</li> <li>16. WHO Bulletin</li> </ul> | <ul style="list-style-type: none"> <li>17. American Journal of Public Health</li> <li>18. BMJ Journals <ul style="list-style-type: none"> <li>a. Journal of Medical Ethics</li> <li>b. Journal Medical Humanities</li> </ul> </li> <li>19. BioMed Central <ul style="list-style-type: none"> <li>a. Malaria Journal</li> <li>b. Journal of the International AIDS Society</li> <li>c. BMC Infectious Diseases</li> </ul> </li> <li>20. AIDS</li> <li>21. AIDS Care</li> <li>22. AIDS Education and Prevention</li> <li>23. AIDS Patient Care &amp; STDs</li> <li>24. Journal of Biosocial Science</li> <li>25. The International Journal of Tuberculosis and Lung Disease</li> <li>26. Tuberculosis</li> <li>27. Indian Journal of Tuberculosis</li> <li>28. Indian Journal of Medical Research</li> <li>29. The National Medical Journal of India</li> </ul> |
|--|---|

## **AN- 402: Complex Societies and Urban Development ( 3 Credits)**

The course introduces various approaches to the study of complex, urban societies, and the process of urbanization, and theoretical contribution of Anthropology.

### **TOPIC UNITS**

#### **Unit 1- Urban Anthropology**

- Historical Perspective
- Contributions of Urban sociology to urban Anthropology
- Foundational concepts of Urban Anthropology
- Theoretical and heuristic implications of urban Anthropology

#### **Unit 2 – Folk – urban Continuum**

- Ideal type analysis
- Folk ideal type : Characteristic of the Folk-Urban Continuum
- Critique of the concept of the folk Urban continuum:
- Peasant society as part society and part Culture
- Primary and Secondary Urbanization

#### **Unit 3 – Anthropology of Urbanization**

- Urbanization and migration
- Culture of Poverty
- Migration and adaptation, adjustment and acculturation
- Urbanization and voluntary association

#### **Unit – 4 Role of cities in Cultural transformations**

- Pre industrial and post industrial cities:
- Orthogenesis and heterogenesis

#### **Unit -5 Theoretical contributions of Urban Anthropology**

- Chicago school of Sociology
- Manchester School of Thoughts
- Concept of scale in Urban Anthropological Studies
- Social network Analysis
- Extended case study methods
- Anthropological approaches: categorical, structural and cultural
- Theoretical development on Urban African Studies

#### **Unit 6 Ethnicity and Pluralism**

- Concept of Ethnicity and ethnic group
- Ethnic identity
- Situational ethnicity
- Ethnic interaction
- Competition for scarce resources and ethnic conflict
- Ethnicity and nation building
- Ethnicity and nation breaking
- Ethnicity and national integration

## Unit – 7 Reading and Seminar Topics

### LIST OF BOOKS

#### Text Books

Barnet H G	1953	‘Innovation: The Basis of Culture Change’ McGraw Hill, New Delhi
Baret F.	1969	Ethnic Groups & Boundaries, George Allen & Unwin, London.
Fox Richard	1977	Urban anthropology, Prentice hall Inc., New York.
Jack, Gibbs (ed.)	1961	‘Urban Research Methods’ D Van Nostrand Company Inc. & Affiliated Press
Nair K S	1978	‘Ethnicity and Urbanization’ Ajantha Publications’ East west Press Pvt. Ltd.
Rao M S and others	1991	‘A Reader in Urban sociology ‘ Orient Longman, New Delhi
Redfield M. P. (ed)	1962	‘ Human Nature and Study of Sociology’ Vol 1 , University of Chicago Press, Chicogo
Robert Redfield	1963	Peasant society and culture: The Little Community, University of Chicago Press.
Uzzel, Douglas J.	1976	‘ Urban Anthropology’ Brown Company Publishers.’

#### Recommended books

Erikson T H	1993	‘Ethnicity and Nationalism’ Pluto Press, London
Danda, Ajitkumar	1991	‘Ethnicity in India’ Inter India publication New Delhi
Fainstein & Campbell	1996	‘Readings in Urban Theory’ Blackwell Publishers, Massachusetts.

Glazor & Moynihan	1970	'Beyond the Melting Pot' The M.I.T. Press , Massachusetts
Goldberg, Theo D	1995	Multiculturalism: A Critical Reader, Blackwell, Oxford
Singer , Milton	1997	' Ethnicity , State University Of New York Press.

