

**UNIVERSITY OF DELHI**  
**MASTER OF SCIENCE**  
**(ANTHROPOLOGY)**  
(Effective from Academic Year 2019-20)

**PROGRAMME BROCHURE**  
**ANTHROPOLOGY**



XXXXX Revised Syllabus as approved by Academic Council on XXXX, 2018 and  
Executive Council on YYYY, 2018

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## **I. About the Department**

- *Historical background of Department*

In 1947, the Department of Anthropology was founded in the Faculty of Science at the University of Delhi, with Dr. P.C. Biswas (M.Sc., Calcutta, Ph.D Berlin) as its Head, when Sir Maurice Gwyer was the Vice Chancellor of Delhi University. It was the second anthropological institute in the country. The Department started in two rooms in the old building of the Department of Zoology, then shifted to the new building of the Arts Faculty in 1949, and later came to occupy its present building- the erstwhile Prince's Pavilion facing Mughal Garden in 1966. Laboratories and lecture halls were added to meet the needs of the growing discipline. From a humble beginning of two rooms today it has 6 laboratories (general and specialized), lecture halls, teacher's rooms, library, and an ethnographic museum. The Museum when it was located in the Arts Faculty building had the distinction of having the visit and blessings of our beloved Prime Minister Pandit Jawaharlal Lal Nehru who regularly donated ethnographic specimen and cultural objects from his personal collection throughout his tenure. This tradition was continued by his distinguished daughter, Prime Minister Indira Gandhi. In its present location, Prince Charles, Prince of Wales, visited the museum in 1980. The Department which in 1947 had a faculty of two members has now 19 members and a number of research associates, DST women scientists, research fellows and scholars which include JRF, SRF and Inspire fellows. Now the Department is headed by Professor P. C. Joshi (2019) to give new focus on the teaching and research in Anthropology and Forensic Science.

- *Department Highlights in terms of its ranking, courses*

The Department has made an immense contribution with respect to the generation of Anthropological knowledge. The Department has featured among the top 100 in QS World University ranking by Subject 2016-2017, the only Anthropology department from India to achieve this status.

The Department has been actively engaged in Teaching and research in all branches of Anthropology. The Department offers courses like B.Sc. (Hons.), M.Sc.; M.Phil. and Ph.D. Programme in Anthropology; One Year Certificate Course in Forensic Science since 1968 and M.Sc. Forensic Science from 1975.

Several braches of Anthropology have been exclusively designed and taught to the students by our faculties. The Department has well equipped and functioning Laboratories and Teachers ensure that the syllabus course the latest development in the discipline.

- *About the programme*

The Masters in Anthropology is a two year programme with four semesters.

- *About Post Graduate Attributes. The course will focus on the human development from various aspects and reasons thereof. It highlights the relationship between Biology, Culture and Environment.*
- *About the process of course development involving various stakeholders at different stages. (As per the notification from the University).*

## **II. Introduction to CBCS (Choice Based Credit System)**

### **Choice Based Credit System:**

The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill-based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Grading system provides uniformity in the evaluation and computation of the Cumulative Grade Point Average (CGPA) based on student's performance in examinations which enables the student to move across institutions of higher learning. The uniformity in evaluation system also enable the potential employers in assessing the performance of the candidates.

### **Definitions:**

- (i) 'Academic Programme' means an entire course of study comprising its programme structure, course details, evaluation schemes etc. designed to be taught and evaluated in a teaching Department/ Centre or jointly under more than one such Department/ Centre
- (ii) 'Course' means a segment of a subject that is part of an Academic Programme
- (iii) 'Programme Structure' means a list of courses (Core, Elective, Open Elective) that makes up an Academic Programme, specifying the syllabus, Credits, hours of teaching, evaluation and examination schemes, minimum number of credits required for successful completion of the programme etc. prepared in conformity to University Rules, eligibility criteria for admission
- (iv) 'Core Course' means a course that a student admitted to a particular programme must successfully complete to receive the degree and which cannot be substituted by any other course
- (v) 'Elective Course' means an optional course to be selected by a student out of such courses offered in the same or any other Department/ Centre
- (vi) 'Open Elective' means an elective course which is available for students of all programmes, including students of same department. Students of other Department will opt these courses subject to fulfilling of eligibility of criteria as laid down by the Department offering the course.
- (vii) 'Credit' means the value assigned to a course which indicates the level of instruction; One-hour lecture per week equals 1 Credit, 2 hours practical class per week equals 1 credit. Credit for a practical could be proposed as part of a course or as a separate practical course
- (viii) 'SGPA' means Semester Grade Point Average calculated for individual semester.

(ix) 'CGPA' is Cumulative Grade Points Average calculated for all courses completed by the students at any point of time. CGPA is calculated each year for both the semesters clubbed together.

(x) 'Grand CGPA' is calculated in the last year of the course by clubbing together of CGPA of two years, i.e., four semesters. Grand CGPA is being given in Transcript form. To benefit the student a formula for conversation of Grand CGPA into % age marks is given in the Transcript.

### III. Anthropology Programme Details:

#### Programme Objectives (POs):

- The students of M.Sc. Anthropology should learn the history, branches and scope of anthropology.
- They should comprehensively understand the concepts and theories of major branches of anthropology i.e. Biological, Social and Archaeological anthropology.
- Students should be familiar with approaches, techniques, methodology and study designs commonly used in anthropological research.
- They must understand the nuances of conducting population based fieldwork independently and collecting useful qualitative and quantitative data pertaining to their research work. They should be aware of ethical principles and right to privacy and data protection.

#### Programme Specific Outcomes (PSOs):

- Students should have reasonable level of theoretical and practical knowledge of advance elective they have opted during this course in anthropology.
- A student of anthropology should be able to relate all the core and elective papers with each other and with overall health of populations, their relation with social and political environment of communities.
- They should achieve the efficiency in detecting the major health or social problems of society/populations and they should themselves give research based feasible solutions related any aspect of human life.
- Students should finally understand the importance of anthropological research in policy making and improving human life.

#### Programme Structure:

The Anthropology programme is a two-year course divided into four-semester. A student is required to complete XXXX credits for the completion of course and the award of degree.

		<i>Semester</i>	<i>Semester</i>
<b>Part – I</b>	First Year	Semester I	Semester II
<b>Part – II</b>	Second Year	Semester III	Semester IV

## Course Credit Scheme

Semester	Number of Papers	Credits				
		Theory	Practical	Dissertation	Open Electives	Total Credits
		<b>4 credit per Paper</b>	<b>2 credit per paper</b>	<b>4 credits</b>	<b>4 credits</b>	
<b>Semester-I</b>	4	4x4 papers= <b>16</b>	2x 4 practicals = <b>8</b>	-	-	<b>24</b>
<b>Semester-II</b>	4	4x4 papers= <b>16</b>	2x 3 practicals = <b>6</b>	-	-	<b>22</b>
<b>Semester-III</b>	4	4x3 papers= <b>12</b>	2x3 practicals = <b>6</b>	-	<b>3 credits Theory</b> <b>1 credit Practical</b>	<b>22</b>
<b>Semester-IV</b>	4*	4x3papers= <b>12</b>	2x3 practicals = <b>6</b>	<b>4</b>	-	<b>22</b>
<b>TOTAL</b>	<b>16</b>	<b>56 credits</b>	<b>26 credits</b>	<b>4 credits</b>	<b>6</b>	<b>90</b>

*\*It includes one dissertation and three papers*

*Theory paper 4 credits (100 marks);*

*Practical- 2 credits;*

*Dissertation-4 credits (100 marks)*

*Open Electives-4 credits (100 marks)*



<b><u>(Table-1)</u></b>	
<b>M.Sc. Anthropology (2019)</b>	
<b>I<sup>st</sup> Semester [Core Papers]</b>	<b>II<sup>nd</sup> Semester [Core Papers]</b>
1. Fundamentals of Biological Anthropology 2. Fundamentals of Social Anthropology 3. Archaeological Anthropology 4. Anthropology of India: Ethnic and Cultural Diversity (Physical and Social)	1. Human genetics 2. Research Methods and Techniques 3. Social Institutions 4. Human Ecology: Biology and Cultural Dimensions
<b>III<sup>rd</sup> Semester</b>	
<b>The students will opt for three core papers from Group A or Group B</b>	
<b>Group A</b>	<b>Group B</b>
<b>Biological Anthropology [Core Papers]</b>	<b>Social Anthropology [Core Papers]</b>
1. Palaeoanthropology 2. Human Population Genetics 3. Human Growth Development and Nutrition 4. Demographic Anthropology	1. Anthropological Theory I 2. Anthropological Theory II 3. Epistemological Foundations of Social and behavioural Sciences 4. Tribal India
<b>Students are required to opt one Open Common Elective Papers from the list given below:</b>	
1. Bio-cultural Dynamics among Indian Population 2. Anthropology in Practice 3. Prehistory of India	
<b>IV<sup>th</sup> Semester [Core Papers]</b>	
<b>Group A</b>	<b>Group B</b>
1. Dissertation (based on fieldwork of at least 2 weeks)	1. Dissertation (based on fieldwork of at least 2 weeks)
<b>Opt three papers from Stream A and B: The students should opt at least two elective papers from stream A or stream B. One elective paper can be opted from either of the stream A &amp; Stream B (list of electives given below) :</b>	
<b>Biological Anthropology [Elective Papers] (Stream A)</b>	<b>Social Anthropology [Elective Papers] (Stream B)</b>
1. Molecular Anthropology 2. Physiological anthropology 3. Kinanthropometry and Ergonomics 4. Forensic Anthropology 5. Nutritional Anthropology 6. Epidemiology and Public Health 7. Primate Biology and Behaviour 8. Dermatoglyphics 9. Human Population Studies	1. Psychological Anthropology 2. Urban Anthropology 3. Gender and Society 4. Developmental Anthropology 5. Ecological Anthropology 6. Medical Anthropology 7. Anthropology of religion 8. Visual Anthropology 9. Business and Corporate Anthropology

**Selection of Elective Courses:**

Already specified and as per notification from the University. (See Table 1)

**Teaching:**

The faculty of the Department is primarily responsible for organizing lecture work for Anthropology. The instructions related to tutorials are provided by the respective registering units under the overall guidance of the Department.

There shall be 90 instructional days excluding examination in a semester.

(Add details about Projects/Dissertation and role of supervisor)

- The topic of the dissertation / project will be allotted by the teacher in-charge who will undertake the fieldwork.
- The student will submit two copies of the dissertation and will be examine by the Board of Examiners.
- The student can choose the topic from any stream/ core papers/ elective papers/ common elective papers

**Eligibility for Admissions:**

Category Id	Course Requirements	Marks Requirements
1	B.Sc. (Hons.) Anthropology (3 Years Course after (10+2) from University of Delhi or any other University whose examination is recognized by the University of Delhi as equivalent and fulfilling other conditions of eligibility	55% or above marks in aggregate or equivalent grade
2	B.Sc. /B.A. in Anthropology from any other University whose examination is recognized by the University of Delhi as equivalent and fulfilling other conditions of eligibility.	55% or above marks in aggregate or equivalent grade
3	B.Sc.(Hons.) / B.Sc. (General) B.A. (Hons.)/B.A. (Pass) with Anthropology as one of the subjects from any other University whose examination is recognized by the University of Delhi as equivalent and fulfilling other conditions of eligibility	55% or above marks in aggregate or equivalent grade
4	B.Sc. (Hons.) in Life Sciences, Biomedical, Zoology & Health Sciences/ B.Sc. in any branch of Science from University of Delhi or any other University whose examination is recognized by the University of Delhi as equivalent and fulfilling other conditions of eligibility.	60% or above marks in aggregate or equivalent grade.
<b>Eligibility in Merit Category</b>		
Category Id	Course Requirements	Marks Requirements
5	B.Sc. (Hons.) Anthropology (3Years Course after 10+2) from Delhi University only.	60% or above marks in the aggregate or equivalent grade.

