

Syllabus and Schema of Examination

for
B.A/B.Sc. (Honours) Anthropology

Submitted

To



Berhampur University, Bhanja Bihar
Berhampur - 760007
Odisha

Under

Choice Based Credit System (CBCS)
(Applicable from the Academic Session 2016-17 onwards)

**COURSE STRUCTURE OF CHOICE BASED CREDIT SYSTEM SYLLABUS FOR + 3
DEGREE IN B.A/B. Sc ANTHROPOLOGY (HONS) FOR BERHAMPUR
UNIVERSITY, ODISHA**

Core Course (CC)-14 papers of 6 credits each.

Discipline Specific Elective (DSE) - 04 (3 theory papers + project) of 6 credits.

Generic Elective (GE): 4 papers of 6 credits each (From other two Disciplines - A & B)

Ability Enhancement (AE): 2 papers of 2 credits.

Skill Enhancement Course (SEC): 2 papers of 2 credits.

Total Papers - (4+4+5+5+4+4) = 26 Total Marks: 2400

Total Credit Points: 140 (In all Six semesters)

S.No.	Core Paper	Theory	Practical
C1.	Introduction to Biological Anthropology	√	√
C2.	Introduction to Socio-cultural Anthropology	√	√
C3.	Archaeological Anthropology	√	√
C4.	Fundamentals of Human Origin & Evolution	√	√
C5.	Tribes and Peasants in India	√	√
C6.	Human Ecology	√	√
C7.	Biological Diversity in Human Populations	√	√
C8.	Theories of Culture and Society	√	√
C9.	Human Growth and Development	√	√
C10.	Research Methods	√	√
C11.	Prehistoric Archaeology of India	√	√
C12.	Anthropology in Practice	√	√
C13.	Forensic Anthropology	√	√
C14.	Anthropology of India	√	√

S.No.	Elective courses	Theory	Practical
DSE1.	Physiological Anthropology	√	√
DSE2.	Sports and Nutritional Anthropology	√	√
DSE3.	Human Genetics	√	√
DSE4.	Neuro Anthropology	√	√
DSE5.	Forensic Dermatoglyphics	√	√
DSE6.	Paleoanthropology	√	√
DSE7.	Anthropology of Religion, Politics and	√	√
DSE8.	Tribal Cultures of India	√	√
DSE9.	Human Population Genetics	√	√
DSE10.	Visual Anthropology	√	√
DSE11.	Fashion Anthropology	√	√
DSE12.	Demographic Anthropology	√	√
DSE13.	Urban Anthropology	√	√
DSE14.	Anthropology of Health	√	√
DSE15.	Linguistic Anthropology	√	√

Note: Student will write dissertation on the basis of 20 days Field Work in the nearby locality on any branch of Anthropology in 6th Semester. She/He will be supervised by one Teacher/ teachers.

Generic Elective (GE)

For B.Sc. in Anthropology: Chemistry, Botany, Zoology, Geology, Geography, Bio-Technology, Environmental Science, Psychology, Statistics, Marine Science, BCA

For B.A. in Anthropology: History, Political Science, Economics, Psychology, Geography, Sociology, Home Science, Sanskrit, Odia, Philosophy, BBA and BBA (Health Care management), Tourism Administration

Ability enhancement Elective (skill based) (SEC)

SEC1. Public Health and Epidemiology SEC 3. Media Anthropology
SEC 2. Business and Corporate Anthropology SEC 4. Tourism Anthropology
SEC 5. Museology and Cultural Resource Management

CORE PAPRES Credits: Papers X (Theory +Practical)

C 1. Introduction to Biological Anthropology

Credit- 4

Unit I: History and development of understanding human variation and evolutionary thought; Theories of evolution; Human variation and evolution in ancient times pre-19th and post-19th Century; Theories of evolution. Lamarckism, Neo Lamarckism, Darwinism, Synthetic theory, Mutation and Neo-Mutation theory.

Unit II: History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines; Difference in the approaches of modern and traditional Biological Anthropology, with emphasis on human evolution.

Unit III: Non human primates in relation to human evolution Classification and characteristics of living primates; Comparative anatomy and behaviour of human and non-human primates; Significance of non-human primate study in Biological Anthropology.

Unit IV: Structure and function of an animal cell; cell theory and cell division. Essentials of Genetics; Landmarks in the history of genetics, principles in human genetics Mendel's Laws of inheritance and its application to man; Concept of race & UNESCO Statement on Race; A comparative account of various races of the world.

Practical

Credit-2

Somatometry

- | | |
|--------------------------------|---------------------------------------|
| 1. Maximum head length | 9. Physiognomic facial height |
| 2. Maximum head breadth | 10. Morphological facial height |
| 3. Minimum frontal breadth | 11. Physiognomic upper facial height |
| 4. Maximum bizygomatic breadth | 12. Morphological upper facial height |
| 5. Bigonial breadth | 13. Head circumference |
| 6. Nasal height | 14. Stature |
| 7. Nasal length | 15. Sitting height |
| 8. Nasal breadth | 16. Body weight |

Somatoscopy

- | | | | |
|--------------|--------------|----------------|-------------|
| 1. Head form | 2. Hair form | 3. Facial form | 4. Eye form |
|--------------|--------------|----------------|-------------|

5. Nose form

6. Hair colour

7. Eye colour

8. Skin colour

Suggested Readings

1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology Wadsworth Publ., USA
2. Kroeber A. L. (1948). Anthropology. Oxford & IBH Publishing Co., New Delhi.
3. Stanford C., Allen J.S. and Anton S.C. (2010). Exploring Biological Anthropology. The Essentials. Prentice Hall Publ, USA.
4. Statement on Race: Annotated Elaboration and Exposition of the Four Statements on Race (1972). Issued by UNESCO. Oxford University Press.

C 2. Introduction to Socio-cultural Anthropology

Credit- 4

Unit I: Anthropological perspective and orientation; Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other disciplines.

Unit II: Concepts of society and culture; status and role; groups and institution, social stratification, and civil society.

Unit III: Social organization; social structure; social function; social system.

Unit IV: Theory and practice of ethnographic fieldwork; survey method; comparative and historical Methods.

Practical

Credit- 2

Methods and Techniques of Social Anthropology: The practical will include the following techniques and methods in collection of data in Social Anthropology.

1. Observation
2. Interview
3. Questionnaire and Schedule
4. Case study
5. Life history

Suggested Readings

1. Beattie J. (1964). Other Cultures. London: Cohen & West Limited.
2. Bernard H.R. (1940). Research Methods in Cultural Anthropology. Newbury Park: Sage Publications.
3. Davis K. (1981). *Human Society*. New Delhi: Surjeet Publications.
4. Delaney C. (2004). 'Orientation and disorientation' In *Investigating Culture: An Experiential Introduction to Anthropology*. Wiley-Blackwell.
5. Ember C. R. et al. (2011). *Anthropology*. New Delhi: Dorling Kindersley.
6. Ferraro G. and Andreatta S. (2008). In *Cultural Anthropology: An Applied Perspective*. Belmont: Wadsworth.
7. Haviland, Prins, Walrath, McBride (2007). Introduction to Anthropology. Cengage Learning India Pvt. Ltd., New Delhi
8. Haviland, Prins, Walrath, McBride (2008). Cultural Anthropology. Cengage Learning India Pvt. Ltd., New Delhi
9. Karen O'reilly. (2012). 'Practical Issues in Interviewing' *Ethnographic Methods*. Abingdon: Routledge
10. Lang G. (1956). 'Concept of Status and Role in Anthropology: Their Definitions and

Use. *The American Catholic Sociological Review*.17(3): 206-218

11. O'reilly K. (2012). *Ethnographic Methods*. Abingdon: Routledge.

12. Parsons T. (1968). *The Structure of Social Action*. New York: Free Press

13. Rapport N. and Overing J. (2004). *Key Concepts in Social and Cultural Anthropology*. London: Routledge.

13. Royal Anthropological Institute of Great Britain and Ireland (1971). *'Methods' In Notes and Queries on Anthropology*. London: Routledge & Kegan Paul Ltd.

C3. Archaeological Anthropology

Credit- 4

Unit I: Introduction, Definition and scope of archaeological anthropology; Relation with other disciplines; Methods of studying archaeological anthropology.

Unit II: Methods of Estimation of Time and Reconstruction of the Past; Absolute dating methods: Radiocarbon¹⁴ dating (C¹⁴), Potassium-Argon, Fission Track Dating; Relative dating methods: Stratigraphy, Palaeontology, Palynology.

Unit III: Geochronology of Pleistocene Epoch; Glacial and Interglacial; Pluviation and Inter Pluviation; Different types of geoclimatic events.

Unit IV: Understanding Culture; Technique of tool manufacture and estimation of their relative efficiency; Classification of tools: primary and combination fabrication techniques; Earliest evidence of culture in the world: Konso, Olorgesaille, Olduvai Gorge Pirro Nord, Damanisi, Attirampakkam, Isampur, Kuliana.

Practical

Credit- 2

Typo-technological Analysis of Prehistoric Tools: Identification, Interpretation and Drawings of the tool Types

1. Core Tool Types
2. Flake Tool Types
3. Blade Tool Types
4. Microlithic Tool Type
5. Neolithic Tool Type

Suggested Readings

1. Allchin and Allchin (1993). *The Rise of Civilization of India and Pakistan*. Cambridge University Press
2. Bhattacharya D.K. (1978). *Emergence of Culture in Europe*, Delhi, B.R. Publication.
3. Bhattacharya D.K. (1979). *Old Stone Age Tools and Techniques*. Calcutta, K.P. Bagchi Company
4. Bhattacharya D.K. (1996). *Palaeolithic Europe*. Netherlands, Humanities Press.
5. Champion et al. (1984). *Prehistoric Europe*. New York, Academic Press.
6. Fagan B.M. (1983). *People of Earth: An Introduction*. Boston, Little, Brown & Company.
7. Phillipson D. W. (2005). *African Archaeology*. Cambridge, Cambridge University Press.
8. Sankalia H.D. (1964). *Stone Age Tools*. Poona Deccan College

C 4. Fundamentals of Human Origin & Evolution

Credit- 4

Unit-I: Primate origins and radiation with special reference to Miocene hominoids: Ramapithecus, distribution, features and their phylogenetic relationships.

Unit-II: Australopithecines: distribution, features and their phylogenetic relationships. Appearance of genus Homo (Homo habilis) and related finds. Homo erectus from Asia,

Unit IV: Ethnicity Issues: Tribal and peasant, movements; Identity issues.

Practical

Credit- 2

Reading of Ethnography: Students are required to read and analyze any two of the ethnographies (as listed below) and prepare a report based upon it. The report should clearly link up the study with the concept of tribe and peasantry and delineate clearly the concept used in the text.

1. Research questions/objectives of the study and their relevance.
2. Theoretical schema.
3. Methods and techniques used in the study.
4. Key findings and their significance in the context of the objectives of the study.
5. Critical analysis of the finding on the basis of contemporary available resources.

List of Ethnographies:

- Walker A. (1986). *The Todas*. Delhi : Hindustan Publishing Corporation Verrier Elwin (1992). *The Muria and their Ghotul*. USA: Oxford University Press.
- Malinowski M. (1922). *Argonauts of the Western Pacific*. London: Routledge and Kegan Paul Ltd.
- Furer-Haimendorf C.V. (1939). *The Naked Nagas*. London: Methuen and Co.
- Evans-Pritchard E.E. (1940). *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People*. Oxford : Clarendon Press.
- Majumdar D. N. (1950). *Affairs of tribes*. Lucknow: Universal Publishers Ltd.
- Dube S.C. (1955). *Indian Village*. London: Routledge and Kegan Paul Ltd.
- Berreman G.D. (1963). *Hindus of the Himalayas*. Berkeley: California University Press.