**Reference Books**

Baily F G	1996	'Civility Of Indifference' On domesticating Ethnicity' Oxford New delhi
Banks Marcus	1996	Ethnicity: Anthropological Construction, Routledge, London.
Campbell & Faistein	1996	'Readings in Planning Theory' Blackwell publications Massachusetts.
Cherry Gordon (ed.)	1974	Urban planning problems, Leonard Hill
Paul Brass	1991	Ethnicity and Nationalism: Theory and Comparison, Sage, New Delhi.
Pathy ,Jagannath	1988	'Ethnic Minorities in the process of Development' Rawat Publications Jaipur
Ramchandra R	1991	'Urbanization and Urban Systems in India Oxford University Press Del

## **Aim**

- To familiarize students on the fundamentals of population studies and its links with Anthropology
- Provide overview of National and International population policies and programmes.

### **Unit 1- Definition, Scope and, branches**

Relation with Anthropology

### **Unit 2- Demographic Data**

Methods of demographic data collection

Sources of data

Population Census

Population composition

### **Unit 3-World population scenario**

- Countries with :
  - high population growth
  - stable population
  - declining population growth
  - life tables

### **Unit 4- Factors affecting demographic profile**

Fertility

Mortality

Migration

Marriage

### **Unit 5- Growth of Indian population**

Population projections

National Population policy of India

Population control measures

### **Unit 6- Population aging**

Issues and problems in developed and developing countries

Policies for older persons in developed and developing countries

### **Unit – 7 Reading and Seminar Topics**

## **Suggested texts**

Asha Bhende and Tara Kanitkar,	1996	Principles of population Studies: Himalaya Pub, Houses, Mumbai,
John Weeks	1994	Population: Wordsworth pub., California, USA,
S.N.Singh,M.K.Premi,	1989.	Population Transition In India B.R.Publishing Corporation, Delhi,:
P.S.Bhatia,		
: P.B. Desai	1987.	Population in the context of India's development, UGC – UNFPA project, Ahmedabad,
Peter Cox,	1989.	Demography: Cambridge University Press, U.K.
K.B. Pathak, F. Ram,	1992	Techniques of Demographic Analysis: Houses, Himalaya Publishing Mumbai,
Foundation for Research in Health S, Mumbai,	1990	Health Monitor:
K. Srinivasan,	1998	Basic Demographic Techniques and Applications Sage Publications,
International Institute for Population Sciences, Mumbai.		National Family Health Survey – 1, 2 and 3
United Nations Population division, Department of Economic and Social Affairs		World Population Prospects,

## **AN 404: TRIBAL AND RURAL DEVELOPMENT ( 3 Credits)**

### **Aim:**

The course focus on the two most important thrust areas of development: the development of tribal and rural societies, in the Indian context.

### **SYLLABUS**

#### **Unit 1: The Weaker Sections of Indian Population**

- Concept of scheduled groups and scheduled areas;
- Population and distribution of scheduled tribes, scheduled castes and scheduled (V & VI) area in India;
- Distinctive characteristics of tribal and rural settings.

#### **Unit 2: Tribal Problems, Movements and revolts**

- Distinctive problems in the tribal and rural area related to
  - Forest and forest laws,
  - Shifting cultivation,
  - Land alienation,
  - Housing and infrastructural facilities,
  - Health and hygiene,
  - Indebtedness,
  - Bonded labour,
  - Education and employment, etc.
- Historical overview of tribal revolts and movements in India, Tribal leadership.

#### **Unit 3: Approaches to Tribal Development**

- Mughal and British approaches;
- Assimilation, total integration and museum-models of tribal development;
- Post-independence National Policy on tribal development;
- Constitutional safeguards and special provisions;

#### **Unit 4: Administration of Tribal Development**

- Evolution of tribal development programmes in India
- Five years planning and tribal sub-plan
- Special programmes – Large Scale Agricultural Multipurpose Societies (LAMPS), Integrated Tribal Development Project (ITDP), Community Development Project (CDP), Tribal Youth Self-Employment Scheme (TRYSEM). etc.
- Institutional and administrative arrangements for tribal development at the level of Block, District, State and Union; Tribal Research and Training Institutes,
- Monitoring and review of tribal development – various review committees and commissions appointed and their recommendations.