The syllabus for the entrance examination of each postgraduate course is the corresponding B.A./B.Com/B.Sc. (or equivalent) syllabus of the University of Delhi. The syllabus of BSc. (H) Anthropology is available at website of University of Delhi.

**Assessment of Students' Performance and Scheme of Examinations:**

- English shall be the medium of instruction and examination.
- Assessment of students' performance shall consist of:  
(Point wise details of internal assessment and end semester examination, their weightage and scheme to be given)  
(Assessment will be based on Learning Outcomes for the course) and as per University Rules.

**Pass Percentage & Promotion Criteria:**

Minimum marks for passing the examination in each semester shall be 40% in each paper and

45% in aggregate of a semester

**Part I to Part II Progression:**

(Provide department policy about semester to semester progression, policy for re-appearance, policy in case of failing in one or more papers)

**Conversion of Marks into Grades:**

(specify the formula for conversion of marks into grades)

**Grade Points:**

Grade point table as per University Examination rule

**CGPA Calculation:**

As per University Examination rule.

**SGPA Calculation:**

**Grand SGPA Calculation:**

**Conversion of Grand CGPA into Marks**

As notified by competent authority the formula for conversion of Grand CGPA into marks is: Final %age of marks = CGPA based on all four semesters  $\times$  9.5

**Division of Degree into Classes:**

Post Graduate degree to be classified based on CGPA obtained into various classes as notified into Examination policy.

**Attendance Requirement:**

(specify components for marking attendance of students)

**Span Period:**

No student shall be admitted as a candidate for the examination for any of the Parts/Semesters after the lapse of **four** years from the date of admission to the Part-I/Semester-I of the Anthropology Programme.

**Guidelines for the Award of Internal Assessment Marks Anthropology Programme (Semester Wise)**

(Mention the components of Internal Assessment and the scheme for awarding marks for students' attendance)

IV: Course wise content Details for Anthropology

## MASTER of Science

### Semester I/ Course Code: Fundamentals of Biological Anthropology

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### Course Objectives:

- To understand the history and scope of biological anthropology
- To study the comparative anatomy of man
- To describe the phylogeny and taxonomy of primates
- To understand the fundamentals of human evolution

#### Course Learning Outcomes:

Students will be

- Able to describe scope of studying biological anthropology
- Able to understand the human anatomy
- Familiar with the variation in primates and their behavior
- Familiar with the basic principles of human evolution

#### Course Contents:

- Unit I** History and development of physical/ biological Anthropology, aim, scope and its relationship with allied disciplines.
- Unit II** Theories of evolution- Lamarckism, Darwinism, Punctuated Equilibrium, Synthetic theory, Neomutationism.
- Unit III** Distribution, classification and characteristics of living primates. Comparative anatomy of man and non-human primates with special reference to skull, pelvis, dentition and long bones. Evolution of brain and senses.
- Unit IV** Bio-genetic basis of phylogeny and taxonomy of primates.
- Unit V** Primate behaviour with special reference to rhesus monkeys, baboons, langurs and apes.
- Unit VI** Concept of Race, historical development, formation and criteria of racial classification. Racial classification of Hooton's, Deniker's, Coon, Garn and Birdsell's and Boyd's .UNESCO statement.
- Unit VII** Human evolution with respect to hominoid fossil.

### **Suggested Literature:**

- Turnbaugh, N. A., Jurmain, R., Igoe, L. K., & Neison (2002). Understanding Physical Anthropology and Archaeology. Wadsworth Group, Canada.
- Lasker, G.W., Holt, & Rinehart (1976). Physical Anthropology. Winston Inc.
- Ember, Ember, & Peregrine (2003). Anthropology. Prentice Hall Inc.
- John, H., Relethford, Mc Graw-Hill (1996). Fundamentals of Biological Anthropology, (Third Ed).
- Standford, Allen, John, S., Anton, & Susan C. Exploring Biological Anthropology: The Essentials.. Prentice Hall.

### **Practical/ Project**

**Somatometry:** The students will take the following measurement on twenty subjects (10 males & 10 females)

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

### **Somatoscropy**

1. Head form
2. Hair form
3. Facial form
4. Eye form
5. Nose form
6. Hair colour
7. Eye colour
8. Skin colour

**Craniometry** : The student will take the craniometric measurements on five skulls.

10 Craniometric measurements to be decided by the concerned teachers.

## MASTER of Science

### Semester I/ Course Code: Fundamentals of Social Anthropology

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### Course Objectives:

- The objective of this course is to familiarize the students with the discipline of social anthropology, its historical roots subject matter and its scope in India and abroad. It would also look at different traditions in social anthropology and the debates relating to the nature of society and culture
- It would apprise students with the recent advances in the field of social anthropology by focusing upon its emerging branches.

#### Course Learning Outcomes:

- The students will be able to understand and apply the basic concepts like groups, institutions, organization and community in understanding of society and culture.
- They should be able to appreciate the significance of social anthropology and its contemporary role in the society.
- They will also critically understand the various approaches to understand society and culture be able to understand how the knowledge of anthropology is important for health, business, ecology, psychology, media and public policy.

#### Contents:

- Unit I** Subject matter, scope and its relations with other subjects, such as sociology, linguistics , psychology, history and economics
- Unit II** Historical roots of anthropological tradition: classical social anthropology: evolutionism, diffusion and early American school.
- Unit III** Concept of society and culture and its characteristics, status and role; groups, association, community, institution and organization. (Socio cultural change)
- Unit IV** Approaches to the study of society and culture : functional ( pattern and integration), action oriented, Marxist, structuralism, poststructuralist and feminist, Interpretive and postmodernism
- Unit V** Emerging branches of Social anthropology: Medical anthropology; Psychological anthropology, Business anthropology, Ecological anthropology, Social anthropology of Climate change and Disaster, Media/Visual anthropology, Social anthropology of public policy.

## PRACTICAL: READINGS OF ETHNOGRAPHY

The student will be required to critically comment on the methodology and findings of an ethnographic account as directed by the teacher concerned.

1. The student should be able to critically examine the theoretical approach followed.
2. Make a critical evaluation of data used.
3. Suggest alternative analytical tools.
4. Evaluate the impact made by this ethnography an anthropological theory.

### Suggested Readings:

1. Barnard, Alan. 2000. History and theory in anthropology. Cambridge, U.K.: Cambridge University Press.
2. Beattie, John. 1968. Other cultures: Aims, Methods and Achievements in Social Anthropology. Free Press.
3. Davis, Kingsley. 1949. Human society. New York: Macmillan Co.
4. Ember, C.R., Melvin Ember, Peter N. Peregrine. 2007. Anthropology. Pearson Education, Inc.
5. Metcalf, Peter. 2005. Anthropology: the basics. Abingdon [England]: Routledge.
6. Nadel, S. F. 1951. The foundations of social anthropology. Glencoe, Ill: Free Press.
7. Ingold, Tim. 1994. Companion encyclopedia of anthropology. Routledge reference. London: Routledge.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	Understand and apply the basic concepts like groups, institutions, organization and community in understanding of society and culture	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	Appreciate the significance of social anthropology and its contemporary role in the society	Lecture and class discussion.	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	Understand how the knowledge of anthropology is important for health, business, ecology, psychology, media and public policy.	Class lecture, emphasis on case studies	Discussion and class presentation

## **MASTER of Science**

### **Semester I/ Core paper: Fundamentals of Archaeological Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### **Course Objective:**

- To make students learn the concepts of archaeological anthropology, tool typology, identification and their cultural interpretations

#### **Course Learning Outcomes:**

- The Course will explain the basic concepts and terminology used in prehistoric archaeology
- Understand the chronological and cultural determinants of Indian prehistory
- Understand chronological and cultural determinants of European prehistory
- Appreciate the new trends in archaeological anthropology

#### **Course Contents**

##### **UNIT I** The Framework of Archaeology

- i. History of Development
- ii. Basics of Archaeology
- iii. Dating Methods- Relative dating and Absolute dating
- iv. Introduction to Social Archaeology
- v. Environmental Archaeology
- vi. Cognitive Archaeology
- vii. Ethno-Archaeology

##### **UNIT II** European Prehistory

- i. Introduction to Prehistory of Europe: Chronology and Terminology.
- ii. Lower Palaeolithic Culture of Europe.
- iii. Middle Palaeolithic Culture of Europe.
- iv. Upper Palaeolithic Culture of Europe.

- v. Paleolithic Art of Europe.
- vi. Mesolithic Culture of Europe.
- vii. European Prehistory in 21<sup>st</sup> Century: With Special Reference to Dmanisi of Georgia, Iserniala Pineta, Monte Poggiolo, Pirro Nord of Italy and Atapuerca of Spain.

### **UNIT III Indian Prehistory**

- i. Introduction of Indian Prehistory: Chronology and Terminology.
- ii. Lower Palaeolithic Culture of India.
- iii. Middle Palaeolithic Culture of India.
- iv. Upper Palaeolithic Culture of India.
- v. Prehistoric Art in India.
- vi. Mesolithic Culture of India.
- vii. Neolithic Culture of India.
- viii. Indus Valley Civilization.
- ix. Megalithic Cultures of India.
- x. Indian Prehistory in 21<sup>st</sup> Century: Problems and Challenges.

### **UNIT IV New Trends in World Prehistory: Origin and Dispersal of Earliest Homo from Africa**

- i. The First Human Settlement of Europe during Lower Pleistocene Epoch.
- ii. The First Human Settlement of Asia during Lower Pleistocene Epoch.

### **Suggested Literature**

1. Bhattacharya, D.K. (2006). An outline of Indian Prehistory. Delhi: PalakaPrakashan.
2. Bhattacharya, D.K. (1977). Palaeolithic Europe. Netherland: Humanities press.
3. Sankalia, H.D. (1974). Prehistory and Protohistory of India and Pakistan. Pune: Deccan College.
4. Renfrew, C., and P. Bahn., (2001). Archaeology: Theories methods and Practices, London: Thames and Hudson.
5. Fagan B. M. (2004). People of the Earth: An Introduction to World Prehistory. New Jersey: Pearson Education.
6. Renfrew, C. (ed.). (1973). The Explanation of culture change: Models in prehistory. London. Duckworth.
7. Hole, H. and R.F. Heizer. (1969). An Introduction to Prehistoric Archaeology. New York: Hold, Rinehart and Winston, INC.
8. Sankalia, H. D. (1977). Prehistory of India. Delhi: MunshiramManoharlal Publishers Pvt. Ltd.
9. Possehl, G. L. (2002). The Indus Civilization: Contemporary Perspectives. New Delhi: Vistaar publication.

10. Bailey, G., & P. Spikins (eds.). (2008). *Mesolithic Europe*. Cambridge: Cambridge University Press.
11. Allchin, B., & R. Allchin. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
12. Singh, M. K. (2013). *The Prehistory of Kharagpur Hills, South Bihar (India)*. Archaeopress: Oxford.
13. Devi, N. A., & Singh M. K. (2017). *Neolithic Culture of North- East India (with special reference to Manipur)*. Delhi: Research India Press.