Suggested Readings

1. Gupta D. (1991). *Social Stratification*. Oxford University Press: Delhi.
2. Madan V. (2002). *The Village in India*. Oxford University Press: Delhi.
3. Nathan D. (1998). *Tribe-Caste Question*. Simla: IAS.
4. National Tribal Policy (draft). (2006). Ministry of Tribal Affairs. Government of India.
5. Patnaik S.M. (1996). *Displacement, Rehabilitation and Social change*. Inter India Publication, Delhi.
6. Shah G. (2002). *Social Movement and the State*. Delhi: Sage.
7. Shanin T. (1987). *Peasants and Peasantry*. New York, Blackwell.
8. Vidyarthi L.P. and Rai B.K. (1985) *Tribal Culture in India*, New Delhi, Concept Publishing Company.
9. Wolf E. (1966). *Peasants*. NJ, Prentice Hall.

C 6. Human Ecology
Credit- 4

Theory

Unit 1: Concepts in Ecology: Definition, ecosensitivity adaptation, acclimation, acclimatization, biotic and abiotic component.

Unit II: Methods of studying human ecology. Adaptation to various ecological stresses: heat, cold and high altitude; Ecological rules and their applicability to human populations.

Unit III: Culture as a tool of adaptation; Various modes of human adaptation in pre-state societies; (i) Hunting and food gathering (ii) Pastoralism and (iii) Shifting

cultivation and Agriculture and peasantry.

Unit VI: Ecological themes of state formation: i. Neolithic revolution, ii. Hydraulic Civilization, Impact of urbanization and industrialization on Man.

Practical

Credit- 2

Biological Dimensions

Size and Shape Measurements

1. Stature
2. Sitting Height
3. Body Weight
4. Total Upper Extremity Length
5. Total Lower Extremity Length
6. Nasal Breadth
7. Nasal Height

Size and Shape Indices (Any two)

1. Body Mass Index
2. Ponderal Index
3. Relative Sitting Height
4. Relative Upper Extremity Length
5. Relative Total Lower Extremity Length
6. Nasal Index

Cultural Dimensions

1. Make a research design pertaining to any environmental problem and do a project based on it.

Suggested Reading

1. Human ecology: biocultural adaptation in human communities. (2006) Schutkowski, H. Berlin. Springer Verlag.
2. Human ecology and cognitive style: comparative studies in cultural and physical adaptation. (1976).Berry, J.B. New York: John Wiley.
3. Human ecology. (1964) Stapledon. Faber & Faber.
4. Studies in Human Ecology. (1961) Theodorson, G.A. Row, Peterson & Company Elmsford, New York.
5. Human ecology: (1973) Problems and Solutions. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress. W.H. Freeman & Company, San Francisco.
6. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
7. Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
8. Symposium on Man the Hunter, Richard B. Lee, and Irven DeVore. 1969. Man the hunter. Chicago: Aldine Pub. Co.
9. Dave Deeksha & S.S. Katewa (2012). Text Book of Environmental Studies. Cengage Learning India Pvt. Ltd., Delhi
10. Eugene P. Odum and Gary W. Barrett (2004). Fundamentals of Ecology. Cengage Learning; 5 edition.

C 7. Biological Diversity in Human Populations

Theory

Credit- 4

Unit I: Concept of Biological Variability; Race, Hardy-Weinberg Law; Sources of Genetic Variation; Structuring Genetic Variation; Interpretation of Human Variation, Genetic Polymorphism (Serological, Biochemical and DNA Markers).

Unit II: Role of Bio-cultural Factors: Human Adaptability Cultural Biology; Bio-cultural factors influencing the diseases and nutritional status; Evolution of Human diet, biological perspectives of ageing process among different populations.

Unit III: Demographic Perspective Demographic Anthropology; Sources of Demographic Data, Demographic Processes, Demographic profile of Indian populations and its growth structure; Inbreeding and Consanguinity – Biological consequences of inbreeding, frequency of inbreeding in world populations; Methods of counselling.

Unit IV: Genetic diversity among Indian Population A critical appraisal of contribution of Risley, Guha, Rickstett and Sarkar towards understanding ethnic elements in the Indian populations.

Practical (Any Two)

Credit- 2

1. Craniometric Measurements (Skull & Mandible)
2. Determination of B, O; and Rh blood groups of ten subjects.
3. Analysis and interpretation of finger ball pattern types, palmar main lines and pattern index; Finger print classification and development of chance prints and statistical treatment of the data collected (Ten Subjects)
4. Collection of demographic data from secondary sources.

Suggested readings:

1. Baker P.T. and J.S. Weiner (ed.) (1996) *The Biology of Human Adaptability*. Oxford & New York, Oxford University Press.
2. Bhende A. and T. Kantikar (2006) *Principles of Population Studies*. Himalayan Publishing House, Mumbai
3. Bogin B. (1999). *Pattern of Human Growth*. 2nd edition CUP.
4. Cameron Noel and Barry Bogin (2012) *Human Growth and development*. Second edition, Academic Press Elsevier.
5. Eckhardt R.B.(1979) *The Study of Human Evolution*. McGrand Hill Book Company, USA.
6. Frisancho R. (1993) *Human Adaptation and Accommodation*. University of Michigan press
7. Harrison G.A., Tanner, J.M., Pilbeam, D.R., Baker, P.T. (1988) *Human Biology*. Oxford University Press.
8. Jurmain Robert Lynn kilgore Wenda Trevathan and Ciochon (2010). *Introduction to Physical Anthropology*. Wadsworth Publishing, USA.
9. Kapoor A.K. and Satwanti Kapoor (ed) (1995). *Biology of Highlanders*. Jammu, Vinod Publisher & Distributor.
10. Kapoor A.K. and Satwanti Kapoor (eds) (2004) *India's Elderly-A Multidisciplinary Dimension*. Mittal Publication, New Delhi.
11. Klepinger L.L. (2006). *Fundamentals of Forensic Anthropology*. John Willey & Sons.,New Jersey.
12. Malhotra K.C. and B. Balakrishnan(1996) *Human Population Genetics in India*.
13. Malina Robert M., Claude. Bouchard, Oded. Bar-Or. (2004) Growth, and Physical Activity. *Human Kinetics*.
14. Stanford C., Allen, S.J. and Anton, C.S. (2013): *Biological Anthropology*. 3rd edition, Pearson, USA.

C8. Theories of Culture and Society

Theory

Credit- 4

Unit I: Emergence of Anthropology: Interface with evolutionary theory and colonialism, changing perspectives on Evolutionism, Diffusionism and Culture area

theories.

Unit II: Emergence of Fieldwork tradition; Historical Particularism, American Cultural Tradition.

Unit III: Durkheim and Social integration; Functionalism and Structural-functionalism and British Social Anthropology.

Unit IV: Structuralism: Claude Levi-Strauss and Edmund Leach; Symbolism and Interpretative approach.

Practical

Credit- 2

As a part of the practical following exercises will be undertaken by the students so as to enable them to connect the theories they learn with things of everyday living.

1. To identify a topic relating to contemporary issue and formulate research questions and clearly identify the theoretical perspectives from which they are derived.
2. Identification of variables of a study.
3. Various types of hypotheses.
4. Formulation of hypothesis.
5. Distinction between hypothesis testing and exploratory research.
6. Identification of universe and unit of study with justifications.
7. Choice of appropriate research technique and method in the context of theoretical framework.
8. Data collection and analysis

Suggested Readings

1. Applebaum H.A. (1987) *Perspectives in Cultural Anthropology*. Albany: State University of New York.
2. Barnard A. (2000). *History and Theory in Anthropology*. Cambridge: Cambridge University.
3. McGee R.J. and Warms R.L. (1996) *Anthropological Theories: An Introductory History*.
4. Moore M. and Sanders T. (2006). *Anthropology in Theory: Issues in Epistemology*, Malden, MA: Blackwell Publishing.

C 9. Human Growth and Development

Theory

Credit- 4

Unit I: Concept of human growth, development, differentiation and maturation; Evolutionary perspective on human growth (including living primates and fossil human ancestors).

Unit II: Prenatal (conception till birth) and postnatal (birth till senescence) period of growth, pattern of normal growth curves, variation from normal growth (canalization, catch-up growth and catch-down growth), ethnic and gender differences in growth curves, secular trend.

Unit III: Bio-cultural factors (genetic, social, and ecological factors) influencing patterns of growth and variation, methods and techniques to study growth, significance/ applicability of growth studies

Nutritional epidemiology-concept of balanced diet, impact of malnutrition (over and under) with special reference to obesity, Kwashiorkor and Marasmus. Assessment of

nutritional status.

Unit IV: Human physique and body composition – models and techniques; gender and ethnic differences; Somatotyping and human physique with reference to Sheldon, Parnell, Heath and Carter methods.

Practical (Any two)

Credit- 2

1. Growth status: Somatometry (stature, body weight, mid upper arm circumference etc), assessment of chronological age, percentile, z-score, height for age, weight for age, BMI for age
2. Obesity assessment: General (BMI, body fat %, Conicity index, body adiposity indices) and regional adiposity indices (WC, WHR, WHtR)
3. Estimation of body composition (fat percentage and muscle mass) with skinfold thickness and bioelectric impedance
4. Nutritional assessment through dietary pattern and anthropometric indices

Suggested Readings

1. Bogin B. (1999) Patterns of human growth. Cambridge University Press.
2. Frisancho R. (1993) Human Adaptation and Accommodation. University of Michigan Press.
3. Cameron N and Bogin B. (2012) Human Growth and Development. Second edition, Academic press Elsevier.
4. Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.
5. Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.
6. Jurmain R, Kilgore L, Trevathan W. Essentials of physical anthropology. Wadsworth publishing.
7. Kapoor AK and Kapoor S. (1995) Biology of Highlanders. Vinod Publisher and Distributor.
8. Kathleen K. (2008). Encyclopedia of Obesity. Sage.
9. Malina RM, Bouchard C, Oded B. (2004) Growth, Maturation, and Physical Activity. Human Kinetics.
10. McArdle WD, Katch FI, Katch VL. (2001) Exercise Physiology: Energy, Nutrition, and Human Performance.
11. Singh I, Kapoor AK, Kapoor S. (1989). Morpho-Physiological and demographic status of the Western Himalayan population. In Basu and Gupta (eds.). Human Biology of Asian Highland Populations in the global context.
12. Sinha R and Kapoor S. (2009). Obesity: A multidimensional approach to contemporary global issue. Dhanraj Publishers. Delhi.

C10. Research Methods

Theory

Credit- 4

Unit I: Field work tradition in Anthropology; Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethnocentrism, etic and emic perspectives, comparative and historical methods, techniques of rapport establishment identification of representative categories of informants, maintenance of field diary and logbook.

Unit II: Research Design; Review of literature, conceptual framework, formulation of research problem, formulation of hypothesis, sampling, tools and techniques of data collection: Survey method, Observation, Questionnaire, Schedule, Interview, Case

study, Life history and Genealogy; data analysis and report writing- Chapterization, preparing a text for submission and publication, concepts of preface, notes (end and footnotes), glossary, prologue and epilogue, appendix, bibliography(annotated) and references cited, review and index.