### **Unit 5: Sectors of Tribal and Rural Development**

- Forestry, agriculture, horticulture, animal husbandry and fisheries;
- Education, awareness and employment assurance;
- Entrepreneurship development and self employment;
- Infrastructure and public amenities;
- Subsidies , loans and finances;
- Public health and hygiene,
- Capacity building and people's empowerment;
- Conservation of environmental and ecological balance.

### **Unit 6: Panchayat Raj Act and the Self Rule**

- Concept and theme of self rule;
- Gram Sabha as an instrument of people's empowerment and self rule;
- Salient features of Panchayat Raj Act;
- Panchayat Raj and rural development;
- Issues and debates related to Panchayat Raj.

### **Unit 7: Development Issues**

- Developmental displacement – physical , socio-cultural and psychological impacts of displacement; rehabilitation of the displaced and the related issues;
- Identity crisis – development and loss of identity, ethnic violence;
- Environmental sustainability – development and sustainability of resource utilization pattern;
- Social equity – problem of equitable distribution of resources and socially justifiable development.

### **Unit – 8 Reading and Seminar Topics**

#### **LIST OF BOOKS**

#### **Text Books**

Deogaonkar, S.	1994	'Tribal Administration and Development', Concept publication.
Haimondorf, C.	1985	'Tribes of India: Struggle for Survival', Oxford University Press, New Delhi.
Long, Norman	1980	'An introduction to the sociology of rural development', Westview press, Boulder, Colorado.
Patil & Jagatdeb	1991	'Tribal demography in India', Ashish publishing house, New Delhi.
Singh, K.S.	1972	'Tribal society in India;', Motilal Banarasidas, New Delhi.
Verma, M.M.	1996	'Tribal development in India: Programmes and perspective', Concept publishing.

#### **Recommended Books**

Behera, M.C.	1994	'Planning and socio-economic development of tribals',
--------------	------	---

Choudhary, M.	1997	Commonwealth publishers.
Khare, P.K.	1991	'Tribes of ancient India', Indian museum, Calcutta.
		'Social change of Indian Tribes: Impact of planning and economic development', Deep & Deep.
Purushottham, P.	1993	'Development administration: A rural perspective', Kanishka publication.
Sharma, B.K.	1996	'Tribal revolts', Pointer.
Srivastava, A.K.	1986	'Integrated rural development programme in India: policy and administration', Deep and Deep publications.

### **Reference Books**

Govt. of India	1973	'The tribal people of India', New Delhi.
Munda, G.S.	2000	'Caste dynamics and tribal societies', Dominant publishers, New Delhi.
Sahay, K.N.	1998	'Dynamics and dimensions of tribal societies', Commonwealth publications.
Sahu, C.	1998	'Primitive tribes of India', Sarup & Sons.

## **AN-405: BIO-SOCIAL GERONTOLOGY ( 3 Credits)**

### **Aim**

Rapidly expanding numbers of older persons around the world represent a social phenomenon without historical precedent. To date, population ageing has been a prominent issue largely in the industrialized nations of Europe, Asia, and North America. In at least 50 such countries, 15 percent or more of the entire population is age 60 or over, and these nations have experienced intense public debate over issues that are directly linked to the changing age structure of their populations.

What is not as widely appreciated is the fact that population ageing is occurring in less developed countries like India as well, and that older populations in most less developed countries are growing much more rapidly than those in more developed nations. Our over 60 million numbers is expected to almost treble in next 25 years.

Keeping in mind the changing times and changing needs, this course on Bio-social Gerontology has been introduced to expose the students to the basics of gerontology-the demographic, biological as well as socio-cultural dimensions of ageing and their long term implications. The course ends with a note on Quality Ageing.

## **SYLLABUS**

### **Unit 1: Ageing in Twentieth Century**

- Global Perspective;
- Situation in India;
- Demography of Ageing;
- Demographic changes in 21<sup>st</sup> century and Longevity.

### **Unit 2: The process of Ageing**

- Biological Ageing;
- Psychological changes;
- Socio-cultural Dimensions of Ageing

### **Unit 3: Theories of Biological Ageing**

- Programmed Theory,
- Wear & Tear Theory,
- Somatic Mutation Theory,
- Toxic accumulation,
- Auto-immune Theory,
- Free Radical Theory,
- Cell membrane Theory,
- Telomere theory;
- Evolution & Ageing

### **Unit 4: Ageing in Cultural Context**

- The Diverse meanings of Age & Ageing,

- Sex & Gender in Ageing Society,
- Elderly females in India,
- Ageing and Widowhood.