### **Practical**

1. Quaternary geological formations
2. Detailed Study and Understanding of tool types-
  - i. Lower Palaeolithic Culture
  - ii. Middle Palaeolithic Culture
  - iii. Upper Palaeolithic Culture
  - iv. Mesolithic Culture
  - v. Neolithic Culture
  - vi. Art objects
  - vii. Bone Tools and artefacts

### **Suggested Literature**

1. Bhattacharya, D.K. (1979). *Old Stone Age Tools: A Manual of Laboratory Techniques of Analysis*. Calcutta: K. P. Bagchi and Company.
2. Inizan, M.L., Ballinger, M .R., Roche, H., and Tixier, J. (1999). *Technology and terminology of Knapped Stone*. Nanterre: CREP.
3. Oakley, K.P. (1972). *Man the Tool Maker*. London. Trustees of the British Museum Natural History.
4. Sankalia, H.D. (1982). *Stone Age Tools: Their techniques, Names and Probable Functions*. Poona: Deccan College.
5. Debenath, A. & L. Dibble. (1993) *Handbook of Palaeolithic Typology*. Philadelphia: university of Pennsylvania.

### **Facilitating the achievement of Course Learning Outcomes**

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	Explain the basic concepts and terminology used in prehistoric archaeology	Class lecture and discussion	Written Assignment
2.	Understand the chronological and cultural determinants of Indian prehistory	Class lecture and discussion	Compulsory Discussion
3.	Understand chronological and cultural determinants of European prehistory	Class lecture and discussion	Classroom debate
4.	Appreciate the new trends in archaeological anthropology	Class lecture and discussion	Critical review of a research article

## MASTER of Science

**Semester I/ Course code : Anthropology of India: Ethnic and Cultural Diversity**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

### **Course Objectives:**

- This course is divided into two sections, the first section looks at the ethnic or the biological composition of the Indian population and the second section examines the cultural diversity of people of India.
- There have been numerous attempts made to classify the people of India on the basis of genetic, linguistic, cultural, economic and ecological markers. This paper would be a critical appraisal of all such systems of classification. It would also deal with the origin, evolution and foundation of social life in India and the composition of Indian civilization.
- The underlying focus of this paper is on the factors which contributes to the unity of Indian civilization in spite of the wide diversity.

### **Course Learning Outcomes:**

- In term of biological variations the students will be able to critically analyse the contributions of Risley, Guha, Rickstett and Sarkar towards understanding ethnic elements in the Indian populations.
- They would able to understand the composition origin and evolution of Indian civilization and thereby appreciate the contextual and reflexive nature of Indian civilization and shortcoming of the universal approaches of western theories.
- They will be able to explain the critical concepts of tribe caste, class, gender in understanding of Indian social reality.

### **Contents:**

#### **Section A**

**Unit I** A critical appraisal of contributions of Risley, Guha, Rickstett and Sarkar towards understanding ethnic elements in the Indian populations.

**Unit II** Pre and Proto historic racial elements in India.

**Unit III** Linguistic classification of Indian population.

**Unit IV** Recent trends in Indian Population Genetic Studies.

**Unit V** Nutritional and health problems with reference to women and children in India.

## Section B

- Unit VI** Introduction to Indian Civilization: Foundations of social life - The origin and evolution of social structures and their underlying philosophies.
- Unit VII** Understanding the diversity in Indian social structure, Culture zones in India.. Social reality – Caste, class, tribe, communal and gender hierarchies.
- Unit VIII** Tribes of India : Definitional Issues, Place in Indian Civilization, Classification and distribution; Diversity of social organization . Linkages with other communities, modernizations and ethnicity issues.
- Unit IX** Caste system and its structure. Ritual, economic and social aspects of caste. Relevance of caste in Indian social structure, Changes in the caste system.
- Unit X** Urbanization and urban social structure, Changes in Urban India .

## Suggested Literature

1. Bose, N.K. 1961. *The Structure of Hindu Society*. Delhi Orient Longman .
2. Cohn S. Bernard: 2000. *India: The Social Anthropology of Civilization*. Delhi: Oxford University Press.
3. Dirks Nicholas. 2001. *Castes of Mind: Colonialism and the Making of Modern India*. Princeton University Press.
4. Gupta, Dipankar (ed). *Social Stratification*. Delhi: Oxford University Press.
5. Karve, Irawati 1961. *Hindu Society : An Interpretation* . Poona : Deccan College
6. Mandelbaum, D.G., 1970. *Society in India : Changes and Continuities*. Bombay : Popular Prakashan.
7. Srivastava V. K. 1997, *Religious Renunciation of a Pastoral people*. Delhi : :Oxford University Press

### Facilitating the achievement of Course Learning Outcomes

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	Critically analyse the contributions of Risley, Guha, Rickstett and Sarkar towards understanding ethnic elements in the Indian populations	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Written Assignment
2.	Understand the composition origin and evolution of Indian civilization and thereby appreciate the contextual and reflexive nature of Indian civilization and shortcoming of the universal approaches of western theories.	Lecture and class discussion.	Debate and discussion.
3.	Explain the critical concepts of tribe caste, class, gender in understanding of Indian social reality.	Class lecture, emphasis on case studies	Discussion and class presentation

## MASTER of Science

### Semester II/ Core Paper : Human Genetics

**Marks: 100 Total Credits-4: Theory-4 credits (i.e. 100 marks);**

**Duration: 14 weeks (L= 4 hours per week,)**

#### Course Objectives:

- To understand the structure and function of human genome
- To describe the mechanisms that underpin the inheritance of traits in human populations
- To understand the role of genetic factors in health and disease
- To communicate genetic information in an explicable manner
- To understand the relevance of genetic data bases in human genetic research

#### Course Learning Outcomes:

Students will be

- Able to describe structure and function of human genome
- Able to understand the use of inheritance pattern underlying genetic diseases
- Familiar with types of genetic variations used to assess genetic traits/diseases
- Aware of big projects and data bases related human genome research

#### Course Content:

**Unit I History of Human Genetics:** Mendelian to Medical genetics

**Unit II Human Genome:**

- a. Chromosomes, DNA structure, Transcription, Translation, Protein coding genes, Conserved Elements and Repetitive Elements,
- b. Human Genome Project, HapMap Project, and 1000 Genome project.
- c. Variation in Human Genome: SNP, Sequence repeats, Insertion/Deletion, Copy number variants
- d. Cytogenetics: Heterochromatin, Euchromatin, Dosage compensation, chromosome bands and banding techniques

**Unit III Chromosomal Abnormalities:** Structural and Numerical chromosomal abnormalities

**Unit IV Mendelian Genetics:** Autosomal and Sex linked inheritance and related concepts (Penetrance and Variable expressivity), Codominant inheritance, Non-nuclear inheritance

**Unit V Heritability:** Concept of Heritability, Linkage, Haplotype, LOD score, Pedigree analysis, Multifactorial inheritance

**Unit VI Pharmacogenetics:** Concept of pharmacogenetics and relevance of conducting pharmacogenetic studies

**Unit VII Genetic Databases:** *Ensembl* and *OMIM* or any other latest database

**Practical: Nil**

**Readings:**

- Tom S., & , Read, A. (2010). Human Molecular Genetics, Fourth Edition. Garland Science
- Lewis, R. (2009). Human genetics: concepts and applications. McGraw-Hill
- Marks, J.(2017). Human Biodiversity: Genes, Race and History (Foundations of Human Behaviour). Routledge
- Vogel, & Motulsky. (2010). Human Genetics. Springer

**Facilitating the achievement of Course Learning Outcomes**

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	Able to describe structure and function of human genome	Class lecture and discussion	Written Assignment
2.	Able to understand the use of inheritance pattern underlying genetic diseases	Class lecture and discussion	Written Assignment
3.	Familiar with types of genetic variations used to assess genetic traits/diseases	Class lecture and discussion	Written Assignment
4.	Aware of big projects and data bases related human genome research	Class lecture and discussion	Written Assignment

**MASTER of Science**  
**Semester II/ Core paper : Research Methods and Techniques**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- This course will introduce the statistical techniques used in anthropological analysis.
- It will also introduce the basic research methods and techniques of social anthropology including the genealogical methods, observation including direct, indirect, questionnaire schedule and Interviews case study, FGD and the life history method.

**Course Learning Outcomes:**

- Students will be able to draw genealogies and collect verbal as well as non verbal data. They would be able to prepare questionnaire and schedule to collect information on a specific topic and also organize and take notes in a focus group discussion.
- They will be able to collect a life history and other data from a informant and analyse them to understand a problem given to them.
- They will be able operationalise all these methods and undertake a field based research and prepare a report on a given topic

**Course content:**

**Unit-I:** Research Methods: Concepts and Definitions

**Unit-II:** Presentation and Summarization of Data (Tables and Graphs)

**Unit-III:** Population and Samples

**Unit-IV:** Descriptive statistics

- I. Measurers of Central Tendency
- II. Measure of Variation: Range, Variance and Standard deviation.
- III. Normal Distribution, Skewness and Kurtosis

**Unit-V: Test of Significance**

- I. Student t Test
- II. Chi-square Test

**Unit-VI:** Pedigree Analysis

**Unit-VII:** Genealogical method: Construction of Genealogy.

**Unit-VIII:** Observation: Direct, Indirect, Participant, Non-participant, Controlled

**Unit-IX:** Fieldwork Research: Anthropological Fieldwork, Ethnographic Approach, Types of Ethnographies, Rapport Establishment and Impression Management in fieldwork, Data management in field Research.

**Unit-IX:** Questionnaire and Schedule, Interview- Unstructured, Structured, Key informant interview, Focused, Group Discussion, and Free listing, pile sorting Unit-X: Case study and life history

**Unit-XI:** Ethics in Research

### **Suggested Literature**

1. Bernard, (2011). *Field Research methods in Anthropology: Qualitative and Quantitative Approaches*. AltaMira Press.
2. Sarantakos, S. (1998). *Social Research*. London, McMillan Press.
3. Madriga, L. (2012). *Statistics for Anthropology*. Cambridge, Cambridge University Press. 2012.
4. Zar, Z. H. (2010). *Biostatistical Analysis*. Printice Hall.
- 5.
6. Barnard, H. R. (2006). *Research Methods in Anthropology. Qualitative and Quantative Approaches*. Rowman Altamira Press.
7. Patton, M.Q. (2014). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. Sage Publications.
8. Spradley, & James, P. (1980). *Participant Observation*. New York: Holt, Rinehart and Winston New York.
9. Srivastava, V. K. (1994). *Methodology and Fieldwork*. Oxford University Press.
10. Yin, R. K. (2008). *Case Study Research Design and Methods*. Sage.

### **Practical/ Projects: Research Methods and Techniques**

1. Nature of anthropological research.
2. Genealogical method: Construction of Genealogy.
3. Observation: Direct, Indirect, Participant, Non-participant, controlled.
4. Questionnaire and Schedule, Interview- Unstructured, Structured, Key informant interview, Focussed Group Discussion, and Free listing, pile sorting.
5. Case study and life history.
6. Project Report: The student shall undertake a project under which they will investigate and interpret a Physical or Social problem by collecting primary data from the field.

### Facilitating the achievement of Course Learning Outcomes

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	draw genealogies and collect verbal as well as non verbal data	Lecture and class practice	Practical exercise
2.	prepare questionnaire and schedule to collect information on a specific topic and also organize and take notes in a focus group discussion	Lecture and class practice	Practical exercise
3.	to collect a life history and other data from a informant and analyse them to understand a problem given to them	Lecture and class/field practice	Discussion and class presentation

## **MASTER of Science**

### **Semester II/ Core paper: Social Institutions**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### **Course Objectives:**

- This course deals with the institutionalize aspect of human behaviour and standardized mode of co-activity relating to the domain of kinship, family, marriage, economic, religion and the political institution.
- Students will be introduced to the basic concepts like descent, alliance, filiations, power, leadership, authority, sacredness and supernatural.