Unit III: Ethics and Politics of Research Identify, define, and analyze ethical issues in the context of human subject research; Ethical importance of consent, privacy and confidentiality in research; Issues of academic fraud and plagiarism, conflicts of interest, authorship and publication.

Unit IV: Bio-Statistics; Guiding ideals and critical evaluation of major approaches in research methods, basic tenets of qualitative research and its relationship with quantitative research; Types of variables, presentation and summarization of data (tabulation and illustration). Descriptive statistics- Measures of Central Tendency, Measure of Variation, Skewness and Kurtosis, Variance and standard deviation, Normal and binomial distribution; Tests of Inference- Variance ratio test, Student's 't' tests, Chi-square test.

Practical

Credit- 2

1. Construction of Genealogy & Pedigree Analysis.
2. Observation: Direct, Indirect, Participant, Non-participant, Controlled
3. Questionnaire and Schedule, Interview- Unstructured, Structured, Key informant interview, Focussed Group Discussion, and Free listing, pile sorting
4. Case study and life history

Suggested Readings

- Garrard E and Dawson A. What is the role of the research ethics committee? Paternalism, inducements, and harm in research ethics. *Journal of Medical Ethics* 2005; 31: 419-23.
- Bernard H.R. *Research Methods in Anthropology, Qualitative and Quantitative Approaches*. Jaipur: Rawat Publications. 2006.
- Madrigal L. *Statistics for Anthropology*. Cambridge: Cambridge University Press. 2012.
- Zar JH. *Biostatistical Analysis*. Prentice Hall. 2010.
- Michael A. *The Professional Stranger*. Emerald Publishing. 1996.
- Bernard R. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. AltaMira Press. 2011.
- Emerson RM, Fretz RI and Shaw L. *Writing Ethnographic Fieldnotes*. Chicago, University of Chicago Press. 1995.
- Lawrence NW. *Social Research Methods, Qualitative and Quantitative Approaches*. Boston: Allyn and Bacon. 2000.
- O'reilly K. *Ethnographic Methods*. London and New York: Routledge. 2005.
- Patnaik S.M. *Culture, Identity and Development: An Account of Team Ethnography among the Bhil of Jhabua*. Jaipur: Rawat Publications. 2011.
- Pelto PJ and Pelto GH. *Anthropological Research, The Structure of Inquiry*. Cambridge: Cambridge University Press. 1978.
- Sarantakos S. *Social Research*. London: Macmillan Press. 1998.

C11. Prehistoric Archaeology of India

Theory

Credit- 4

Unit I: Pleistocene chronology of India; Palaeolithic cultures in India.

Palaeolithic cultures in India: Lower Palaeolithic cultures – evidences from Kashmir Valley and Peninsular India), Middle Palaeolithic culture in India, Upper Palaeolithic culture in India (characteristic features, major type tools, important sites, chronology with stratigraphic evidences). Some important sites of Odisha may be discussed on above cultural periods.

Unit II: Mesolithic cultures in India.

Mesolithic cultures in India (characteristic features, major type tools, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural periods).

Unit III: Neolithic cultures in India.

Neolithic culture in India (characteristic features, major type tools, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural periods).

Unit IV: Rock art of India.

Prehistoric Art in India with special reference to Central India and Odisha.

Practical

Credit 2

1. Identification of tools:

- (a) Hand axe varieties, chopper/chopping tools
 - (b) Cleaver varieties
 - (c) Side scraper varieties
 - (d) Knives e) Burins(f) End scrapers(g) Borer(h) Microlithic tools
 - (i) Bone tools
2. Identification of lithic technology.

Suggested Reading:

1. Agarwal, D. P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
2. Allchin, Briget. and Raymond Allchin,1982. *The Rise of Civilization in India and Pakistan*.Cambridge: Cambridge University Press.
3. Allchin, B. and R. Allchin, 1997. *Origins of Civilization: The Prehistory and Early Archaeology of South Asia*. New Delhi. Viking by Penguin Books India (P) Ltd.
4. Bhattacharya, D. K.1990, *An Introduction to Prehistoric Archaeology*. Delhi; Hindustan Publishing Corporation
5. Bhattacharya, D. K.2001. *An Outline of Indian Prehistory*. Delhi: Palaka Prakashan.
6. Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
7. Jain, V.K.2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
8. Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.
9. Pappu R. S.2001, *Aheulian Culture in Peninsular India-- An Ecological Perspective*, New Delhi: D.K. Printworld (P) Ltd.
- 10.Rammi Reddy, V.1987, *Elements of Prehistory*. New Delhi: Mittal Publications.

11. Rammi Reddy, V.1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.
12. Rammi Reddy, V.1991, *Neolithic and Post-Neolithic Cultures*. New Delhi: Mittal Publications.
13. Sankalia, H.D.1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
14. Sankalia (1982) *Stone Tool Type and Technology*. Delhi, B.R.Publication.
15. Settar, S. and R. Korisettar (Ed), 2001, *Indian Archaeology in Retrospect*, Vol.1: PREHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.

C12. Anthropology in Practice

Theory

Credit- 4

Unit I: Academic Anthropology; Academics and Practitioners: Differences, Structure, Activities, Controversies and Issues: Applied Anthropology, Action Anthropology and Development Anthropology.

Unit II: Role of Anthropology in Development; Anthropology and Public Policy, Need Assessment and Community Development, Anthropology of NGO's, Business Anthropology, Environment and Community Health, Social and economic sustainability, Cultural resource management.

Unit III: Future Dynamics in Anthropology; Trends in Anthropology: Anthropology of Tourism, Anthropology In Census; Designing And Fashion, Visual Anthropology.

Unit IV: Biosocial anthropology in practice; Bio-social elements of human development at national and international level, application of conceptual framework of Forensic Anthropology in judicial settings both criminal and civil, Population Dynamics and relationship between population growth and various aspects of culture such as means of subsistence, kinship, social complexity, social stratification and political organization, Bio-social counselling of an individual or population.

Practical

Credit- 2

1. The students will visit a NGO or corporate office or census office in Odisha and its adjoining areas and write principal observations on the same.
2. Write a project on constitutional provisions or evaluation of any development project/report.
3. Draw a scene of crime and identify the various evidences in a portrayed crime scene.
4. Write a project on Religious Tourism / Tribal Tourism / Health Tourism / Fashion / Human Rights / Ecotourism.
5. Write a project on the demographic profile from secondary data.
6. Collect data on bio-social problem and design counselling and give the analysis and interpretation.

Suggested Readings

1. Arya A and Kapoor AK. (2012). *Gender and Health Management in Afro-Indians*. Global Vision Publishing House, New Delhi.

2. Kertzer DI and Fricke T. (1997). *Anthropological Demography*. University of Chicago Press.
3. Basu, A. and P. Aaby (1998). *The Methods and the Uses of Anthropological Demography*. 329 pp. Oxford, Clarendon Press
4. Carter A. (1998). *Cultural Models and Demographic Behavior*. In *The Methods and the Uses of Anthropological Demography* edited by Basu A and Aaby P. Oxford: Clarendon Press. pp 246-268.
5. Census of India (2001, 2011) and National Family Health Survey (2006,2010).
6. Ervic, Alexander M., (2000). *Applied Anthropology: Tools and Perspectives for Contemporary Practise*, Boston, MA: Allyn and Bacon.
7. Erwin A. (2004). *Applied Anthropology Tools and Practice*, Allyn and Bacon.
8. Gupta S and Kapoor AK. (2009). *Human Rights among Indian Populations: Knowledge, Awareness and Practice*. Gyan Publishing House, New Delhi.
9. Willen SS. (2012). *Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations*. *Journal of Human Rights*. 11:150-159.
10. Goodale M. (2009). *Human Rights: An Anthropological Reader*. Wiley Blackwell.
11. Gupta S and Kapoor AK. (2007). *Human Rights, Development and Tribe*. In : *Genes, Environment and Health – Anthropological Perspectives*. K. Sharma, R.K. Pathak, S. Mehra and Talwar I (eds.). Serials Publications, New Delhi.
12. Margaret AG. (2003). *Applied Anthropology: A Career-Oriented Approach*, Boston, MA: Allyn and Bacon.
13. Halbar BG and Khan CGH. (1991). *Relevance of Anthropology – The Indian Scenario*. Rawat Publications, Jaipur.
14. Kapoor AK (1998). *Role of NGO's in Human Development : A Domain of Anthropology*. *J Ind Anthropol Soc*; 33:283-300.
15. Kapoor AK and Singh D. (1997). *Rural Development through NGO's*. Rawat Publications, Jaipur.
16. Klepinger LL (2006). *Fundamentals of Forensic Anthropology*. Wiley-Liss Publications
17. Kumar RK and Kapoor AK. (2009). *Management of a Primitive Tribe: Role of Development Dynamics*. Academic Excellence, Delhi.
18. Mehrotra N and Patnaik SM. (2008). *Culture versus Coercion: The Other Side of Nirmal Gram Yojna*, *Economic and Political weekly*. pp 25-27.
19. Mishra RC (2005). *Human Rights in a Developing Society*, Mittal Publications, Delhi.
20. Noaln RW. (2002). *Anthropology in Practice: Building a Career outside the Academy*. Publishing Lynne Reinner.
21. Patnaik SM (1996). *Displacement, Rehabilitation & Social Change*. Inter India Publications, New Delhi.
22. Patnaik SM (2007). *Anthropology of Tourism: Insights from Nagaland*. *The Eastern Anthropologist*. 60(3&4):455-470
23. Srivastav OS (1996). *Demographic and Population Studies*. Vikas Publishing House, India
24. Vidyarthi LP and BN Sahay (2001). *Applied Anthropology and Development in India*, National Publishing House, New Delhi.
25. Vidyarthi LP. (1990). *Applied Anthropology in India – Principles, Problems and Case Studies*. Kitab Mahal, U.P.

26. Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.

C13. Forensic Anthropology

Theory

Credit- 4

Unit-I: Introduction to Forensic Anthropology: Definition, Brief History, Scope, Applications and Integration of Forensic Anthropology.

Unit-II: Basic Human Skeletal Biology, Identification of Human and Non-Human Skeletal Remains, Ancestry, age, sex and stature estimation from bones, Discovery and Techniques for recovering skeletonized Human Remains.

Unit-III: Personal Identification, Complete and Partial Identification, Methods of Identification in Living Persons: Somatometry, Somatoscopy, Occupational Marks, Scars, Bite Marks, Tattoo Marks, Fingerprints, Footprints, Lip Prints, Nails, Handwriting, Deformities and Others.

Unit-IV: Serology: Identification and Individualization of bloodstain, urine, semen and saliva.

Patterns of Bloodstains; Individualization: Forensic Odontology-Tooth Structure and Growth, Bite Marks, Facial Reconstruction, DNA Profiling.

Practical

Credit- 2

1. Study of Human Long Bones. Estimation of age, sex and stature from bones.
2. Somatometric and Somatoscopic Observation on living persons.
3. Identification of bloodstain, urine, semen and saliva.
4. Examination of Fingerprints and Handwriting.