**Unit 5: Aged in the family**

- Changing status and role;
- Family Support: Ageing in Urban India;
- Ageing in a Rural(& Tribal) Society;
- Institutionalized ageism and intergeneration relation/
- Family care verses Senior Citizen’s Homes

**Unit 6: Ageing and Health**

- Organic and psychosomatic symptoms of Menopause;
- Chronic Diseases of Old Age;
- Minor ailments
- Healthy Ageing;
- Life-style and Ageing;
- Ageing & Nutrition.

**Unit7: Welfare of the Aged**

- Rights and Responsibilities of the aged;
- Charter of Rights of the Aged.

**PRACTICAL**

**Measuring Biological age-changes:**

- Linear body changes, Transverse changes,
- Body Fat Changes, Body Mass Index, Estimating Total Body Fat,
- Percent Body Fat, Fat Mass, Fat Mass Index, Muscle Mass.

**Assessment of Physical Health Status of Elderly**

- Measuring Blood pressure, Pulse, Muscle strength, Lung capacity etc.

**Psychological Measurements of Ageing**

- Evaluating Mental Health (Cognitive tests, Memory Tests etc.)

**Unit – 8 Reading and Seminar Topics**

**LIST OF BOOKS**

**Text Books**

Bond, Jam; Peter Coleman	1996	‘Ageing in Society - An Introduction to Social Gerontology’ Sage Publication, New Delhi.
Shiela Peace		
Dandekar, K	1996	‘The Elderly in India’ Sage Publications India.

- Pvt.Ltd.
- Gubrium, Jaber F.; 1994 'Qualitative Methods in Aging Research', Sage Publication, New Delhi.
- Sankar, Andrea;
- Ulijaszcz Stanley J.; 1998 'The Cambridge Encyclopaedia of Human Growth And Development', Cambridge University Press.
- Johnston, Francis E. ;
- Preece, Micheal A.;
- Rao, Venkoba A. 1987 'National Task Force on Problems of The Aged Seeking Psychiatric Help', Indian Council of Medical Research, New Delhi.
- Weiner, J.S. and Lourie, J.A. 1969 'Human Biology : A Guide to Field Methods', IBP Hand Book, Oxford : Blackwell Scientific Publications.
- World Health Organization 1995 'Physical Status: The use and Interpretation of Anthropometry', WHO Technical Report Series 854 Geneva.
- Recommended Books**
- Bagchi Kalyan 1997 'Elderly Females In India', Society for Gerontological Research, New Delhi and Helpage India, New India.
- Bhatia, H. S. 1983 'Ageing and Society', Arya's book Centre, Udaipur-313001 (India).
- Gokhale, S.D.; 1999 'Ageing In India', Somaiya Publications Private Limited, Mumbai-400014
- Ramamurti, P. V.; Pandit, Nirmala; Pendase, Balwant.
- Muttagi P. K. 1997 'Ageing Issues and Old Age Care', Classical Publishing Company, New Delhi.
- Shrivastava, R.C. 1994 'The Problem of the Old Age', Classical Publishing
- United Nations 1994 Ageing and the Family', ST/ESA/SER.R/124 United Nations, New York.
- Myerhoff, Barbara 1978 'Aging and the Aged in Other Cultures: An Anthropological Perspective', In The Anthropology of Health. E. Bauwens, ed. Pp. 151-166 St. Louis: C.V. Mosby.
- National Sample Survey 1983 ( July-October ), Department of Statistics, Organization (*Sarvekshana*), Ministry of Planning, Government of India. 7 (1-2).
- National Sample Survey 1991 (October-December), Department of Statistics, Organization (*Sarvekshana*), Ministry of Planning, Government of India. 15(2).
- Straurt- Hamilton Ian 1995 'The Psychology of Ageing', Jessica Kinglsey Publishers, London and Bristol, Pennsylvania.
- Reference Books**
- Craig, Grace J. 1996 'Human Development' Prentice Hall, New Jerco.
- Pati, R. N. & Jena, B. 1989 'Aged in India', Ashish Publishing House, New Delhi.
- Chakravarty, Indirani( ed ) 1997 'Life in Twilight Years', Kwality Book Company, Calcutta