#### **Biological dimensions**

##### **Course Learning Outcomes:**

- The students will be able to understand the nuances of formulating definitions of some of the universals like family, marriage, kinship and gender in human society.
- They should be able to understand and explain the wide variations and myriad ways through which cultures evolve in the process human beings quest for living.

#### **Contents:**

**Unit I** Concepts of social institution and approaches

**Unit II** Kinship: definition and foundation, descent and alliance theories, kinship as a cultural principle and social mechanism. descent groups kinship terminology

**Unit III** Family and marriage : Concept and approaches, rules of marriage and kin terms, variation in family forms, Kinship, Marriage and Family in India ; Domestic group.

**Unit IV** Economic Institution : Formalist and substantivist approaches, Systems of production, distribution and exchange, Wealth and capital

**Unit V** Religion: Concept of Supernatural and approaches to the study of religion ; Religious Specialists; Witchcraft and Sorcery, Religion and its relationship to power in India

**Unit VI** Political Institution : Concept of power, leadership; issues of legitimacy and authority, customary laws ; nation state and citizenship

**Practical:**

1. The student is required to conduct interview of the functionaries of any of the institutions or as instructed by the course teacher. They are to write down the functioning of these institutions: - Family, Kinship, Economic, Religious and Political.
2. Case study of any of the social institution (religion, economic, political) or inter-relationship between the institutions with respect to cultural perspective. The project may be presented as text or visual.

**Suggested Literature**

Enber, C.R., Melvis Ember, Peter N. Peregrine 2007 Anthropology. Pearson Education

1. Douglas, Mary. 2012. How institutions think? Syracuse University Press.
2. Goody, Jack, and Meyer Fortes. 1973. The Character of kinship. Cambridge [Eng.]: University Press.
3. Harris, C. C. 1990. Kinship. Concepts in social thought. Minneapolis: University of Minnesota Press.
4. Karve, Irawati. 1968. Kinship organization in India. London: Asia Publ. House.
5. Lessa and Vogt (ed). 1979 A Reader in Comparative Religion. New York, Harper and Row.
6. Lévi-Strauss, Claude. 1969. The elementary structures of kinship. Boston: Beacon Press.
7. Michael Lambeck(ed), 2002. A Reader in the Anthropology of Religion. Malden, Blackwell.
8. Malinowski, B. 1967 Argonauts of the Western Pacific. London: Routledge and Kegan Pau
9. Radcliffe-Brown, A. R., and Cyril Daryll Forde. 1950. African systems of kinship and marriage. London: Published for the International African Institute by the Oxford University Press.
10. Vincent, Joan (ed.) . 2002. The anthropology of Politics: A reader in ethnography, theory and critique. Blackwell publisher

**Facilitating the achievement of Course Learning Outcomes**

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	Understand the nuances of formulating definitions of some of the universals like family, marriage, kinship and gender in human society	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Written Assignment
2.	Understand and explain the wide variations and myriad ways through which cultures evolve in the	Lecture and class discussion.	Debate and discussion.

	process human beings quest for living.		
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## MASTER of Science

### Semester II/ Core paper: Human Ecology: Biological & Cultural Dimensions

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### Course Objectives:

- This course is divided into two sections, the first section looks at the biological dimensions of the human Ecology and the second section examines the cultural aspects of human ecology.
- The paper would look at the biotic, abiotic and cultural dimensions of ecology in conjunction with one another.
- It will deal with various ecological stresses, the changing nature of human commons like air, water and soil, the impending ecological crisis, issues of climate change and how to resolve these issues.
- Students will be able to understand how human beings in various environmental settings adjust to their surroundings biologically. They will also learn about the importance of sustainable development in contemporary world.

#### Course Learning Outcomes:

- The students will be able to understand the contemporary ecological issues from both the biological and cultural dimension. Will be able to apply the concepts of ecosensitivity adaptation, acclimation, acclimatization, biotic and abiotic components in conjunction culture and how they affect the ecology of a place.
- The students will be able to address the issues of natural resources like air, water, forest and their conservation for a sustainable growth and development.
- Based on the learning they should be able to apply the concepts, formulate and undertake a research on any of the ecological issues.

#### Contents:

- To understand the potential ecological stressors that affects human being.
- How human beings by the process of their in-built biological mechanism or by adopting some cultural practices make an effort to minimize the effect of stress on their body.
- Cultural Ecology and Process of Adaptation.
- Concepts of Adaptation and Adaptive Strategies used in Cultural Ecology.

#### *Biological Dimensions*

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

**Unit II** Methods of studying human ecology.

**Unit III** Adaptation to various ecological stressors.

**Unit IV** Ecological rules and their applicability to human populations.

**Unit V** Impact of urbanization and industrialization on Man.

### **Cultural Dimensions**

**Unit VI** Culture as a tool of adaptation and the concept of nature

**Unit VII** Various modes of human adaptation -

- i. Hunting and food gathering
- ii. Pastoralism
- iii. Shifting cultivation
- iv. Ecological themes of state formation
- v. Neolithic revolution
- vi. Hydraulic civilization
- vii. Industrial civilization and growth of urban societies

**Unit VIII** Concept of Sustainability, commons and state of our air, water and forest.

**Unit IX** Emerging issue in Climate Change Adaptation

### **Suggested Literature (biological)**

1. Berry, J.B. . 1976. Human ecology and cognitive style: comparative studies in cultural and physical adaptation. New York: John Wiley.
2. Ehrlich, Paul R., Anne H. Ehrlich and John P. Holdress. 1973. Human ecology: Problems and Solutions. W.H. Freeman & Company, San Francisco.
3. Schutkowski, H . 2006. Human ecology: biocultural adaptation in human communities. Berlin:SpringerVerlag
4. Stapledon . 1964. Human ecology. Faber & Faber.
5. Theodorson, G.A . 1961. Studies in Human Ecology. New York: Row, Peterson & Company Elmsford.
6. **Suggested Literature (cultural dimension)**
7. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
8. Lee, Richard B. and Irven DeVore. 1969. Man the hunter. Chicago: Aldine Pub. Co.
9. Redfield, Robert. 1965. Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
10. Wittfogel, Karl August. 1957. Oriental despotism; a comparative study of total power. New Haven: Yale University Press.

## **Practical:**

### *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

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.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	To understand the potential ecological stressors that affects human being	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Written Assignment
2.	How human beings by the process of their in-built biological mechanism or by adopting some cultural practices make an effort to minimize the effect of stress on their body.	Lecture and class discussion.	Debate and discussion.
3	The students will be able to understand the role of culture in adaptation.	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Written Assignment
4	Understand the emerging environmental issues based on human action.	Lecture and class discussion. Students are expected to be aware of current environmental issues.	Written Assignment and visual presentation

## MASTER of Science

### Semester III/ Core paper: Palaeoanthropology

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### Course Objectives:

- To understand the chronological dating methods and their limitations
- To describe the methods of studying human evolution
- To understand early primate evolution and characteristics of early hominids
- To understand the concepts of palaeodemography and palaeopathology

#### Course Learning Outcomes:

Students will be

- Able to describe scope of different chronological methods
- Able to understand the methods of studying human evolution
- Familiar with the distribution and characteristics of early hominids
- Able to describe various aspects of palaeodemography and palaeopathology

#### Course Content:

- a. Terminological taxonomic and chronological problems of fossils. Dating methods. Geological Time Scale. Taphonomy and fossilization.
- b. Principles and processes of evolution. Formation of new population and species. Methods of studying human evolution.
- c. Early primate evolution, Adaptive primate radiation, differential rate of somatic evolution.
- d. Ramapithecus: Phylogenetic & Taxonomic status.
- e. The evolution of early hominids: Distribution, Characteristics, life ways and phylogenetic status.
  - i. Australopithecines
  - ii. Homo habilis
  - iii. Homo erectus
  - iv. Early Homo sapiens (Fontchevade, Shiring dorf, Karapina, Saccopastore)
  - v. Homo sapiens neanderthalensis
  - vi. Homo sapiens sapiens (Upper Palaeolithic men - Grimaldi, Cromagnon and Chancelade).
- f. Hominization Process: Evolution of hominid-human bipedalism.

- g. Palaeodemography- skeletal analysis and determination of demographic variables in prehistoric populations and post-neolithic population growth.
- h. Palaeopathology- The dispersion of modern humans - molecular and morphological patterns of relationship.
- i. On going evolution in man: are we still evolving?

### **Suggested Literature**

1. Camilo J. Cela-conde & Francisco J. Ayala (2007). Human Evolution: Trails from the past: Oxford University Press.
2. Clark Spencer Larsen, Matter, R. M., & Daniel, L. (1998). Human Origin: The fossil Record.. Gebo. Waveland Press.
3. David W. Cameron & Colin, P. (2004). Bone, Stones and Molecules: “Out of Africa” and Human Origins. . Groves- Elsevier Inc.

### **Practical/ Project**

1. Comparative primate Osteology
2. Description and identification of the disarticulated skeleton of non-human primates (to be specified)
3. Identification and description of fossil casts; Excursion to a site for seven days for collection of fossil material and its record (not exceeding 5 pages)

## Human Population Genetics

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

### Course Objectives:

- To learn the major concepts of human population genetics and their inferences in understanding human evolution
- To use the measures of human genetic diversity and their use in understanding population structure
- To understand phylogenetic tree reconstruction and their interpretation
- To learn major evolutionary forces and their dynamic relationship to each other

### Course Learning Outcomes:

Students will

- Explain the basic terms/concepts of human population genetics
- Appreciate the mechanisms of evolutionary forces in shaping biological diversity
- Be familiar with the terminology and tools used in phylogenetic tree reconstruction
- Be able to link different evolutionary forces and dynamic interaction between in human evolution

### Course Content

- Unit I Basic Concepts:** History of Human Population Genetics, Mendelian populations, Hardy-Weinberg Equilibrium (HWE), Measuring Departure from HWE. Application of Hardy-Weinberg law in human population genetics.
- Unit II Genetic diversity assessment:** Measures of genetic diversity and Phylogenetic analysis and tree reconstruction
- Unit III Genetic polymorphism:** Transient and balanced polymorphism. Haemoglobin polymorphisms and their distribution, Thalassaemia, G6PD Deficiency and its distribution
- Unit IV Natural selection:** Concept of fitness, Models explaining the maintenance of genetic polymorphism and selection relaxation.
- Unit V Genetic Drift:** Concept of genetic drift, Effective Population size, genetic isolates, Dynamics of genetic drift, mutation and selection
- Unit VI Mutation, Gene Flow and Migration**
- Unit VII Consanguinity and inbreeding** - Definitions and concept, Genetic consequences of inbreeding in human population, inbreeding coefficient and genetic load.

## Suggested Literature

- Daniel Hartl & Clark, A. G. (1997). Principles of Population Genetics. Sinauer Associates, Inc.
- Peter Snustad & Simmons, M. J. (2006). Principles of Genetics. John Wiley and Sons
- Benjamin Pierce (2003). Genetics : A Conceptual Approach. W. H. Freeman & Company.
- Cavalli - S. Ferza & Bodmer (1976). The genetics of Human Population. Freeman, San Francisco.