Suggested Readings:

1. Bass W.M. (1971). Human Osteology: A Laboratory and Field manual of the Human Skeleton. Columbia: Special Publications Missouri Archaeological Society.
2. Black S. and Ferguson E. (2011). *Forensic Anthropology 2000 to 2010*. CRC Press, London.
3. Byers, S. N. (2008). *Forensic Anthropology*. Boston: Pearson Education LTD.
4. Gunn A. (2009) *Essential Forensic Biology* (2nd ed). Chichester: Wiley-Blackwell
5. Modi, R. B. J. P. (2013). *A Textbook of Medical Jurisprudence and Toxicology*. Elsevier.
6. Reddy V. R. (1985). *Dental Anthropology*, Inter-India Publication, New Delhi.
7. Spencer, C. (2004). *Genetic Testimony: A Guide to Forensic DNA Profiling*, Pearson, New Delhi.
8. Vats Y., Dhall J.K. and Kapoor A.K. (2011). Gender Variation in Morphological Patterns of Lip Prints among some North Indian Population. *J. Forensic Odontology*, 4: 11-15.
9. Wilkinson, C. (2004). *Forensic facial reconstruction*. Cambridge University Press.

C 14. Anthropology of India

Theory

Credit- 4

Unit I: Origin, history and development of Anthropology in India, approaches to study Indian society and culture- traditional and contemporary Racial and linguistic elements in Indian population Understanding the diversity of Indian social structure - concept of Varna, Jati, Caste, Ashram or purusharatha, gender hierarchies - their economic and cultural impact, origin and evolution of social structures and their underlying philosophies; Contribution of contemporary biological, social and archaeological anthropologists in India.

Unit II: Aspects of Indian Village –social organisation, agriculture and impact of market economy on villages; Tribal situation in India- biogenetic variability, linguistic and socio-economic characteristics; Problems of tribal peoples, land-alienation, indebtedness, lack of educational facilities, shifting-cultivation, migration, forests and tribal unemployment, health and nutrition, tribal movement and quest for identity

Unit-III: Developmental projects- tribal displacements and rehabilitation problem; Impact of culture-contact, urbanization and industrialization on tribal and rural Population ; Basic concepts -Great tradition and little tradition, sacred complex, Universalization and parochialization, Sanskritization and Westernization, Dominant caste, Tribe-caste; continuum, Nature-Man-Spirit complex, pseudotribalism.

Unit IV: Problems of exploitation and deprivation of scheduled caste/ tribe and Other Backward Classes. Constitutional Provisions for the Scheduled caste and scheduled tribes, Evaluation and Development of Indian Population; Human Rights, Protection and enforcement of human rights, Human rights of special category and marginal groups, Emerging trends of human rights with respect to terrorism, globalization and environment.

Practical

Credit- 2

1. Identify various traits/variables which can be used in racial classification and comment on its relevance.
2. Review a book/edited volume on Indian social structure such as caste, religion, tribe or rural population and give its salient features.
3. Explore the biological diversity of any population group considering a minimum of five genetic traits.
4. Highlight the contributions of any two contemporary Indian anthropologists.

Suggested Reading

1. Nicholas D. (2001). Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
2. Bernard CS. (2000). India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
3. Bhasin MK, Watter H and Danker-Hopfe H. (1994). People of India - An Investigation of Biological variability in Ecological, Ethno-economic and Linguistic Groups. Kamla

Raj Enterprises, Delhi

4. Lopez DS. (1995). Religions of India in Practice. Princeton University Press
5. Gupta D. Social Stratification. Delhi: Oxford University Press.
6. Karve I. (1961). Hindu Society: An Interpretation. Poona : Deccan College
7. Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
8. Trautmann TR (2011). India: Brief history of Civilization. Oxford University Press : Delhi
9. Vidyarthi LP and Rai BK. (1976). The tribal culture of India. Concept Publishing Co, Delhi.
10. Haddon AC. (1929). Races of man. Cambridge University, London.
11. Kapoor A.K. (1992). Genetic Diversity among Himalayan Human Populations. M/S Vinod Publishers, Jammu
12. Majumdar DN. (1901). Races and Culture of India. Asia Publishing House, Bombay
13. Dube SC. (1992). Indian Society. National Book Trust, India : New Delhi.
14. Dumont L. (1980). Homo Hierachicus. University of Chicagon Press.
15. Guha B.S. (1931). The racial attributes of people of India. In : Census of India, 1931, vol I, Part III (BPO, Simla)
16. Malhotra K.C. (1978). Morphological Composition of people of India. J. Human Evolution.

ELECTIVE COURSES (DSE)

**Credits: Any four papers = Theory + Practical = (4+2)
(Including one Project Report)**

DSE 1. Physiological Anthropology

Theory

Credit- 4

Unit I: Fundamentals of work physiology- homeostasis; metabolism and energy and systems; exercise, respiratory system and haemodynamics (blood pressure, pulse rate, heart rate and oxygen- transporting system, blood flow ,Hb, heamatocrit etc).

Unit II: Acute physiological adjustments during transition from resting homeostasis to sub-maximal and maximal exercise; chronic physiological adaptations to exercise training; age, sex and population variation in the physiological characteristics.

Unit III: Cardio-vascular and respiratory endurance, physical working capacity and physical fitness- evaluation of response and assessment; relationship of body measurements with cardio-vascular and respiratory functions, aerobic and anaerobic exercise training, health related fitness in gender and ethnic group; Principles of effective physical conditioning techniques.

Unit IV: Impact of smoking, alcohol, drug, pollution and occupation on cardio-respiratory functions; physical performance and environmental stress, chronic diseases, malnutrition, lifestyle disease Factors affecting physical performance and capacity, relation between physique, body composition, nutrition and performance; Ageing and health related aspects of exercise.

Practical (Any two)

Credit- 2

1. Cardiovascular function (Blood pressure, heart rate, pulse rate)
2. Respiratory function (Tidal volume, vital capacity, forced vital capacity, minute ventilation etc.)
3. Haemoglobin estimation
4. Step-test
5. Treadmill test

Suggested Readings:

1. McArdle WD, Katch FI and Katch VL. (2010). Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins.
2. Powers SK and Howley ET. (2007). Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill.
3. Sherwood L. (2008). Human Physiology: From Cells to Systems. Brooks Cole.
4. Case RM. (1985). Variations in Human Physiology. Manchester University Press.
5. Vander AJ, Sherman JH and Dorothys L. (1978). Human Physiology: The Mechanisms of Body Functions. Mc Graw-Hill Education.
6. Nageswari KS and Sharma S. (2006). Practical workbook of Human Physiology. Jaypee Brothers, Medical Publisher.
7. Wildmaier EP, Raff H, Strang KT. (2014). Vander's Human Physiology: The Mechanisms of Body. Mc Graw Hill Education.
8. Hale T. (2003). Exercise Physiology. England :John Wiley & Sons Inc.

DSE 2. Sports and Nutritional Anthropology

Theory

Credit- 4

Unit I: Anthropology of sports- Physical fitness, component of physical fitness.

Unit II: Physical conditioning, training-techniques and physiological effects, environmental effects on physical performance: effect of heat stress, cold stress and high altitude on physiological response and performance.

Unit III: Body composition and Athletes, sports selection and monitoring.

Unit IV: Human biological variability, health and nutrition; doping and performance; cultural constructions and physiologic implications of food across time, space and society; an integrated bio-behavioural perspective towards food preference.

Practical (Any two)

Credit-2

1. Assessment of daily nutrient intake (Weighing method)
2. Evaluate association of nutritional status and physical performance
3. Demonstrate cultural perspective for preference of specific food of a population

Suggested Readings

1. Stinson S. (1992). Nutritional Adaptation. Annual Review of Anthropology 21:143-170.
2. Bruhart R. (1990). The Cultural Context of Diet, Disease and the Body. In Diet and Disease in Traditional and Developing Societies. GA Harrison and JC Waterlow, eds. P. 307-325. Cambridge University Press. Cambridge.

3. Rozin P. (1987). Psychobiological Perspectives on Food Preferences. In Food and Evolution: Toward a Theory of Food Habits. M. Harris and EB Ross (eds.). Temple University Press. Philadelphia, pp. 181-205.
4. Quandt SA. (1987). Methods for Determining Dietary Intake. In Nutritional Anthropology. FE Johnston, ed. Pp. 67-84. Liss. NY.
5. Ulijasek SJ and Strickland SS. (1993). Introduction. In Nutritional Anthropology: Prospects and Perspectives. Pp. 1-5. Smith Gordon. London.

DSE 3. Human Genetics

Theory

Credit- 4

Unit I: Structure, Function and Inheritance of the human genome- gene, DNA structure and replication, DNA repair and recombination, gene expression, coding and non-coding region.

Unit II: Expression of genetic information: from Transcription to Translation – the relationship between genes and protein, transcriptions; transcription and RNA processing, encoding genetic information, decoding the codons: the role of transfer RNAs.

Unit III: Methods of Genetic Study in Human: Pedigree analysis and expressivity; Chromosomal Basis of Genetic Disorders (Karyotypes and identification of chromosome variation; Nucleic Acid Hybridization Assays, cytogenetic mapping), Genetic mapping (Microsatellite and other DNA polymorphisms), LOD score; sequencing strategies (PCR based Sanger sequencing to Exome sequencing), concept of non-mendelian inheritance and complex diseases.

Unit IV: Genomic Diversity & Human Evolution Genomic Variation: Genomic Polymorphisms (SNPs, VNTR, CNVs, etc); haplotypes and haplogroups; genotype-phenotype correlations, epigenetics Peopling of the Indian Subcontinent: Evidence from mtDNA and Y-chromosome; evolutionary genetics; Molecular evolution; DNA sequence variation and human origins.

Practical (Any two)

Credit-2

1. Blood Collection, transportation and storage in field
2. DNA Extraction from whole blood
3. DNA Quantification, Aliquoting and sample preparation
4. PCR and electrophoresis
5. Gel Documentation

Suggested Readings:

1. Strachan T and Read AP. (2004). Human Molecular Genetics. Garland Science
2. Brown TA. (2007). Genomes. Garland Science.
3. Griffiths AJF. (2002). Modern Genetic Analysis: Integrating Genes and Genomes. WH Freeman Press.
4. Griffiths AJF, Wessler SR, Carroll SB, Doebley J. (2011). An Introduction to Genetic Analysis. Macmillan Higher Education.
5. Cavalli-sforza LL, Menozzi P, Piazza A (1994). History and Geography of Human

Genes. Princeton University.

6. Cummings Michael R. (2009). Human Genetics. Cengage Learning India Pvt. Ltd, Delhi.
7. Cummings MR (2011). Human Heredity: Principles and Issues. Brooks/Cole, Cengage Learning
8. Giblett, ER. (1969). Genetic Markers in Human Blood. Blackwell Scietific, Oxford.
9. Jobling M, Hurls M and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. New York: Garland Science.
10. Lewis R. (2009). Human Genetics: Concepts and Application. The McGraw–Hill Companies, Inc.
11. Patch C. (2005). Applied Genetics in Healthcare. Taylor & Francis Group
12. Snustad .D.P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA
13. 14. Verma, P.S. and V.K. Aggarwal (1974). Cell Biology, Genetic, Molecular Biology, Evolution and Ecology. S.Chand and Company Pvt. Ltd., New Delhi.
14. Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition.

DSE 4. Neuro Anthropology

Theory

Credit- 4

Unit 1: Enculturation and Behaviour; Neuroanthropology Holism, The Basics of Neuroanthropology; The Nature of Variation; Overview of Brain, Neural Systems & Their Interconnections; Niche construction Theory; Evolution and the Brain, Social Cognitive Development, Culture and Socialization.