- Krishnaraj, M; R. Sudarshan and A. Shariff Rao, S. (eds) 1998 'Population and Development',. Oxford University Press, New Delhi.
- Gupta, Monica Das; Lincoln C. Chen and T.N. Krishnan (eds) 1995 'Women's Health in India: Risk and Vulnerability', Oxford University Press Bombay.
- Clark, Margaret 1967 'The Anthropology of Aging a New Area for Studies of Culture and Personality', Gerontologist 7:55-64.
- Martin, Linda, G 1988 'The aging of Asia', Journal of Gerontology : Social Sciences, 43 ( 4 ) : S 99-113.
- Cross Cultural Studies In Biological Ageing 1982 Social Sc. Medicine 14 (2).
- Ageing in Cultural Context 1992 'A Symposium 1992' Social Sc. Medicine 32 (12).
- Laragh JH and BM Brenner (eds.) 1990 'Hypertension: Pathophysiology, Diagnosis, and Management', New York: Revan Press.
- World Health Organization 1997 World Health Report, Geneva.
- World Health Organization 1998 World Health Report, Geneva.

## **AN 406: Growth and Nutrition ( 3 Credits)**

### **Aim :**

The course provides basic understanding of the concepts involved in the patterns of child growth and development; and approaches, methods and techniques involved in the study of the child growth. The course provides basic knowledge about nutrition and promotes awareness about malnutrition, under-nutrition, over-nutrition, nutritional deficiencies, birth weight variations and other problems related to growth development and nutrition. Information about various government nutrition programmes in India will also be given.

### **At the end of the course the students are expected to:**

- Understand the patterns of child growth
- Understand the Anthropological approach to nutrition
- Discuss the role of various government nutrition programmes in India.

## **SYLLABUS**

### **Unit 1: Human Growth and Development**

- Definition, history of growth studies, Difference between Growth and Development.
- Patterns of Growth: Infancy, Childhood, Juvenile, adolescence, Adulthood and senility,
- Human Growth curves;
- Basic methods of growth studies: Cross sectional, longitudinal and mixed longitudinal.

### **Unit 2: Factors Influencing Growth**

- Genetics of growth;
- Heredity and environment;
- Concept of age: chronological, skeletal, dental and morphological;
- Changing human growth patterns, secular trend;
- Effects of agricultural intensification, industrialization, modernization, migration and urbanization.

### **Unit 3: Nutrition**

- Basic terms and concepts: nutrition, nutrients, malnutrition, under nutrition, over-nutrition, obesity;
- Types, functions and uses of nutrients.
- Various Governmental programmes: ANP, ICDS, SNP, Mid-day Meal Programme, Vitamin A Prophylaxis Programme, Goiter Control Programme;
- Deficiency: nicotinic acid deficiency, vitamin C deficiency, vitamin D deficiency.

### **Unit 4: Special Problems Related to Growth and Nutrition.**

- Groups at risk: infants, pregnant and lactating mothers,
- Birth Weight Variations- Low Birth Weight;
- Foetal origin of Chronic Diseases in old age

### **Unit 5: Abnormal Growth.**

- Abnormal growth;
- Growth failure (screening);
- Surveillance during famine and war
- Infections in childhood and effects on growth eg. diarrhoea, dysentery, dehydration, amoebiasis, respiratory infection, pneumonia, whooping cough, measles, chicken pox, worm infestation, skin infections, fevers, Tb and AIDS.

### **Unit 6: Determinants of Nutritional Levels, and Nutrition Education**

- Anthropometric, clinical and biochemical indicators of nutrition; Health, diet and Nutrition; (Theory and Practical aspects)
- Standard reference values of growth and nutritional status;
- Health and nutrition education- at household and community level; and
- Nutrition post-adulthood.