## Practical: Human Population Genetics

1. ABO (Subgroups), MN and Rh Blood group Systems
2. PTC
3. Colour Blindness
4. G6PD Deficiency
5. Dermatoglyphics: Finger Print, Palmer Print, Planter Print

## Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	Explain the basic terms/concepts of human population genetics	Class lecture and discussion	Written Assignment
2.	Appreciate the mechanisms of evolutionary forces in shaping biological diversity	Class lecture and discussion	Written Assignment
3.	Be familiar with the terminology and tools used in phylogenetic tree reconstruction	Class lecture and discussion	Written Assignment
4.	Be familiar with the terminology and tools used in phylogenetic tree reconstruction	Class lecture and discussion	Critical review of a research article

**MASTER of Science**  
**Semester III/ Core paper : Human Growth, Development and Nutrition.**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- Students will be able to learn about various stages and environmental factors involved in human growth and development which help them in understanding growth monitoring of a child.
- They will understand the role played by balance diet in leading a healthy life.

**Course Learning Outcomes:**

- Differentiate the term growth, maturation and development.
- Understand the basic principles of human growth and development.
- Comprehend the significance of growth studies.

**Theory**

- Unit I** Definition and concepts of growth, differentiation, maturation and development. Evolution of Human Growth: Human Lifespan development process, Human Life Cycle. Major stages of human growth and development - Prenatal growth, Postnatal growth and their characteristics.
- Unit II** Factors affecting growth : Genetic 'and Environmental: secular trends , adaptation of growth rates to environmental stresses. Methods of studying Human Growth. Human Growth Curves of different body parts and tissues, Catch-Up Growth, Growth references and standards.
- Unit III** Segmental growth and development; analysis of Human physique and body composition - Sheldon, Parnell, Heath -Carter methods of somatotyping. Body Composition: Methods of study, changes during growth, variation and covariates.
- Unit IV** Significance of age in growth studies: Methods of assessing age-chronological age, dental age, skeletal age, secondary sex character age, ' morphological age, age-grouping.
- Unit** Nutritional status: assessment and methods of evaluation. Concept of balanced diet. Nutritional epidemiology, impact of malnutrition, under-nutrition and over-nutrition.

## **Practical/ Project**

### **I Size and Shape measurements**

1. Standing Height Vertex
2. Sitting Height Vertex
3. Body weight
4. Total Right Upper Extremity Length (Direct & Indirect)
5. Total Right Lower Extremity Length (K-quotient method)
6. Right Upper Arm Length (Direct & Indirect).
7. Right Fore Arm Length (Direct & Indirect)
8. Right Hand Breadth
9. Right Hand Length
10. Right Foot Length
11. Right Foot Breadth
12. Biacromial Breadth
13. Bicristal Breadth
14. Chest Breadth (Transverse)
15. Chest Depth (Sagittal)
16. Chest Girth (Inspiration, Expiration, Normal)
17. Minimum Waist Girth
18. Head Circumference
19. Mid. Upper Arm Girth
20. Maximum Calf Girth
21. Skinfold at Triceps
22. Skinfold at Biceps

### **II Shape Growth Ratios**

23. Relative Sitting Height vertex
24. Relative Right Total Upper Extremity Length
25. Relative Right Total Lower Extremity Length
26. Relative Right Fore Arm Length
27. Relative Right Hand Length
28. Relative Biacromial Breadth

29. Relative Bicristal Breadth
30. Relative Head and Face Segment
31. Relative Head and Neck Segment
32. Relative Height Gnathion
33. Relative Height Cervicale
34. Relative Right Upper arm length
35. Cephalic Index
36. Nasal Index

### **Suggested Literature**

1. Malina, Robert, M., Bouchard, Claude., & Bar-Or, Oded. (2004). Growth, maturation & physical activity . Human Kinetics.
2. Noel, C. (2002). Human growth and development . St. Louis, Academic Press.
3. Bogin, Barry (1999). Patterns of human growth.. Cambridge University Press.
4. Harrison, G. A., Tanner, J. M., Pilbeam, D. R., & Baker, P. T. (1988). Human biology: An introduction to human evolution, variation, growth & adaptability.Oxford, England, Oxford University Press.
5. Johnson, F. E., Roche, A. F., & Susanne, C. (1980). Proceeding on Human Physical Growth and Maturation.Plenum Publishing Corporation.
6. Heyward, V. H., & Wagner D. R. (2009). Applied body Compositon Assessment. (2009) Human Kinetic.

**MASTER of Science**  
**Semester III/ Core paper**

**Course Code: Demographic Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Objectives:** This paper aims to understand the anthropological determinants of demographic structure of a population.

**Outcome:** The students will understand:

1. Current trends of demographic dynamics of different population groups.
2. The basic components of population change and the factors affecting these changes in populations.
3. The different ways of estimation of demographic characteristics.
4. The role of various national and health policies relevant to demographic changes.

**Unit I** Basic concepts and definition of demography relationship between demography and anthropology. Importance of population studies and their implications. Population dilemma and fluctuations in population thought.

**Unit II** Various types of sampling design and their relevance in demographic studies.

**Unit III** Sources of demographic data- Census, Civil Registration system (CRS), Sample Registration system (SRS), National samples survey organizations (NSSO), Model Registration System (MRS) - merits and demerits.

**Unit IV** Population structure- Age and sex composition, Ethnic and racial composition, geographical distribution and urbanization, distribution according to various social characteristics. Literacy trend in world population, population projection.

**Unit V** The basic components of population change - fertility, mortality, marriage, migration and biological, social, ecological and economical factors influencing these components

**Unit VI** National increase and population growth. Methods used in describing population growth, effect of socioeconomic development on population growth.

**Unit VII** Estimation of demographic characteristics - general estimates and specific estimates and their merits and demerits.

## **Suggested Literature**

1. NFHS 111111, 1992, 1998, 2006 India: lips Bombay
2. Zubrow, E. B. W. (1976). Demographic Anthropology Quantitative Approaches University of New Mexico Press, Albuquerque.
3. UNOP (2004). Human Development Report Oxford University Press.
4. Cox, P. (1976). Demography Vikas Publishing House.
5. Bogue,(1969).Principles of Demography.
6. Shryock, H. S. & Siegel, J. S. (1971).The Methods & Materials in Demography.
7. Srivastava O.S. (1994).Demography and Population Studies Was Publishing House.
8. Bhende A. and Kaniikar, T. (2006).Principles of Population Studies. Himalaya Publishing House. Mumbai (All Units, It covers most topics).
9. Caldwell J.C. (2006). Demographic Transition Theory. Springer.
10. Census of India (2001,2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO ( Can be seen from browsing net)
11. Howell, N. (1986). Demographic Anthropology. Ann. Rev. Anthropol. 15: 219-246

## **Demographic Anthropology**

### **Practical/Project**

#### **Collection and analysis of some demographic characteristics of a specified population.**

1. Preparation of schedules for collection of demographic data.
2. Preparation of flow chart and graphic presentation
3. Compilation and presentation of data on population studies:
  - a. age composition
  - b. sex composition
  - c. age ratio
  - d. fertility measures
  - e. modality measures
4. Pictorial comparison of health indicators.

**MASTER of Science**  
**Semester III/ Core paper : Anthropological Theory-I**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- The paper will familiarize the students with the anthropological theories of twentieth and the early twenty-first centuries. They would also be introduced to post colonial critique.
- From the epistemological perspective this paper would give special emphasis on the issues of phenomenology and its bearing in understanding of society and culture.

**Course Learning Outcomes:**

- They will be able to critically understand these theories and apply them in the context of contemporary social, economic and the political realities.

**Contents:**

**Unit I** Emergence of anthropological theory- The philosophical foundations.

**Unit II** Colonialism and its impact on anthropological theory: concept of primitive, evolution, function and diffusion, culture contact and development.

**Unit III** Post-colonial critiques.

**Unit IV** Marxism and Neo-Marxian Trends; Phenomenology.

**Suggested Literature**

1. Applebaum, Herbert A. 1987. *Perspectives in cultural anthropology*. Albany: State University of New York Press.
2. Bloch, Maurice. 1983. *Marxism and anthropology: the history of a relationship*. Marxist introductions. Oxford [Oxfordshire]: Clarendon Press.
3. Evans-Pritchard, E. E., and André Singer. 1981. *A history of anthropological thought*. New York: Basic Books.
4. Leaf, Murray J. 1979. *Man, mind, and science: a history of anthropology*. New York: Columbia University Press.
5. Leaf, Murray J., and Bernard Grant Campbell. 1974. *Frontiers of anthropology; an introduction to anthropological thinking*. New York: Van Nostrand.
6. Voget, Fred W. 1975. *A history of ethnology*. New York: Holt, Rinehart and Winston.

## Practical based on Anthropological theory I

### Practical/ Project

- Preparing research tools adequate for doing the following kind of research
  1. Functional studies
  2. Village and community studies
  3. Historical studies
- 2. Making a research proposal and doing an independent project on any of the above areas
- 3. Preparing bibliography and list of references for the project.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	critically understand anthropological theories of twentieth and the early twenty-first centuries	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Written Assignment
2.	Understand issues of phenomenology and its bearing in understanding of society and culture.	Lecture and class discussion.	Debate and discussion.

## **MASTER of Science**

### **Semester III/ Core paper: Code: Anthropological Theory-II**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### **Course Objectives:**

- This course will introduce students to some of the major social theories and debates that inspire and inform anthropological analysis.

#### **Course Learning Outcomes:**

- The student will be able to examine contemporary theoretical debates about and within anthropology
- Critically analyze the process of globalization and its effects upon cultures around the world.
- Articulate an anthropological perspective on current issues and concerns

#### **Contents:**

**Unit I** Structuralism: Structural analysis of symbols, myth and totemism

**Unit II** New Ethnography and Semantic analysis; Interpretive and Hermeneutical approach

**Unit III** Post-structuralism and Postmodernism: Theories and trends; Feminism and Anthropology

**Unit IV** Theories of Globalization; Networked Anthropology; Contemporary social anthropology: its foci and concerns.

#### **PRACTICAL**

1. Formulate research tools adequate for the following types of research
  - i. Structural studies such as of myths and rituals
  - ii. Multi-sited research
  - iii. Studying complex and multicultural situations
- Write a research proposal and conduct an independent study on any of the above areas.
- Prepare an annotated bibliography and list of references for the project.

**Suggested Readings:**

1. Ahmed, Akbar S., and Cris Shore. 1995. *The future of anthropology: its relevance to the contemporary world*. London: Athlone
2. Bourdieu, Pierre. 1977. *Outline of a theory of practice*. Cambridge studies in social anthropology, 16. Cambridge [England]: Cambridge University Press.
3. Collins, Samuel Gerald, and Matthew Slover Durning. 2015. *Networked Anthropology: A primer for ethnographers*. Oxon: Routledge
4. Foucault, Michel. 1992. *The order of things: an archeology of the human sciences*. London: Routledge.
5. Geertz, Clifford. 2001. *The interpretation of cultures: selected essays*. New York, N.Y.: BasicBooks.
6. Ina, Jonathan Xavier, and Renato Rosaldo. 2002. *The anthropology of globalization: a reader*. Blackwell readers in anthropology. Blackwell Publishers
7. Lévi-Strauss, Claude. 1963. *Structural anthropology*. New York: Basic Books.
8. Leach, Edmund, Stephen Hugh-Jones, and James Laidlaw. 2000. *The essential Edmund Leach*. Vol. 1, *Anthropology and society*. New Haven [Conn.]: Yale University Press.
9. Leach, Edmund. 1985. *Culture & [and] communication: the logic by which symbols are connected; an introduction to the use of structuralist analysis in social anthropology*. Themes in the social sciences. Cambridge: Cambridge Univ. Press.
10. Lewin, Ellen (ed) 2009. *Feminist Anthropology: A reader*. John Wiley and Sons.
11. Moore, H.L. 1988. *Feminism and Anthropology*. University of Minnesota Press.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	The student will be able to examine contemporary theoretical debates about and within anthropology	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	Critically analyze the process of globalization and its effects upon cultures around the world.	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion.	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	Articulate an anthropological perspective on current issues and concerns	Class lecture; students are expected to be aware of current affairs in the country. Any relevant current issue to be debated and discussed in the light of anthropological insights.	Discussion and written assignment

## **MASTER of Science**

**Semester III/ Core paper : Epistemological Foundations of Social and Behavioural Sciences**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

### **Course Objectives:**

- This course will introduce the students to some of the major epistemological theories and debates that emerged and influenced studies in social anthropology .
- Starting from the history how research is done, the paper would examine epistemology of various qualitative and quantitative research methodologies in social anthropology.