Unit 2: Balancing Between Cultures; Human Capacities, Skills and Variation; Male embodiment in subsistence societies; Overcoming Mind/Body Dualism;

Unit 3: War and Dislocation: Neuroanthropological model of trauma; Autism, theory of mind and religious development; Cultural consonance, Consciousness and Depression. Neuroconstructivism and Embodied Learning; Human Development: A Biocultural Process; Enculturation and Memory; The Neuroanthropology of Stress; The Neuroanthropology of PTSD (Post traumatic stress disorder); Psychiatry in Neuroanthropological Perspective. Addiction and Neuroanthropology

Unit 4: Neurological and Anthropological Methods; Neuroanthropology Applied; Critical Neuroscience; The Social and Personal Uses of Neuroscience.

Practical (Any two)

Credit-2

1. Case Studies on Human behavior, Capacities, Skills, and Variation (or, a case study report on understanding addiction using neuroanthropology)
2. Prepare a report on socio-cultural and biological perspective of human behaviour and inter-individual variation.
3. Somatometric measurements of human skull and relation with neural activity.
4. Class blog participation :Once every week, each student will be responsible for finding one source in the popular/lay press that's related to the topic for that week (e.g., from newspapers, news magazines, science magazines), and introducing a brief online discussion about what it says and why it's relevant
5. A report on Disorder, and its case study on any disorder and a report in neuroanthropological perspective.

Suggested Reading:

Downey,(2008) Balancing between Cultures, in The Encultured Brain.J. of Neuroanthropology

Downey,(2010) 'Practice without Theory': A Neuroanthropological Perspective on Embodied Learning.JRAI

Miller & Kinsbourne,(2011) Culture and Neuroscience in Development Psychology: Contributions and Challenges. Child Development perspectives. <http://onlinelibrary.wiley.com/doi/10.1111/j.1750-8606.2011.00188.x/abstract>

Worthman,(2010) The Ecology of Human Development: Evolving Models for Cultural Psychology [Required for 500 level, optional for 400 level] <http://jcc.sagepub.com/content/41/4/546.abstract>

Davidson & McEwen,(2012) Social Influences in Neuroplasticity: Stress and Interventions to Promote Well-Being.J.of Nature Neuroscience. <http://www.nature.com/neuro/journal/v15/n5/full/nn.3093.html>

Bonanno et al.,(2011) Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. Association for psychological science. Luhrmann, (2012) Beyond the Brain <http://www.wilsonquarterly.com/article.cfm?AID=2196>

Kirmayer & Gold,(2012). Re-Socializing Psychiatry: Critical Neuroscience and the Limits of Reductionism, in Critical Neuroscience. Blackwell Reference online.

Lende and Downey, (2012) The Encultured Brain: An introduction to Neuroanthropology. Cambridge: Massachusetts Institute of Technology Press.

Goldin&Merrick,(2012)Neuroscience or Neurobabble. http://www.stats.org/stories/2012/Neuroscience_Or_Neurobabble_jul16_12.html

Margulies,(2011) The Salmon of Doubt, in Critical Neuroscience.

Lende,(2012).Neuroanthropology, Applied Research, and Developing Interventions.<http://blogs.plos.org/neuroanthropology/2012/05/10/neuroanthropology-applied-research-and-developing-interventions/>

Buchowski et al.,(2011) Aerobic Exercise Training Reduces Cannabis Craving and Use in Non-Treatment Seeking Cannabis-Dependent Adults <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0017465> <http://www.mc.vanderbilt.edu/news/releases.php?release=2044>

Xue et al.,(2012) A Memory Retrieval-Extinction Procedure to Prevent DrugCravingandRelaps.<http://www.sciencemag.org/content/336/6078/241.full>

DSE 5. Forensic Dermatoglyphics

Theory

Credit- 4

Unit-I: Introduction to Dermatoglyphics: History and Development, scope and Applications.

Unit-II: Formation of fingerprint ridges, pattern types and patterns area. Classification of Fingerprints- Henry Classification, Vucetich System, Single-Digit Classification.

Unit-III: Types of Fingerprints: Plastic, Visible and Latent Prints. Conventional and Modern methods for development of latent fingerprints- Silver Nitrate, Ninhydrin, Iodine Fuming, Powder Methods, Metal Deposition Method, Small Particle Reagent and Laser Techniques.

Unit-IV: Basis of Fingerprint Comparison: Class Characteristics and Individual Characteristics, Determination of Identity. Other Dermatoglyphic Patterns: Palm Print, Sole Prints and Toe Prints. Recent advances: Fingerprint and Palmprint Recognition, Automated Fingerprint Identification System.

Practical (Any two)

Credit-2

1. Recording and Study of Finger and Palm Prints
2. Determination of palmar main line formula, Ridge count and indices
3. Comparison of Fingerprints and Palmprints on the basis of class and individual ridge Characteristics
4. Development of latent fingerprints using different chemical and powder methods.

Suggested Readings:

Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints* (Vol. 8) CRC Press.

Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.

Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.

Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*. CRC press.

Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting. *Advances in fingerprint Technology*, 2, 13-52.

Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay.

DSE 6. Paleoanthropology

Theory

Credit- 4

Unit I: Dating methods, geological time scale, taphonomy and interpretation of the paleontological and archaeological records, taxonomic and chronological problems of

fossils records.

Evolutionary biology: Origins and evolution of stone age technology (Human origins: Development, distribution and fossilized evidence of Australopithecines, Paranthropus (Zinjanthropus), Homo habilis, Homo erectus, Archaic H. sapiens, prehistoric hunter-gatherers, modern pastoral communities, emergence of prehistoric people in Africa).

Unit II: Primate and Non-Primate Models for Early Hominid Behaviour; hominization process- Evolution of hominid-human bipedalism; Primate speciation and extinctions: a geological perspective, adaptive primate radiation, differential rate of somatic evolution.

Unit III: Palaeodemography- reconstruction of population patterns from skeletal analysis, determination of demographic variables in prehistoric populations and post-neolithic population growth, theory and techniques in paleodemography, methodological issues for reconstructing demographic structure, demographic models of mortality and their interpretation.

Unit IV. Palaeopathology- bioarchaeological approach of disease; effects of agriculture, urbanization and slavery on health and disease; colonization and disease with special emphasis on the New World; dispersion of modern humans - molecular and morphological patterns of relationship.

Practical

Credit-2

1. Comparative primate osteology
2. Description and identification of the disarticulated skeleton of non-human primates
3. Identification and description of fossil casts
4. Excursion to a site for seven days for collection of fossil material and its report

Suggested readings

1. Napier JR and Napier PH. (1985). The Natural History of the Primates. Cambridge, MA: The MIT Press
2. Boyd R and Silk JB. (2009). How Humans Evolved. London: WW Norton.
3. Tattersall I. (2009). The Fossil Trail: How We Know What We Think We Know about Human Evolution. New York: Oxford University Press.
4. Waldron T. (2008): Palaeopathology. Cambridge University Press.
5. Cela-conde CJ and Frisancho J. (2007). Human Evolution: Trails from the past. Ayala Oxford University Press.
6. Barnes E. Diseases and Human Evolution. (2005). University of New Mexico Press.
7. Pinhasi R and Mays S (2008). Advances in Human Palaeopathology. Chichester: JohnWiley & Sons, Inc. (PM).
8. Hoppa RD and Vaupel JW. (2002). Paleodemography: Age Distributions from Skeletal Samples. Cambridge University Press.
9. Lansen CS, Matter RM and Gebo DL. (1998). Human Origin: The fossil Record. Waveland Press.

10. Cameron DW and Colin P. Groves CP. (2004). *Bone, Stones and Molecules: "Out of Africa" and Human Origins*. Elsevier Inc.
11. Stringer C. (2011). *The Origin of Our Species*. London: Allen Lane.
12. Conroy GC. (2005). *Reconstructing Human Origins*. WW Norton and Company.

DSE 7. Anthropology of Religion, Politics and Economy

Theory

Credit- 4

Unit I: Anthropological approaches to understand religion- magic, animism, animatism, totemism, naturism; witchcraft and sorcery; Religious specialists: shaman, priests, mystics; Overview of Anthropological Theories of Religion; Religion as the sacrality of ecological adaptation and socialness

Unit II: Economic institutions: principles of production, distribution, and consumption in simple and complex societies; critical examination of relationship between economy and society through neo-classical, substantivist, and neo-marxist approaches, various forms of exchange: barter, trade and market; Forms of currencies; reciprocities: generalized, balanced and negative.

Unit III: Political institutions: concepts of power and authority; types of authority; state and stateless societies; law and justice in simple and complex societies; the prospects for democracy and tolerance among and within the world's diverse civilizations; the meaning and sources of identity in complex contemporary societies; the origins of modern politics, its institutions, and cultures, both Western and non-Western.

Unit IV: Interrelationship between religion, politics and economy; religious conversion and movements, emergence of new religious sects in the global order.

Practical

Credit-2

1. Case study of any of the social institute (religion, economic, political) with respect to culture perspective

Suggested Readings:

2. Durkheim E. (1986). *The elementary forms of the religious life, a study in religious sociology*. New York:Macmillan.
3. Benedict A. (2006). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso
4. Gledhill J. (2000). *Power and Its Disguises: Anthropological Perspectives on Politics*. 2nd ed. London: Pluto Press.
5. Ellis F. (2000). A framework for livelihood analysis. In *Rural Livelihoods and Diversity in Developing Countries* . Oxford: Oxford University Press.
6. Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, McElreath R, Alvard M et al. (2005). 'Economic Man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. *Behavior and Brain Science*. 28(6):795-815;
7. Henrich J. (2002). Decision-making, cultural transmission, and adaptation in economic anthropology. In: J. Ensminger (Ed.), *Theory in Economic Anthropology* (pp.

- 251-295). Walnut Creek, CA: Altamira Press.
8. Lambek. M. (2008) A Reader in the Anthropology of Religion.
 9. Eller JD. (2007). Introducing Anthropology of Religion. New York: Routledge.
 10. Glazier SD. (1997). Anthropology of Religion: A Handbook. Westport, CT: Greenwood Press.
 11. Frick GD and Langer R. (2010). Transfer and Spaces. Harrassowitz (Germany).
 12. Evans-Pritchard EE. (1937). Witchcraft, Oracles and Magic among the Azande, Oxford: Clarendon Press.
 13. Frazer JG. (1978). The Illustrated Golden Bough, London: Macmillan.
 14. Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
 15. Ember CR. (2011). Anthropology. New Delhi: Dorling Kinderslay.
 16. Herskovits MJ. (1952). Economic Anthropology: A Study in Comparative Economics. New York: Alfred A Knopf Inc.
 17. Malinowski B. (1922) Argonauts of the Western Pacific. London: Routledge.
 18. Polyani K. et al (1957), Trade and Market in the Early Empires. Chicago: Henry Regnery Company.
 19. Balandier G. (1972). Political Anthropology. Middlesex: Penguin.

DSE 8. Tribal cultures of India

Theory

Credit- 4

Unit I: Concept of tribes and its problematic nature, General and specific characteristics of tribes, Classification and distribution of tribes based on their economy, occupation and religion, Racial elements among the tribes, Scheduled and non-scheduled categories of tribes, Particularly Vulnerable Tribal Groups (PVTGs).

Unit II: Tribe- caste continuum, Gender and Tribe, Distribution of tribes in India.

Unit III: Tribes: Nomenclature- emic and etic differences; Tribal movements, Problems of tribal development.

Unit IV: Forest policies and tribes, Migration and occupational shift, Tribal arts and aesthetics Displacement, rehabilitation and social change Globalization among Indian tribes.

Practical

Credit-2

1. Distribution of Indian Tribes: PVTGs, ST
2. Location of different tribes on the map of India
3. Write an annotated bibliography on any one tribe
4. Write the social structure of any one tribe of India

Suggested Readings:

1. Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII.