## Unit – 7 Reading and Seminar Topics

### LIST OF BOOKS

Gopaldas & Sheshadri	1984	Nutrition Monitoring and Assessment, New Delhi, Oxford University Press.
Jelliffe, D.B.	1966	The Assessment of the Nutritional status of the community, WHO Geneva
Jelliffe, D.B.	1986	Community Nutritional Assessment with special Reference to less technically developed countries, Oxford University Press.
Park & Park	1994	Text book of Preventive and Social Medicine, Messers Banasidas Bhanot Publishers, Jabalpur.
Shanti, Ghosh	1997	Nutrition and Child Care- A Practical Guide, Jaypee Brothers, Medical Publishers P. Ltd. New Delhi.
Stanley, J. & others	1998	The Cambridge Encyclopedia of Human Growth and Development, Cambridge University Press.
Tanner, J.M.	1962	Growth at Adolescence, Blackwell Scientific Publication, Oxford.
Tanner, J.M.	1978	Foetus into Man, Open Books, London.
Weiner & Lourie	1969	Human Biology – A guide to Field Methods, IBP handbook No. 9 Blackwell Scientific Publications, Oxford and Edinburgh.
WHO	1995	Technical Report Series 854, Physical status, the Use and Interpretation of Anthropometry, Geneva.
Williams S.R.	1974	Essentials of Nutrition and Diet Therap, The C.V. Mosby Co. USA
		Diet, Nutrition and The Prevention of Chronic Diseases Report of a WHO Study Group. Geneva
Ronald S. Illingworth	1992.	The Normal Child Some problems of the early years and their treatment Churchill Livingstone, New York (10 <sup>th</sup> ed.)
Jane B. Morgan and John W.T. Dickerson.	2003.	Nutrition in Early Life. John Wiley & Sons England.

## **AN-407: Medical Genetics (3 Credits)**

### **Aim:**

The course highlights the medical and social aspects of inherited and genetic diseases, defects and disorders. This knowledge with further input from anthropological theories, methods and techniques, would become an effective tool in the hands of Medical Anthropologists.

### **Unit 1: Medical Genetics: Introduction**

- Relation to medicine, human genetics, and medical anthropology
- Genetic diseases and disabilities
- Society's attitude towards illness, disease and disability

### **Unit 2: Methods in Human Genetic Testing**

- Importance and techniques of pedigree construction and pedigree analysis
- Karyotyping and medical applications
- Other diagnostic testing methods
- DNA sequencing, PCR and Microarray based diagnostic tests
- Pre-conception screening for genetic diseases
- Ante-natal and neo-natal screening for genetic diseases
- Recent advances in medical genetics and genetic engineering
  - Cloning: its purpose and Implications
  - Stem Cell Research
  - Human Genome project

### **Units 3: Genetic Diseases**

- Identification, classification and description of genetic diseases.
- Disorder, syndromes, birth defects and other anomalies
- Inherited diseases
  - Autosomal dominant and recessive diseases
  - X linked dominant and recessive diseases
  - Y-linked diseases
- Major syndromes and other Genetic diseases
  - Chromosome non-disjunction, translocation, deletion and duplications
  - Down's, Klienfelter's and Turner's syndromes
  - Trisomy 18
  - Cat's Cry Syndrome
- Inborn Errors of metabolism
  - Tay-Sachs disease
  - Phenyleketonuria (PKU)
  - Albinism
  - G6PD
- Genetics of complex diseases

- Cancer
- Diabetes,
- Cardio-vascular diseases,
- Obesity and others
- Role of teratogens, infections, diseases, medicines and vitamins in causing birth defects

### **Unit 5: Genetic counselling**

- Biomedicine and human rights
- Ethical duties of health professionals
- Epidemiology of genetic diseases in India
- Consent and confidentiality; respect for patient's rights
- Regulations for genetic tests, monitoring and guidance;
- Genetic counselling for would be couples
- Family counselling, sharing information with patients and family members
- Controversy regarding the use of prenatal tests
- Genetic clinics and genetic registry
- Essential qualities of a genetic counsellor

### **Unit – 6 Reading and Seminar Topics**

#### **List of Books**

##### **Text Books**

Connor, J.M. & Ferguson Smith, M.A		Essential Medical Genetics” Blackwell Scientific Publications, Ferguson Smith, M.A. Oxford.
“Emery, A.E.H	1983	Elements of Medical Genetics’, Churchill Living stone, Edinburg.
Thompson, J.S.	1986	Genetics in Medicine’, W.B. Saunders Co., Toronto
British Medical	1998	‘Human Genetics : Choices and Responsibility’, Association Oxford University press, N.Y.
Harper, P.S.	1984 “	Practical Genetic Counseling’, Wright and Littleton, Bristol
Kourilsky	1987	Genetics : The Thread of Life’, Wiley Eastern Ltd., Delhi
Morton, N.E.	1982	‘Outline of Genetic Epidemeology; Wright and Littleton, Bristol.

Websites:

<http://www.ncbi.nlm.nih.gov/>

## **AN 408: Dissertation (4 Credits)**

**In Continuation of dissertation part I the students will undertake extensive field work for data collection, carry out data analysis and prepare final dissertation in the part II of the dissertation. At the end of semester each student will make seminar presentation based on the findings and submit final dissertation report.**