### **Course Learning Outcomes:**

- The course will enable the students to critically apply the epistemological knowledge in undertaking research in social anthropology.
- It would also be able write up their research findings in a systematic manner.
- Will be able to make a quantitative and qualitative research design on any problem given to them.

### **Contents:**

**Unit I** Introduction to social research: The process, conceptualization and measurement Theoretical and epistemological foundation of research philosophy and methodology idea of science, scientism, comparative method, historical method.

**Unit II** Preparation of research projects or conceptualizing research. Survey research: Data analysis and presentation of research

**Unit III** Qualitative research: Analysis of textual data and presentation, tools of analysis. Writing up qualitative research

**Unit IV** Evaluative research.Critics, politics and ethics of social research

### **PRACTICAL**

Student will be required to design two research proposal based on qualitative and quantities methods respectively. They will then collect appropriate data, analysis the data and write the report based on their findings.

1. Making a research design on any problem related to the social or behavioural fields.
2. Construct statistical tools to study any social problem.
3. Make a bibliography of the research project and write a research report based on research design.
4. Indicate ethical and critical problems you are likely to face in conducting this research.

### **Suggested Readings:**

1. Bernard, Harvey Russell. (2006). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Rowman Altamira Press.
2. Brislin, R.W., Conner, W. J., & Thorndike, R.M. . (1973). *Cross-Cultural Research Methods*. New York: John Willey and Sons.
3. Creswell, & John.W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage.
4. Patton, M.Q. (2014). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. Sage Publications .
5. Spradley, & James P. (1980). *Participant Observation*. New York: Holt, Rinehart and Winston New York.
6. Srivastava, V. K. (1994). *Methodology and Fieldwork*. Oxford University Press.
7. Yin, R. K. (2008). *Case Study Research Design and Methods*. Sage.

### **Facilitating the achievement of Course Learning Outcomes**

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	critically apply the epistemological knowledge in undertaking research in social anthropology	Lecture and class discussion.	Written Assignment
2.	able to write up their research findings in a systematic manner.	Lecture and class discussion and practice	Assignment
3.	able to make a quantitative and qualitative research design on any problem given to them.	Class lecture, debates, discussions	Discussion and written assignment

**MASTER of Science**  
**Semester III/ Core paper: Tribal India**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- The objective of this course is to enable students understand tribes in India, their idea of gender, and sustainability; and contextualization of contemporary issues like marginalization, displacement and other developmental issues.)

**Course Learning Outcomes:**

- This course will help students understand the problematic nature of the concepts of tribe and indigenous; how it differs from caste; understand the contemporary issues and challenges faced by the tribals in India due to displacement, marginalization, globalization etc.
- Analyse critically the plans and policies formulated for the welfare of tribes in India.
- The course will also help students understand the diverse societies without being ethnocentric.

**Contents:**

- Unit I** Concept of tribe in Indian context; the idea of Indigenous people; Tribal societies in Pre-colonial period, Colonial period, and Post Independence; Geographic and linguistic distribution of tribes in India; Particularly Vulnerable Tribal Groups in India.
- Unit II** Institutional structure: Kinship, Family and Marriage; Political organization; Means of livelihood and occupational pattern; Religious faiths, beliefs and practices; Arts, Crafts and Architecture.
- Unit III** Constitutional safeguards in modern India, Industrialization, urbanization and globalization; Identity and ethnicity, Conflict and dissension, Integration; gender in tribal society; Tribe-caste Interaction, \*Politics of Religious conversions, Tribal uprisings and unrest; Problems of insurgency. Tribe Peasant interaction.
- Unit IV** Tribal development: plans and policies; tribal customary law; indigenous knowledge; tribal displacement and rehabilitation in India

**PRACTICAL**

1. Map out the various tribal communities on a Map of India wrst:  
Migration pattern, Kinship system, Marriage practices, Occupation pattern,  
Social unrest and conflict, Religious beliefs and practices, Identity assertion  
*The proposed exercise has to be executed based on intensive readings of monographs available in department library.*

2. Write a book review of any tribal ethnography. The review has to be presented in the classroom.
3. Pick up any tribe of your choice, and visually present distinctive features of its society with special focus on gender, or sustainability or indigenous knowledge.
4. A project report of not more than 3000 words on contemporary tribal issues.

### **Suggested Readings:**

1. Bailey, F.G. (1960). Tribes, caste and Nations : A study of political activity and political change in Orissa.
2. Béteille, André. (1998). The Idea of Indigenous People. *Current Anthropology*, Vol. 39, No. 2 (April 1998), pp. 187-192.
3. Behera, M.C. (ed). (2018). *Revisiting Tribal Studies: A Glimpse after Hundred years*. Japiur: Rawat Publications.
4. Fürer-Haimendorf, & Christoph, von. (1985). *Tribal populations and cultures of the Indian subcontinent*. Handbuch der Orientalistik, 7. Bd. Leiden: E.J. Brill.
5. Guha, Ramachandra(1996). Savaging the Civilised: Verrier Elwin and the Tribal Question in Late Colonial India. *Economic and Political Weekly*, Vol. 31, No. 35/37, Special Number (Sep., 1996), pp.2375-2380+2382-2383+2385-2389
6. Miri, Mrinal. (2003). *Identity and the moral life*. New Delhi: Oxford University Press.
7. Oommen, T. K. (2011). Scheduled Castes, Scheduled Tribes, and the Nation: Situating G. S. Ghurye. *Sociological Bulletin*, Vol. 60, No. 2 (May-August 2011), pp. 228-244
8. Sachchidananda. (1970). Tribe-Caste Continuum : A Case Study of the Gond in Bihar. *Anthropos*, Bd. 65, H. 5./6. , pp. 973-997
9. Srivastava, V. K. (2008). Concept of 'Tribe' in the Draft National Tribal Policy. *Economic and Political Weekly*, Vol. 43, No. 50 pp. 29-35
10. Vidyarthi, L. P. (1977). *Tribal Culture of India* : concept publishing company.
11. Xaxa, Virginius. (2008). *State, society, and tribes: issues in post-colonial India*. New Delhi: Dorling Kindersley (India)

### **Facilitating the achievement of Course Learning Outcomes**

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	To understand concepts of 'tribe' and 'indigenous'	Lecture and class discussion. Students are expected to read the suggested readings and	Written Assignment

		come to class for discussion	
2.	To understand different plans and policies	Readings of various debates for eg: Verrier Vs Ghurye on tribal development; download Acts pertaining to tribes from Ministry of tribal affairs for discussion and debate.	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	To understand the context of contemporary issues and challenges faced by the tribal people.	Class lecture; students are expected to be aware of current affairs in the country. Any current issue pertaining to the tribes in India will be debated and discussed in the light of anthropological insights.	Discussion and written assignment
4	To understand the indigenous knowledge of the tribal people in India; their idea of sustainability. To understand gender issues in the light of their customary laws and constitutional provisions.	Class lecture; class discussions.	Visual presentation

## Students are required to opt one Open Common Elective Papers

### Semester III

#### Open Common Elective Paper

##### Paper: Bio-Cultural Dynamics of Indian Population

**Credits=4 (Marks 100)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### Course Objectives:

- To understand the dynamics of Indian population from Bio-Cultural perspective.

#### Course Learning Outcomes:

- The student will come to know the variability of Indian Population and reasons associated with them.

**Unit I:** Definitions of race, ethnic group, population, Culture, Community, Society; Social Structure, social institutions, cultural patterns, culture and environment in India.

**Unit II:** Social and cultural changes in caste and tribes in India. Dating methods, Fossil evidences from India.

**Unit III:** Sources of genetic variation; Biological diversity in India populations; Tribal Health; Biology Culture and environment- the studies conducted on Indian populations; ecology and Human adaptation.

**Unit IV:** Cultural factors affecting human variation, molecular approach for studying biological diversity, Microevolution, Bio-social demographic studies of different ecological zones of India.

#### Practical:

1. Write a project on Social Structure / Social institution focusing one the aspect.
2. Write a report on social or cultural changes in a Tribal or Caste group from secondary data.
3. Identify 5-7 biological variables which can be useful for diversity with reasons thereof.
4. Highlight one populate/ ethnic group for the various demographic measures (from the secondary data).
5. Make a demographic schedule including socio-cultural, environmental and health variables.

## References:

1. L. Newell, Morris (eds. ). (1971). Human Populations, Genetic Variation and Evolution. San Francisco: Chandler.
2. Roger, Keesing. (1984). An Introduction of Cultural Anthropology New York: Mac Millan.
3. Kingsley, Davis. (1948). Human Society. New York: Macmillan.
4. Piddington, R. P. (1951). Introduction to Social Anthropology. (2 Vol) New York: Mac Millan.
5. Paul, Bohannan. (1963). Social Anthropology. New Yourk: Mac Millan.
6. Marvin, Harris. (1991). Cultural Anthropology. New York: Harper Collins Publications.
7. Stein, P. & Rowe, B. (2000). Physical Anthropology 7<sup>th</sup> ed. Boston: Mc Graw Hill.
8. Cavalli-Sforza, L. L., & Bodmer, W. F. (1971). The Genetics of Human Populations. San Francisco: W. H. Freeman & Company.
9. Baker, P. T., & Weiner, J. S. (eds.) (1996). The Biology of Human Adaptability. Oxford & New York: Oxford University Press.
10. Macie-Taylor. C .G. N., & Lasker, G. W (1991). Applications of Biological Anthropology to Human Affairs. New Your : Cambridge University Press.
11. Bhasin, M .K., Walter, H., & Danker-Hopfe, H. (1994). People of India- An Investigation of Biological Variability in the Ecological, Ethno-economic and Linguistic Groups. Delhi: Kamla Raj Enterprises.

**Semester III**  
**Open Common Elective Paper**  
**Paper: Anthropology in Practice**

**Credits=4 (Marks 100)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

Course Objective:

1. To understand the relevance of anthropology in present day scenario.
2. To study the scope and impact of anthropology on different shoves of life.

Course Learning Outcomes:

- The student will come to know new fields in anthropology and their relevance in human life.

**Course:**

**Unit I:** Academic and practicing anthropology: differences, structure, activites, issues, (scope and applications).

**Unit II:** Role of anthropology in Public policy. community development, NGO's, Tourism anthropology, media anthropology.

**Unit III:** Trends in Anthropology: Designing and Fashion Human rights, gender disparity, management anthropology; cyber studies; neuroanthropology; gerontological anthropology.

**Unit IV:** Role of biological anthropology in human development; genetic counseling, tools of forensic identification in living and dead, Biological variability of Indian populations admixture and migration and sub-structure variation. Life style diseases and quality of life.