New Delhi: Concept Publishing Company

2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.

3. Vidarthy, L.P. and Rai. Applied Anthropology in India.

4. Vidarrthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House

DSE 9. Human Population Genetics

Theory

Credit- 4

Unit-I Hardy-Weinberg principle; Genotypic and allelic frequencies, assumptions of Hardy-Weinberg equilibrium, its applications and exceptions. Mechanism for dynamics in Gene Frequency mutation, selection (pattern and mechanism), Genetic drift (bottle neck and founder effect), Gene flow/migration, inbreeding (inbreeding co-efficient and its genetic consequences).

Unit II. Ecological Genetics and Polymorphism; phenotypic & genotypic polymorphisms, transient polymorphism, balanced polymorphisms, models explaining the maintenance of genetic polymorphism (Relationship between sickle cell and malaria, X-linked polymorphism, selection due to infectious diseases and its association with blood groups and other).

Unit III: Population structure and admixture in human populations random & non-random mating (positive and negative assortative mating), heritability, linkage disequilibrium, genetic markers utility of genetic markers in forensic, population and disease association studies.

Unit IV: Human evolutionary genetics From Mendel to molecules: A brief history of evolutionary genetics, Epistasis and the conversion of genetic variances, Human-Ape comparisons.

Practical (Any Two)

Credit-2

1. Blood group typing-A1, A2, B, O, MN and Rh (D) blood groups
2. Color Blindness
3. Glucose-6-phosphate dehydrogenase deficiency(G6PD)
4. PTC tasting ability
5. Biochemical markers-DNA isolation and polymerase chain reaction (PCR)

Suggested Readings

1. Brooker R.J. (2012). Genetics: analysis & principles. The McGraw-Hill Companies, Inc 4th ed.
2. Cavalli-Sforza, L.L. and Bodmer, W.F (1971). The Genetics of Human Population. San Francisco: Freeman
3. Cooper DN and Kehrer-Sawatzki H. (2008). Handbook of Human Molecular Evolution. John Wiley & Sons, volume-2.

4. Crawford MH (2007). *Anthropological Genetics Theory, Methods and Applications*. Cambridge University Press
5. Cummings M.R. (2011). *Human Heredity: Principles and Issues*. Ninth Edition. Brooks/Cole, Cengage Learning
6. Jobling, M.A. Hurlst M. and Tyler-Smith C. (2004). *Human Evolutionary Genetics: Origins, Peoples & Disease*. GS. NY
7. Lewis R. (2009). *Human Genetics: Concepts and Applications* 9th Edition. The McGraw-Hill Companies, Inc.
8. Patch C. (2005). *Applied Genetics in Healthcare*. Taylor & Francis Group
9. Relethford J.H. (2012). *Human Population Genetics*. Wiley-Blackwell, USA
10. Snustad .D.P. and Simmons M.J. (2006). *Principles of Genetics*, Fourth Edition, John Wiley & Sons USA, Hoboken NJ
11. Strachan T, Read A.P. (2004). *Human Molecular Genetics*. Garland Science/Taylor & Francis Group.
12. Vogel F. and Motulsky A.G. (1996). *Human Genetics*. Springer, 3rd revised edition.

DSE 10. Visual Anthropology

Theory

Credit- 4

UNIT 1: Introduction to Visual Anthropology. Visual Culture. Photographic and Digital Media: Still, Interactive and Moving. Theory and Representation. Anthropology and Images: Ethnophotography and ethnographic films and mass media.

UNIT 2: Early Ethnographic Photography: Contexts and Trends. Anthropology of Art and Aesthetics; Ethnographic Photography: Conventions and Methodologies.

UNIT 3: Ethnographic Films: Theoretical issues concerning ethnographic film, ethical dimensions of ethnographic film, Interdependency of technology and culture.

UNIT 4: Cinema Studies with emphasis on key feature, documentary and ethnographic films with a focal theme - the examination of the 'language of film'.

Practical

Credit-2

This paper deals with analysis of visuals such as photographs and films pertaining to cultural practices dealing with institutions of religion, economy and politics.

Theory and Representation: Anthropology and Images: Ethnophotography and ethnographic films and mass media. Theories of representation, modern media and political advocacy.

Anthropology of Art and Aesthetics: Critical reflection on the relation of images, objects and persons. Objects and images from other societies valued as 'art'.

Ethnographic Film and Cinema Studies: This unit consists of screenings followed by seminars. The emphasis will be on key feature, documentary and ethnographic films with a focal theme- the examination of the 'language of film'.

Practical Implications: Explore traditional and experimental means of using visual and audiovisual media to research, represent and produce anthropological knowledge. Critical engagement with policy and the use of audio-visual and internet based media

in advocacy and activism. The students are required to do the following exercises:

1. Basic principles of producing ethnographic films: text and its focus, camera angles, lighting and decision making behind the camera.
2. Analyze the visual data from classical ethnographies signifying how 'otherness' is constituted.
3. A gendered analysis of visuals produced during colonial and postcolonial times.
4. Hypertext and multimedia as analytic end points.
5. Collection, reporting and analysis of photo-ethnographic data.
6. Digital mirror: computer assisted exercises leading to production of ethnographic text.

Suggested Readings

1. Marcus Banks and Howard Morphy, 1998, *Rethinking Visual Anthropology*
2. David MacDougall *Transcultural Cinema*, (Princeton, 1999)
3. Ruby, Jay. 1996. "Visual Anthropology." In *Encyclopedia of Cultural Anthropology*, David Levinson and Melvin Ember, editors. New York: Henry Holt and Company, vol. 4: 1345-1351.
4. Ch. 1, "Reading Pictures," pp. 1-12 [From: Banks, Marcus. 2001. *Visual Methods in Social Research*. London: Sage.]
5. Ember C.R. et al (2011). *Anthropology*. New Delhi: Dorling Kinderslay. [Unit II, III, IV (Page: 282-321, 430-438, 464, 469-471)]
6. Banks M. and Ruby J. (2011). *Made do Be Seen. Perspectives on the History of Visual Anthropology*. University of Chicago Press [Practical]
7. Schneider A. and Wright C. (2010) *Between Art and Anthropology: Contemporary Ethnographic Practice*. Berg Publishers [Practical]
8. Henley P. (2010). *The Adventure of the Real. Jean Rouch and the Craft of ethnographic Cinema*. Chiacago University Press [Practical]
9. Pink S. (2010). *Doing Sensory Ethnography*. Sage Publications [Practical]
10. Grimshaw A. and Ravetz A. (2009). *Observational Cinema. Anthropology, Film, and the Exploration of Social Life*. Indiana University Press [Practical]

DSE 11. Fashion Anthropology

Theory

Credit- 4

Unit I: Theoretical and Ethnographic Approaches to Understanding Fashion and

Consumer Society; Colonialism, Dress, and Identity : Colonialism, Consumption, and Civilizing Fashion Anti-colonial Dress, Clothing Debates in Burma and Africa.

Unit II: Race and Fashion: The 1980s "Japanese Invasion" and 1990s "Asian Chic" Alternative Approaches to Consumerism

Unit III: Gender, Fashion and Consumption in different Human societies, application of fashion in traditional and modern societies, role of religion in fashion.

Unit IV: Globalization and Dress, leather cosmetic relationships, relationship of tribal clans with reference to embroidery color and designs in ethnic group of India.

Practical

Credit-2

1. Identification of Pattern making Garment construction and color dynamics.
2. Sewing and Clothing manufacture practical.
3. Surface ornamentation, Textile crafts and Accessories Design in different ethnic group
4. A comparison of Computer aided design versus traditional designs

Suggested Readings

1. Allman, Jean. *Fashioning Power: Clothing, Politics and African Identities*. Bloomington: Indiana University Press, 2004.
2. Aronson, Lisa. "Body Modification and Art", in the Berg Encyclopedia of World Dress and Fashion, Volume 1, Africa. Berg Fashion Library, 2010.
3. Bachu, Parmindar. *Dangerous Designs: Asian Women Fashion the Diaspora Economies*. New York: Routledge, 2004.
4. Bradley Foster, Helen, and Johnson, Donald Clay. *Wedding Dress Across Cultures*. Berg Fashion Library, 2003.
4. Eicher, Joanne B., and Roach-Higgins, Mary Ellen. "Definition and Classification of Dress: Implications for Analysis of Gender Roles." In *Dress and Gender: Making and Meaning*. Oxford: Berg, 1992, 8-28.
5. Eicher, Joanne B., and Sumberg, Barbara. "World Fashion, Ethnic and National Dress", in *Dress and Ethnicity: Change Across Space and Time*. Berg Fashion Library, 1995.
6. El Guindi, Fadwa. *Veil: Modesty, Privacy and Resistance*. Berg Fashion Library, 2003 [1999].
7. Fair, Laura. "Veiling, Fashion, and Social Mobility: A Century of Change in Zamzibar", in *Veiling in Africa*. Bloomington: Indiana University Press, 2013, 15-33.
8. Fee, Sarah. "Anthropology and Materiality." In *The Handbook of Fashion Studies*. London: Bloomsbury, 2013, 301-324.
9. Gott, Suzanne, and Loughran, Kristyne. *Contemporary African Fashion*. Bloomington: Indiana University Press, 2010.
10. Hansen, Karen Tranberg. "The World in Dress: Anthropological Perspectives on Clothing, Fashion, and Culture" in *Annual Review of Anthropology*, 34 (2004): 369-392.
11. Hebdige, Dick. *Subculture: The Meaning of Style*. Routledge, 1979. ISBN: 0415039495

12. Hansen, Karen Tranberg. *Salaula: The World of Secondhand Clothing and Zambia*. Chicago, 2000. ISBN: 0226315819
13. Rooks, Noliwe. *Hair Raising: Beauty, Culture, and African American Women*. Rutgers, 1996. ISBN: 9780813523125
14. Miller, Daniel and Sophie Woodward, eds. *Global Denim*. Berg, 2011. ISBN: 9781847886316
15. Mangieri, Tina. "Fashion, Transnationality, and Swahili Men", in *African Dress: Fashion, Agency, Performance*. London: Bloomsbury, 2013, 153–167.
16. Schneider, Jane. "The Anthropology of Cloth", in *Annual Review of Anthropology*, 16 (1987): 409–448.
17. Smith, Fred T. "Archaeological Evidence", in the *Berg Encyclopedia of World Dress and Fashion, Volume 1, Africa*. Berg Fashion Library, 2010.
18. Tarlo, Emma, and Moors, Annelies. *Islamic Fashion and Anti-Fashion: New Perspectives from Europe and America*. London: Bloomsbury, 2013.
19. Tarlo, Emma. *Clothing Matters: Dress and Identity in India*. Chicago: University of Chicago Press, 1996.
20. Tarlo, Emma. *Visibly Muslim: Fashion, Politics, Faith*. Berg Fashion Library, 2010.

DSE 12. Demographic Anthropology

Theory

Credit- 4

Unit I: Demographic Anthropology; Introduction, definition and basic concepts Relationship between demography, population studies and anthropology Population Theories: John Graunt, Thomas R. Malthus; Biological theory of population; Theory of demographic transition.

Unit II: Tools of Demographic Data; Measures of population composition, distribution and growth; Measures of fertility; Measures of mortality; Measures of migration.

Unit III: Population of India; Sources of demographic data in India; Growth of Indian population; Demography of Indian tribal and non-tribal groups; Anthropological determinants of population growth; Impact of urbanization on the migration of tribal groups.