**Unit V:** Reproductive health and anthropology; life course induction of adiposity, cognitive anthropology.

**Practical:**

1. Write a project on community development.
2. List of five NGO's and their functioning in social welfare activities.
3. Draw a scene of Crime and Identity the various evidences from the scene.
4. Write a project on religious tourism/ health tourism/ tribal tourism.
5. Collect any evidence on Human rights and make a report on the same.
6. Collect the genetic information and make the pedigree and highlight the role of genetic conseller.

## References:

1. Kertzer, D. I., & Fricke, T. (1997). *Anthropological Demography*. University of Chicago Press.
2. Basu, A. & Aaby, P. (1998). *The Methods and the Uses of Anthropological Demography*. 329 pp. Oxford, Clarendon Press
3. Census of India (2001, 2011) and National Family Health Survey (2006,2010)
4. Ervic, Alexander M.(2000). *Applied Anthropology: Tools and Perspectives for Contemporary Practise*, Boston, MA: Allyn and Bacon.
5. Erwin, A. (2004). *Applied Anthropology Tools and Practice*, Allyn and Bacon.
6. Willen, S. S. (2012). *Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations*. *Journal of Human Rights*. 11:150-159.
7. Margaret, A. G. (2003). *Applied Anthropology: A Career-Oriented Approach*, Boston, MA: Allyn and Bacon.
8. Vidyarthi, L. P., & Sahay, B. N. (2001). *Applied Anthropology and Development in India*, National Publishing House, New Delhi.
9. Vidyarthi, L. P. (1990). *Applied Anthropology in India - Principles, Problems and Case Studies*. Kitab Mahal, U.P.

### **Semester III**

#### **Open Common Elective Paper**

#### **Course Code: Prehistoric India**

**Credits=4 (Marks 100)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### **Course Objective:**

To introduce Indian prehistory, important prehistoric field sites and their cultural interpretations

#### **Course Learning Outcomes:**

Students will be

- Able to describe understand the geological characteristic of India
- Familiar with contemporary theories and models of Indian archaeology
- Fairly aware of Paleolithic and Mesolithic cultures of India
- Able to understand the evolution of Indian settlements and other complex cultures

#### **Course content**

##### **Geological Features of India**

- a. Geological formations
- b. Introductory overview of the stratigraphy of the Indian sub-continent.
- c. Pleistocene chronology, climate and environmental features of Indian subcontinent

##### **Contemporary Theories and models in Archaeology**

- a. Middle Range Theory
- b. New Archaeology/ Processual Archaeology
- c. Post-processual Archaeology
- d. Post-Modernism
- e. Models for understanding Hunter-gatherers' and early Agriculturalists' Appropriation of Nature
  - i. Site Catchment Analysis (SCA)
  - ii. Site Exploitation Territory (SET)
  - iii. XTENT Modeling
  - iv. Multi-Dimensional Scaling (MDSCAL)

## v. Optimal Foraging Models

### **Palaeolithic in India**

- a. Northern Region
- b. Western Region
- c. Central Region
- d. Eastern Region
- e. Southern Region

### **Mesolithic Cultures in India**

- a. Northern Region
- b. Western Region
- c. Central Region
- d. Eastern Region
- e. Southern Region

### **Advent and Evolution of settlement in India**

- a. Advent of agriculture in India with respect to all five regions.
- b. The beginning of agriculture in India in pan-Asian perspective

### **Rise of Complex Society in India**

- a. Emergence of the Indian Civilization.
- b. Emergence of State Civilization: Harrapan civilization
- c. Neolithic/ Chalcolithic cultures- Western region, Central region, Eastern region and Southern region

### **Legacy of the Harrapan Civilization**

- a. Advent of Iron.
- b. Late/ Post Harrapan Civilization: Ochre Coloured Pottery and Copper Hoards in Ganga Valley, Gujarat and Sindh.
- c. Megaliths and use of iron in South India

### **Suggested Literature**

1. Bhattacharya, D.K. (2006). An outline of Indian Prehistory. Delhi: Palaka Prakashan.
2. Sankalia, H. D. (1974). Prehistory and Protohistory of India and Pakistan. Pune: Deccan College.

3. Burkitt, M. (1963). *The Old Stone Age: A study of Palaeolithic Times*. London: Bowes and Bowes.
4. Renfrew, C., & Bahn, P.( 2001). *Archaeology: Theories methods and Practices*, London: Thames and Hudson.
5. Fagan, B. M. (2004). *People of the Earth: An Introduction to World Prehistory*. New Jersey: Pearson Education.
6. Oakley, K. P. (1966). *Frameworks for dating Fossil man*. London: Weidenfeld and Nicolson.
7. Renfrew, C. (ed.). (1973). *The Explanation of culture change: Models in prehistory*. London. Duckworth.
8. Lee, R. B and Devore, I. (Eds.). (1977). *Man the Hunter*. Chicago: Aldine Publishing Company.
9. Hole, H. and R.F. Heizer. (1969). *An Introduction to Prehistoric Archaeology*. New York: Hold, Rinehart and Winston, INC. Sankalia, H. D. (1977). *Prehistory of India*. Delhi: Munshiram Manoharlal Publishers Pvt. Ltd..
10. Possehl, G. L. (2002). *The Harrapan Civilization: A Contemporary Perspective*. New Delhi: Vistaar publication.
11. Allchin, B. & R. Allchin. (1982). *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.

### **Practical/ Project**

1. Identification of stone tools-type, technology and function
2. Identification of ceramic traditions- type, technology and function
3. Computer applications for archaeology
4. Geographical Information System (GIS) for archaeology

### **Suggested Literature**

1. *Old Stone Age Tools: A Manual of Laboratory Techniques of Analysis*. Calcutta: K. P. Bagchi and Company. Bhattacharya, D.K. (1979).
2. *Technology and terminology of Knapped Stone*. Nanterre: CREP. Inizan, M.L.; M. R. Ballinger; H. Roche and J. Tixier. (1999).
3. *Man the Tool Maker*. London. Trustees of the British Museum Natural History. Oakley, K.P. (1972).
4. *Stone Age Tools: Their techniques, Names and Probable Functions*. Poona: Deccan College. Sankalia, H.D. (1982).

### Facilitating the achievement of Course Learning Outcomes

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	Able to describe understand the geological characteristic of India	Class lecture and discussion	Written Assignment
2.	Familiar with contemporary theories and models of Indian archaeology	Class lecture and discussion	Compulsory Discussion
3.	Fairly aware of Paleolithic and Mesolithic cultures of India	Class lecture and discussion	Classroom debate
4.	Able to understand the evolution of Indian settlements and other complex cultures	Class lecture and discussion	Critical review of a research article

## **Master of Science**

### **Semester IV/**

#### **Dissertation (Stream A/ Stream B/ Stream C)**

The master's students will go for fieldwork for two weeks. They will be accompanied by teacher and laboratory staff. The students will be required to write a dissertation based on fieldwork conducted under the guidance of a teacher assigned by the staff council or teacher in-charge who will take the students for fieldwork. Students must behave responsibly in the fieldwork and support/assist the field team and teacher-in-charge throughout the course of the fieldwork.

The student can choose any stream for dissertation.

Stream A= Biological Anthropology

Stream B= Social Anthropology

Stream C= Archaeological Anthropology

## **Biological Anthropology (Elective Paper)**

### **Semester IV**

#### **Molecular Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### **Course Objective:**

To learn the use of molecular markers, their applications, in inferring human population affiliations and understanding disease etiology

#### **Course Learning Outcomes:**

Students will

- Be able to describe the basic concepts and terminology used in molecular anthropology
- Understand the relevance of molecular markers in studying human origin
- Be familiar with the principles of genetic epidemiology of complex diseases
- Learn the methods and techniques used in genetic data generation
- Appreciate the importance of genetic data bases in health research

#### **Course Content**

**Unit I Basic concepts:** Genetic markers, Macro and Micro evolution, Concept of molecular evolution, rate of molecular evolution, gene functions, regulations and phenotypic evolution

**Unit II Human Origin:** Mitochondrial Eve Hypothesis, Haplogroups, Models of Human origin based on mtDNA and Y-chromosomal markers and Phylogeography: Peopling of India and world populations. Applications of phylogenetic studies.

**Unit III Ancient DNA technology:** Concepts, Methods and Techniques. Inferences from studies on ancient DNA technology

**Unit IV Genetic epidemiology:** Concept of Linkage disequilibrium (LD) and Association and their measures. Candidate gene approach, Genome-wide association and Whole genome studies. Genetics of Type 2 diabetes and Cardiovascular disease.

**Unit V Genotyping and Sequencing Techniques:** Single gene, Multiple genes, Genome-wide and Whole genome genotyping and sequencing methods

**Unit VI** Role of culture in shaping human genetic variation

**Unit VII** Online data bases and softwares used in Molecular anthropology

## Suggested Readings

- 1 Jobling, MA Hurles, M and Tyler-Smith, C (2004). Human Evolutionary Genetics, Origins, Peoples and Disease. Garland Science, New York.
- 2 Kresina, TF (2001). An Introduction to Molecular Medicine and Gene Therapy. Wiley-Riss, New York.
- 3 Reece, RJ (2004). Analysis of Genes and Genomes. John Wiley and Sons Ltd, England.
- 4 Strachan, T and Read, AP (2003). Human Molecular Genetics. Garland Publishing Inc, New York
- 5 Li, WH (1997). Molecular Evolution. Sinauer Associates Inc, Sunderland, MA.
- 6 Page, DM and Holmes, EC (1998). Molecular Evolution: A Phylogenetic Approach. Blackwell, Oxford.

## Practical (Molecular Anthropology):

- DNA Extraction
- DNA Quantification
- DNA Amplification: Polymerase chain reaction
- Electrophoresis
- Genotyping Technique: RFLP, Allele specific, other latest technology

## Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	Be able to describe the basic concepts and terminology used in molecular anthropology	Class lecture and discussion	Written Assignment
2.	Understand the relevance of molecular markers in studying human origin	Class lecture and discussion	Written Assignment
3.	Be familiar with the principles of genetic epidemiology of complex diseases	Class lecture and discussion	Critical review of a research article
4.	Learn the methods and techniques used in genetic data generation	Class lecture and discussion	Report
5.	Appreciate the importance of genetic data bases in health research	Class lecture and discussion	Written Assignment

## **Biological Anthropology (Elective Paper)**

### **Physiological Anthropology**

#### **Course Objectives:**

- Students will be able to understand how anthropologists have utilized the knowledge and tools of Human physiology in Anthropology for assessing health, learn variation in physiological parameters and understand their relevance to environment and in the community health.

#### **Course Learning Outcomes:**

- Inter-relatedness of Physiology and Physiological Anthropology by knowing about their scopes shall be covered.
- To know about homeostasis, an important defining feature of Physiology.

#### **Theory**

- Unit I** Physiological Anthropology : Concept and Scope, Fundamentals of Work Physiology: Cardio-vascular and respiratory endurance, haemodynamics and exercise (blood pressure, pulse rate, heart rate. and oxygen- transporting system, blood flow ,Hb, haematocrit etc).
- Unit II** Physical working capacity and physical fitness methodology: evaluation of response and adaptation of the body to stress of exercise. Exercise as a key component of health.
- Unit III** Impact of smoking, alcohol, air pollution and occupation on cardio-respiratory functions. Variation in respiratory function with age, sex and environment.
- Unit IV** Body composition: methods of assessment, environmental and genetic contribution to obesity, its treatment, prevention and management. Obesity and ethnicity. Global prevalence and secular trends in obesity: regulation of body weight- energy expenditure and physical activity.