Unit IV: National policies; National Population Policy; National Health Policy; National Policy on Reproductive Health Care.

Practical

Credit-2

A student will collect and compile demographic data from different secondary sources on any given topic by the concerned teacher and a project report will be submitted for its evaluation.

Suggested Readings

1. Bhende A. and Kaniikar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)

2. Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
3. Census of India (2001,2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO (Can be seen from browsing net)
4. Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
5. Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
6. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume* 9:229-245.
7. Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) *Population Characteristics of Desert Ecology*.VDM Verlag Dr. Muller Gmbh and Co., Germany.
8. Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
9. National Population Policy <http://populationcommission.nic.in/npp.htm>
10. Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
11. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
12. Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98
13. Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-17.
14. Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
15. Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.
16. <http://human-nature.com/dm/chap3.html>
17. <http://biography.yourdictionary.com/john-graunt>
18. <http://www.marathon.uwc.edu/geography/demotrans/demtran.htm>

DSE 13. Urban Anthropology

Theory

Credit- 4

Unit 1 : Emergence of urban anthropology; Introduction, Extension of the anthropological interest in peasants and rural areas, Origins of Cities and Early Sociological Approaches, Urban planning and design

Unit 2: Political economy; Rural-urban migration, kinship in the city, problems that arise from urbanism, poverty and social stratification

Unit 3: Class approach; Culture of Poverty and the Underclass Approach, Comparison between relations function in an urban setting versus function in a rural setting, Race and Class in Urban Ethnography, Urban Dystopia

Unit 4: Urban Inequality and Disasters; Poverty, extended family for urban natives

versus migrants , Global Cities and the Production of Space, Community study and urban ecology, Urban Space, Postmodern and Hypermodern City; Contemporary urban issues: Suburbs, Exurbs and Urban Decline.

Practical

Credit-2

1. Visit city life among business community and appreciate the role of culture with politics and economics.
2. Media-popular culture behaviour
3. Photo shoot in any city life, Creating captions and texts relating to urban anthropology findings.

Suggested readings

1. <http://www.oxfordbibliographies.com/>
2. Cities, classes and the social order. Anthony Leeds, Roger Sanjek
3. Childe, V. Gordon. 1950. " Urban Revolution." Town Planning Review
4. Low Reader Part V: "The Postmodern City" in Low pp. 317-377;
5. Dear and Flusty ."Anthropological Fieldwork in Cities", "The anthropology of Cities: Some Methodological Issues".

DSE 14. Anthropology of Health

Theory

Credit- 4

Unit-1: Defining Health and Illness in Cross-Cultural Perspective; Looking at "health," "illness," and related concepts in Western culture, including sociological "sick role" models, Some important variations in the process of seeking health care Morbidity, Mortality, Epidemiology: Meaning, scope and methods. Epidemiology of common communicable diseases: Malaria, Tuberculosis, Leprosy, Diabetes, Cardiovascular disease and Sexually Transmitted Diseases (STDs), HIV/AIDS.

Unit - 2: Women's Health, Sex, Family Planning, and Maternal-Infant Health; Reproductive life, child Birth, Family planning adoption, male dominance, Nursing and early nurture, hyper-menstruation and its corollaries; Chronic Disease, Injury, Stress, and Mental Health; Relationship between mental health, chronic disease, and injury, Understanding Stress and Its Effects Cross-Culturally, Mental Disorders and Related Phenomena, diseases associated with specific sociocultural and environmental contexts: Kuru, osteomalacia, sickle cell anaemia. Adaptations to Health Threats: Genetic Vulnerability and Resistance & Environment, Developmental and Cultural Adaptations to adverse Conditions.

Unit - 3: Variations in Health Care Systems: A Comparative Perspective; Health

promotion and health care delivery programmes; Family welfare programmes. Child health and nutrition programmes. Reproductive health awareness; Healing and Healers in Cross-Cultural Perspectives; Shaman, Magic, Witchcraft and Sorcery; Folk healers and alternative medicine: Types of healers and healing, Problems in evaluating efficacy, Sources of dissatisfaction with mainstream medicine.

Unit - 4: Legal Aspects & Future Prospects for Health; Rules and regulations of international health policy, Medico- Legal Problems in relation to health administration, International health organization / NGOs, Medical Ethics, Critical issues in global health.

Practical

Credit-2

1. Make a Schedule on Health and Demography.
2. Calculation of Infant Sex ratio, Fertility rate, Total fertility rate, Mortality rate, Birth rate, crude birth rate, crude death rate, Mortality rate, life expectancy, immigration rate, population growth rate.
3. Identification and Characteristics of Various diseases.
4. Case Studies of Traditional and Modern healers.

Suggested Readings

Rajesh Khanna and A.K. Kapoor. 2007. Ethnic Groups and Health Dimensions. Discovery Publishing House, New Delhi.

Chin, James, M.D., M.P.H. (ed.) 2000. Control of Communicable Diseases Manual. 17th Edition. American Public Health Association. *Anyone interested in field work in less developed areas should own this book for reference.*

Helman, Cecil G. 2001. Culture, Health, and Illness. 4th ed. London: Arnold. *This book is written for health care practitioners and clearly explains the relevance of culture to health.*

Mann, Jonathon M., et al. (eds.) 1999. Health and Human Rights. New York: Routledge.

Albrecht, Gary L., Ray Fitzparick, and Susan C. Scrimshaw (eds.) 2000. The Handbook of Social Studies in Health and Medicine, SAGE Publications.

Bannerman, Robert, J. Burton, and Ch'en Wen-Chieh (eds.) 1983. Traditional Medicine and Health Care Coverage. Geneva: World Health Organization.

Chen, Lincoln C. Arthur Kleinman, and Norma C. Ware 1994. Health and Social Change in International Perspective. Harvard University Press.

Coreil, Jeannine and J. Dennis Mull (eds.) 1990. Anthropology and Primary Health Care, Boulder: Westview Press.

Hahn, Robert A. 1999. Anthropology in Public Health. Bridging Differences in Culture and Society. New York: Oxford University Press.

Helman, Cecil G. 1994. Culture, Health, and Illness. 3rd ed. Oxford: Butterworth-Heinemann.

Inhorn, Marcia C. and Peter J. Brown 1997. The Anthropology of Infectious Disease.

International health Perspectives. Gordon and Breach Publishers.

Koop, C. Everett, Clarence E. Pearson, and M. Roy Schwartz (eds.) 2001. Critical Issues in Global Health. San Francisco: Jossey-Bass. A Wiley Company.

Mayer, Kenneth H. and H.F. Pizer (eds.) 2000. The Emergence of AIDS. The Impact on Immunology, Microbiology, and Public Health. Washington, D.C.: American Public Health Association.

Nichter, Mark and Mimi Nichter 1996. Anthropology and International Health. Asian Case Studies. Gordon and Breach Publishers.

Paul, Benjamin D. (ed.) 1955. Health, Culture, and Community. Case Studies of Public Reactions to Health Programs.

Williams, Cicely D., Naomi Baumslag, and Derrick B. Jelliffe 1994. Mother and Child Health. Delivering the Services. 3rd Edition. New York: Oxford University Press

Basch, Paul F. Textbook of International Health 1999. New York: Oxford University Press.

Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) 1997. Reproductive Health in Developing Countries. Washington, D.C.: National Academy Press.

DSE 15. Linguistic Anthropology

Theory

Credit- 4

Unit-1: Concept and Scope of Linguistic Anthropology; Linguistic Anthropology and other Behavioural Sciences; Universals of Language, Types: Descriptive and Historical Linguistic; Origin and Evolution of Language; Language, Dialect and Idiolects: Definitions and Interrelations; Socio-Linguistics.

Unit-2: Language as a System: Phonetic Sub System, Morphophonemic Sub System, Syntactic Sub System and Semantic Sub System; Language and Culture: Cultural Influence on Language and Linguistic; Influence on Culture Sapir-Whorf Hypothesis; Linguistic and Culture Change.

Unit-3: Classification of Languages: Typological and Genealogical; Functional study of Languages; India as a Linguistic Area; Standard languages and Nationalism; speech variation and the study of Indian civilization.

Unit-4: Languages and the Analysis of Social Laws; Language and Social Structure; Structural Analysis in Linguistics and Anthropology; Language and Communication: Verbal and Non-Verbal (Signs and Symbols); Communication and Sociability; Language and Speech.

Practical

Credit-2

Report writings

Education policies in India
Multilingual Education
Tribal Languages

Suggested Readings

1. Ardver ,E.(ed) Social Anthropology and Language
2. Bloomfield, L. Language
3. Bright, W. Socio-linguistics
4. Burling, R. Man's Many voices-Language in its Cultural Context
5. Gleason, H.A. An Introduction to Descriptive Linguistics
6. Gumperz and The Ethnography of Communication Hymas(eds.)
7. Hockett,C.F. A Course in Modern Linguistics
8. Hoijer, H. (ed) Language in Culture
9. Hymes, D.(ed) Language in Culture and Society
10. Lehmann, H.P. Historical Linguistics
11. Levi Strauss,C. Structural Anthropology (Selected chapters)
12. Mishra, K.K. Anthropological Linguistics
13. Sapir, E. Language

Note: *Student will write dissertation on the basis of 20 days Field Work in the nearby locality on any branch of Anthropology in 6th Semester. She/ He will be supervised by one Teacher/ teachers.*

Generic Elective Course (GE)

Credits: Any four papers = Theory +Practical = (4+2)

For B.Sc. in Anthropology, a student shall have the option to choose from the following subjects: Chemistry, Botany, Zoology, Geology, Geography, Bio-Technology, Environmental Science, Psychology, Statistics, Marine Science, BCA

For B.A. in Anthropology, a student shall have the option to choose from the following subjects: History, Political Science, Economics, Psychology, Geography, Sociology, Home Science, Sanskrit, Odia, Philosophy, BBA and BBA (Health Care management), Tourism Administration

SEC 1. Public health and epidemiology

Theory

Credit- 2

Unit I: Principles of Epidemiology in Public Health: Public health and Anthropology; Overview of epidemiology methods used in research studies to address disease patterns in community and clinic-based populations, distribution and determinants of health-related states or events in specific populations, and strategies to control health problems

Unit II: Environmental Health; Effects of biological, chemical, and physical agents in environment on health (water, air, food and land resources); ecological model of population health; current legal framework, policies, and practices associated with environmental health and intended to improve public health. Psychological, Behavioural, and Social Issues in Public Health: behavioural science theory and methods to understanding and resolving public health problems

Unit III: Management of Health Care Program and Service Organizations; Techniques and procedures for monitoring achievement of a program's objectives, generating evidence of program effectiveness, assessing impacts in public health settings; evaluate framework that leads to evidence-based decision-making in public health.

Unit IV: Epidemiology of disease; Contemporary methods for surveillance, assessment, prevention, and control of infectious and chronic diseases, disabilities, HIV/AIDS; understanding etiology; determining change in trend over time; implementation of control measures

Practical

Credit-2

1. Draw appropriate inferences from provided epidemiologic data through statistical analysis
2. Assesses the health status of populations and their related determinants
3. Analyzes information relevant to specific public health policy issues
4. Development of health promotion model for health problem

Suggested reading

1. Gordis L. (2004). Epidemiology. Third edition. Philadelphia: Elsevier Saunders.
2. Remington PL, Brownson RC, and Wegner MV. (2010). Chronic Disease Epidemiology and Control. American Public Health Association.
3. Pagano M and Gauvreau K. (2000). Principles of Biostatistics. Belmont, CA: Wadsworth.
4. Turnock B. (2011). Public health. Jones & Bartlett Publishers.
5. Edberg M. (2013). Essentials of Health Behavior. Social and Behavioral Theory in Public Health. Second Edition, Jones and Bartlett Publishers.
6. Griffith JR and White KR. (2010). The Well-Managed Healthcare Organization. Health Administration Press: Chicago, IL.
7. Kovner AR, McAlearney AS, Neuhauser D. (2013). Health Services Management: Cases, Readings, and Commentary. 10th Ed. Chicago, IL: Health Administration Press.
8. Lee LM. (2010). Principles and Practice of Public Health Surveillance. Oxford University Press
9. Turnock B. (2011). Essentials of Public Health. Jones & Bartlett Publishers
10. Merson M, Black RE, Mills A. (2006). International Public Health: Diseases, Programs, Systems and Policies. Jones & Bartlett Learning.
11. Aschengrau A and Seage GR. (2008). Essentials of Epidemiology in Public Health. Boston, Massachusetts.

SEC 2. Business and Corporate Anthropology

Theory

Credit-2

Unit 1: History of Business and corporate Anthropology; Subject Matter of Business Anthropology: Organizational Anthropology, Marketing and Consumer Behaviour, Design Anthropology, Globalization and International communication.

Unit 2: Applied anthropology in industry; application of the ethnography in business Management: organizational ethnography, stages and advantages of ethnographic approach, ethical issues in ethnographic research.

Unit 3: Anthropology and consumer behaviour: cultural meaning to consumer behaviour; Anthropological approach to consumer behaviour: values and consumer behaviour, Heros and consumer behaviour, Rituals and consumer behaviour, Symbols and consumer behaviour.

Unit 4: Globalization, Regional Cooperation, and International Business: Cultural dimensions in international business: Hofstede and Ferraro; Cross-cultural Business Etiquette and Sensitivity in international communication

Practical

Credit-2

1. Visit a corporate sector and write a short report Case study
2. Study of interaction pattern in corporate sector with reference to ethnicity
3. Make a schedule on the structure of the corporate/MNC

4. Make a brief report only on one dimension of the corporate sector and give your assessment

Suggested Readings

1. Jordan, Ann T. *Business Anthropology*. Waveland Press, Long Grove, Illinois.
2. Whyte, W.F. 1948 Incentives for Productivity: The Case of the Bundy Tubing Company *Applied Anthropology* 7(2):1-16
3. Gardner, Burleigh B. 1978 Doing Business with Management. In *Applied Anthropology in America*, Elizabeth M. Eddy and William Partridge (Eds.). New York: Columbia University Press. Pp.245- 260.
4. *Handbook of Anthropology in Business* by Rita M Denny.
5. *Advanced reading in Business Anthropology* edited by Robert Guang Tian, Daming Zhu, Alfons van Marrewijk.

SEC 3. Media Anthropology

Theory

Credit-2

Unit 1: Introduction to Media Anthropology; Audiences, Consumption and Identity Formation: The Social and Material Life of Cinema; Television and the Cultural Politics of Nation, Media as Material Objects.

Unit 2: The Cultural Work of Mass Media Production: Producing “Bollywood”.

Unit 3: Producing Reality - Journalism and Advertising; News as Social Practice; the Local and the Global in Advertising.

Unit 4: Small Media: Materiality, Circulation, Everyday Life & Social Transformations; Indigenous Media and Cultural Activism; The Social and Material Lives of Cell Phones; Media as Social Infrastructure - The Case of Facebook; Learning from New Media; The Possibilities & Constraints of YouTube.

Practical

Credit-2

1. Visit to Mass Media Company and submit a report on any one dimension.
2. Making a schedule and testing the same in the field with focus on either cinema or television
3. Describe the components of mass media in its different parts
4. Submit a report on the behavioural pattern of media people.

Suggested readings

1. Rothenbuhler, Eric W; Coman, Mihai. *Media Anthropology*. 2005. California, Sage.
2. Askew, K and R.R. Wilk (Eds.). 2002. *The Anthropology of Media- a Reader*. Blackwell Publishers Ltd, USA.
3. Brauchler, B and J. Postill (Eds.). 2010. *Theorising Media and Practice*. Berghahn Books.

SEC 4. Tourism Anthropology

Theory

Credit-2

Unit I: Tourism- anthropological issues and theoretical concerns, tourist as ethnographer; pilgrimage and Authenticity Issues.

Unit II: Interconnections between tourism history and the rise of the socio-cultural study of tourism including temporary migration, colonial exploration, pilgrimage, visiting relatives, imagined and remembered journeys, and tourism.

Unit III: understand the implications of tourism as a major mechanism of cross-cultural interaction; role of symbolism, semiotics, and the imagination in tourism; tourism and the commodification of culture or cultural degradation.

Unit IV: understand the global and local political economy of contemporary tourism, particularly in relation to international development; explore dynamic relationships between heritage-making enterprises, revival and preservation projects, the international flow of capital; role of museums and other branches of the cultural industries" (including music, art, and food) in tourism economies; tourism and global mobility; Ecotourism and sustainable development.

Practical

Credit-2

1. Visit a place, identify a population and write a short report Case study
2. Make a brief report only on one dimension of the tourism sector and give your assessment

Suggested Readings

1. Chambers E. (2000). *Native Tours: The Anthropology of Travel and Tourism*. Prospect Heights: Waveland.
2. Crick M. (1995). *The Anthropologist as Tourist: An Identity in Question*. In Lanfant MF, Allcock JB, Bruner EM (eds.) *International Tourism: Identity and Change*. London: Sage. pp. 205-223.
3. Dann GMS, Nash D and Pearce PL. (1988). *Methodology in Tourism Research*. *Annals of Tourism Research*. 15:1-28.
4. Gmelch SB. (2004). *Tourists and Tourism: A Reader*. Long Grove: Waveland.
5. Graburn NHH. (1977). *Tourism: The Sacred Journey*. *Hosts and Guests: The Anthropology of Tourism*. Valene L. Smith, ed. Philadelphia: University of Pennsylvania Press. Pp. 33-47.
6. Dann G. (2002). *The Tourist as a Metaphor of the Social World*. Wallingford: CAB International.
7. Nash D. (1996). *Anthropology of Tourism*. New York: Pergamon.
8. Kirshenblatt-Gimblett B.(1998). *Destination Culture: Tourism, Museums, and Heritage*. University of California Press.

9. Lippard LR. (1999). *On the Beaten Track: Tourism, Art and Place*. New Press.
10. Picard M and Wood R. (1997). *Tourism, Ethnicity, and the State in Asian and Pacific Societies*. University of Hawai Press.
11. Crick M. (1994). *Anthropology and the Study of Tourism: Theoretical and Personal Reflections*. In Crick M (eds.). *Resplendent Sites, Discordant Voices: Sri Lankans and International Tourism*. Chur, Switzerland: Harwood Publishers.
12. Wood R. (1997). *Tourism and the State: Ethnic Options and the Construction of Otherness*. In Picard and Wood *Tourism, Ethnicity and the State in Asian and Pacific Societies*. University of Hawai Press. *Otherness*. In Picard and Wood *Tourism, Ethnicity and the State in Asian and Pacific Societies*. University of Hawai Press.
13. Richard B. (1992). *Alternative Tourism: The Thin Edge of the Wedge*. In Valene Smith and Eadington *Tourism* (eds.). *Alternatives: Potentials and Problems in the Development of Tourism*. University of Pennsylvania Press.
14. Hitchcock. (1997). *Cultural, Economic and Environmental Impacts of Tourism Among the Kalahari*. In Chambers E (eds.) *Tourism and Culture: An Applied Perspective*. SUNY Press.

SEC 5. Museology and Cultural Resource Management

Theory

Credit-2

Unit-I Museum, Museology and New Museology

Museum and Museology: Meaning, Definition, Nature and Scope; Classification of Museums in India--National Museum, State Museum, University Museum, Specialized Museums in India.
New Museology: Concept and scope, New Museum Movement

Unit-II Museum Administration, Acquisition, Display and Documentation:

Museum Administration: Staff

Acquisition and Arrangement of Specimens: Modes and ways of Acquisition of Museum Specimens, Principles of Display and Arrangement in Museums (including lighting)

Documentation and Labels of Museum Specimens: Methods of Documentation, Documentation of Ethnographic and Archaeological Specimens,

Unit-III Management of Cultural Resources in Museum (Storage, Security and Conservation)

Museum Storage: Location of the storage, Storage Furniture, Lighting and Ventilation in Storage, Methods of Storage, Visual Storage.

Security in Museum: Security Risks of Museum Objects, Preventive Measures.

Conservation of Cultural Resources in Museum: Causes of Decay and Deterioration, Care and Handling, Cleaning and Repairing, Packing and

Shifting of Museum Objects; Preservation of Organic and Inorganic Objects in Museums.

Unit-IV Educational and Extension Activities of Museum

Museum Education, Tourism and Museums, Travelling Exhibition, Museum Library and Publication, Public Relations, Museum and Communities

Practical

Credit-2

1. Development of Computer based Documentation; Museum Labels; Dioramas, Models and Charts; Museum Photography.
2. Cleaning and Repairing, Packing and Shifting of Museum Objects; Preservation of Organic and Inorganic Objects in Museums.

Suggested Readings:

1. Agrawal, O. P. and Shashi Dhawan 1985 Control of Biodeterioration in Museums. National Research Laboratory for Conservation of Cultural Property, Lucknow.
2. Agrawal, O. P. and Mandana Barkeshli 1997 Conservation of Books, Manuscripts and Paper Documents. INTACH, Indian Council of Conservation Institutes, Lucknow.
3. Aiyappan, A. and S.T. Satyamurti (Ed), 1960, Handbook of Museum Technique, Government Museum, Madras.
4. Banerjee, N. R. 1990, Museum and Cultural Heritage in India. Agamkala Prakashan, Delhi.
5. Basa, K.K., Md. Rehan, R.K. Gupta 2007, Museology A Comprehensive Bibliography and Webliography, Serial Publications, New Delhi.
6. Basa, K. K. 2010 Museums in India: From Colonial Constructs to Post-Colonial Engagements. Jhargram: INCAA Publications
7. Behera, B.K. and S.K. Mohanty, 2007, Museology and Museum Management in India, Mayur Publications, Bhubaneswar, Orissa.
8. Bhatnagar, A.1999, Museum, Museology and New Museology, Sandeep Prakashan, New Delhi.
9. Diwvedi, V. P. and G.N. Pant(Ed) 1980, Museum and Museology: New Horizon, Agam Kala Prakashan, New Delhi.
10. Ghoshmaulik, S.K. and K. K. Basa (Ed) 2001, Understanding Heritage: Role of Museum, Academic staff Collage, Utkal University, Bhubaneswar, India.
11. Nair, S. M., 1970. Bio-Deteriorations of Museum Materials, Agam Kala Prakashan, New Delhi.
12. Nigam, M. L., 1985 Fundamentals of Museology, Deva Publications, Hyderabad.

13. Sarkar, H. 1981, *Museums and Protection of Monuments and Antiquities in India*, Sandeep Prakashan, New Delhi.
14. Stone, P.G. and B. L. Molyneaur 1994, *The Present Past: Heritage Museums and Education*, Routledge, London.
15. Thompson, J.M. (Ed.) 1992, *Manual of Curatorship: A Guide to Museum Practice*, Butterworth-Heinemann Ltd. Oxford.