#### **Practical/ Project**

1. Blood pressure
2. Heart rate/ pulse rate
3. Minute ventilation
4. Respiratory rate
5. Static and Dynamic lung functions
6. Haemoglobin estimation

#### **Suggested Literature**

1. Sherwood, Lauralee (2008). Human Physiology: From Cells to Systems. Brooks Cole.
2. Case, R. M. Ed (1985). Variations in Human Physiology. Manchester University Press.

3. Eds. Davson., Hugh., Eggleton., M Grace. Lea & amp, Febiger 1968. Principles of Human Physiology.4. Vander, Arthur J., Sherman, James H., Luciano, Dorothys (1978). Human Physiology: The Mechanisms of Body Functions.McGraw-Hill Education.
5. Nageswari, K Sri., & Sharma, Raj eev (2006). Practical workbook of Human Physiology.Jaypee Brothers Medical Publisher.
6. Tudor, Hale (2003). Exercise Physiology.John Wiley & Sons Inc, England.
7. Astrand, Kaare Rodahl, Hans Dahl, Sigmund. Textbook of Work Physiology-4th Edition Physiological Bases of Exercise.
8. Larry G Shaver. Essentials of exercise physiology.
9. Exercise Physiology: Nutrition, Energy, and Human Performance (Point (Lippincott Williams & Wilkins))
10. William D. McArdle., Frank, I. Katch., & Victor L. Katch. Exercise Physiology: Nutrition, Energy, and Human Performance.

## Semester IV

### Biological Anthropology (Elective Paper)

#### Kinanthropometry and Ergonomics

##### Course Objectives:

- Students will be able to understand the relevance of Anthropology in fast emerging fields like Kinanthropometry and Ergonomics.
- They will learn utilization of Anthropometry in not only sports but in the designing of various products.
- The knowledge of these two fields will help them in the critical assessment of occupational health.

##### Course Learning Outcomes:

- To understand the meaning of biomechanics in terms of human physical activity and sport.
- To study goals of studying biomechanics in sport and physical activity.
- To understand how the results of a qualitative analysis improve technical training.
- To discuss the steps involved in a qualitative anatomical analysis.
- Understanding the advantages of following a set of physical training.

#### Theory

- Unit I** Ergonomics: Concept, evolution and scope, Theories and concepts (Posture, Concept of safety, efficiency and comfort, Clearance and Reach, Man-Machine relationship)
- Unit II** Anthropometry in Designing : Use of Percentiles in designing products, Design of workplace and work environment, Design of Clothing, personal equipment, component and devices, Designing for PWD
- Unit III** Kinanthropometry : concept and historical background, Anthropology of sports: Physical conditioning, Training-Techniques and Physiological effects, Athletes and Body composition, Athletes and Nutrition, doping and performance.
- Unit IV** Environmental effects on physical performance of athletes: Effect of heat stress, cold stress and high altitude on their physiological response and performance. Physical performance tests.

#### Practical/Project

1. Rapid Fitness Index
2.  $VO_{2submax}$
3. Hand grip dynamometry
4. Operation Designing Measurements:
  1. Height vertex
  2. Body weight
  3. Sitting height vertex

4. Right anterior arm reach
5. Right anterior thumb tip reach
6. Head circumference
7. Arm scye circumference
8. Elbow to elbow breadth
9. Elbow rest height
10. Bideltoid breadth
11. Popliteal height
12. Knee height
13. Buttockpoplital length
14. Buttock knee length
15. Buttock leg length
16. Bitragion submandibular arch
17. Bitragionmenton arch

### **Suggested Literature**

1. John, Mclester., & Peter St. Pierre. Applied Bio-mechanics concepts & connections (2008).Wadsworth Publishing Co.
2. Murrell, K. F. H. (1965). Ergonomics man in his working environment.London; Chapman & Hall.
3. North, K., Stepheton, C., & Vogt, Chantal (1982). Ergonomics Glossary: Terms Commonly used in Ergonomics.Published for the Bureau of information and co-ordination of communityergonomics action of the European Coal and Steel Community by Bohn, Scheltema& Holkema(Utrecht).

## Semester IV

### Biological Anthropology (Elective Paper)

#### Forensic Anthropology

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks (Lecture: 4 hours/week; Practical: 3 hours/week)**

#### Course Objective:

- To learn the scope and basic concepts of forensic anthropology
- To understand the methods used in forensic anthropology and their limitations
- To describe the applications of forensic anthropology

#### Course Learning Outcomes:

Students will

- Be able to describe the scope and various concepts of forensic anthropology
- Understand the relevance of various methods used in forensic anthropology
- Be familiar with applications of forensic anthropology

#### Course content

**Unit I** Definition, scope and schools of forensic anthropology.

**Unit II** Study of skeletal material: Human and animal remains. The study of bone fragments. Attribution of sex, estimation of age and reconstruction of stature from the skeletal remains, and their medico-legal implications.

**Unit III** Forensic Odontology: tooth structure and growth, estimation of age in young and adults. Population differences in size and morphology. Bite marks. Individualization of tooth pulp.

**Unit IV** Establishment of partial and complete identity of skeletal material and dead bodies – morphometric techniques.

**Unit V** Personal identification of living persons- Identification through somatometric and somatoscopic observations, nails, occupation marks, scars, tattoo marks and deformities; handwriting and mannerisms.

**Unit VI** Finger prints: Identification of living and dead through partial and complete prints. Classification of fingerprints for criminal record purposes. Chance Prints. Various methods of latent print development.

**Unit VII** Forensic Haemogenetics: Pattern of blood splashes, Identification of bloodstains and determination of species of origin. Individualization of blood stains: Determination of blood group, sex, age and racial origin from dried bloodstains. Typing of some common polymorphic enzymes. HLA haplotypes and serum proteins from dried blood stain.

Menstrual and lochial blood identification. Identification and individualization of body fluids like semen, saliva, urine etc.

**Unit VIII** DNA profiling and individualization:- concept of sequence variations, STR, VNTRs, STR markers used in DNA finger printing.

**Unit IX** Disputed parentage: role of Anthropologic traits in solving such cases: Forensic Anthropologist's as an expert witness under section 45 of the Indian Evidence Act.

### **Suggested Literature**

1. Linda, L. Klepinger (2006). Fundamentals of Forensic Anthropology. Wiley-Liss.
2. Steven, N. Byers (2007). Introduction to Forensic Anthropology (3<sup>rd</sup> Edition). 2007.

### **Practical/ Project**

1. Study of human long bones and relevant measurements for estimation of stature.  
Estimation of age from skull, and determination of sex from skull and Pelvic measurements.
2. Measurement and observations on living persons.
3. Recording and classification of fingerprints, development of chance prints by various methods.  
Comparison of questioned and suspected fingerprints.
4. Hair examination from various body sites and comparative analysis.
5. Identification of blood stains, Determination of blood group from dried stains, Determination of origin (i.e. the species).
6. Identification of seminal, urine and saliva stains.

## Semester IV

### Biological Anthropology (Elective Paper)

#### Nutritional Anthropology

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### Course Objectives

- To review, evaluate, and understand the literature on human diet and nutrition from an explicitly anthropological perspective.
- To augment the basic knowledge of nutrition with special reference to its evolutionary perspective.
- To understand the macro and micro components of nutrition and their interaction, immunity and infection.
- To have deeper insights of biocultural perspective of nutrition and variations in the contemporary food habits.
- To understand the current changes in the dietary pattern and lifestyle basis of diseases emerging trends in nutrigenomics.

#### Course Content

- UNIT1** Introduction to Nutritional Anthropology:
- Basic principles aim and objectives of nutritional anthropology.
  - Macro and micro nutrients and their interaction immunity and infections.
  - Trace elements and their importance in human nutrition.
- UNIT 2** The Evolutionary Background.
- Palaeolithic diet.
  - Evolution of diet with the earliest human ancestors and latest human.
  - Implications of dietary evolution.
- UNIT 3** Biocultural diversity of food and Nutrition.
- UNIT 4** Variation in contemporary food habits.
- Pre-industrialisation, Industrialisation and Globalisation.
  - Changes in the dietary pattern and lifestyle.
  - Under nutrition and malnutrition.
  - Nutritional disorders
  - Emerging trends: nutrigenomics, nutraceuticals and bio active compounds.
- UNIT 5** Nutritional Requirements and assessment techniques.
- Recommended dietary allowances.
  - Qualitative and Quantitative assessment techniques of human nutrition.

## **PRACTICALS**

1. Anthropometric assessment of nutritional status:  
Somatometry: Height, weight, BMI, Body fat percentage, Circumferences,
2. Hand Grip Strength.
3. Development of FFQ
4. Haemoglobin Assessment
5. Glucose estimation
6. 24-hour dietary recall
7. In depth interviews
8. Focus Group discussions.
9. Quantitative data analysis using softwares.

## **Suggested Readings**

1. Farb, P. & Armelagos, G. (1980). *Consuming Passions: The Anthropology of Eating*. Boston: Houghton Mifflin Co. Pp. 3-14.
2. Lee, R. B. (1968). What Hunters Do for a Living, or, How to Make Out on Scarce Resources. In: Lee RB, Devore I. (eds.) *Man the Hunter*, Chicago: Aldine de Gruyter. Pp. 30–48.
3. Harris, M. (1987). Foodways: historical overview and theoretical prolegomenon. In: Harris, M. and E. B. Ross (eds.) *Food and Evolution: Toward a Theory of Human Food Habits*. Philadelphia: Temple University Press. Pp. 57-90.
4. Eaton, S. B., & Konner, M. (1985). Paleolithic nutrition: a consideration of its nature and current implications. *The New England Journal of Medicine*, 312(5):283-289.
5. Leonard, W. R. (2002). Food for thought: dietary change was a driving force in human evolution. *Scientific American*, 287:106-112.
6. Teaford, M. F., & Ungar, P. S. (2000). Diet and the evolution of the earliest human ancestors. *Proceedings of the National Academy of Sciences*, 97:13506–13511.
7. Pelto, G. H., Goodman, A. H., & Dufour, D. L. (2000). The biocultural perspective in nutritional anthropology. In: Goodman AH, Dufour DL, Pelto GH. (eds.) *Nutritional Anthropology: biocultural Perspectives on Food and Nutrition*. Mountain View, CA: Mayfield Publishing Co. Pp. 1-9.
8. Hunter, J. M. (1973). Geophagy in Africa and in the United States: A Culture-Nutrition Hypothesis. *Geographical Review*, 63:170-195.

9. Katz, S. H. (1987). Food and biocultural evolution: a model for the investigation of modern nutritional problems. In: F. E. Johnston (ed.), *Nutritional Anthropology*. New York: Alan R. Liss. Pp. 41-63.
10. Weiss, K. M. (2005). The reluctant calf. *Evolutionary Anthropology* 14:127–131.
11. Wilson, W. M., & Dufour, D. L. (2002). Why "bitter" cassava? Productivity of "bitter" and "sweet" cassava in a Tukanoan Indian settlement in the northwest Amazon. *Economic Botany*, 56:49-57.
12. Johnson, A. & Baksh, M. (1987). Ecological and structural influences on the proportions of wild foods in the diets of two Machiguenga communities. In: Harris, M. and E. B. Ross (eds.) *Food and Evolution: Toward a Theory of Human Food Habits*. Philadelphia: Temple University Press. Pp. 387-406.

## Elective Paper

### Epidemiology and Public Health

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### Course Objective:

- To learn basic aspects of medical measurement—sources of variation; measures of disease occurrence and trait/outcome associations;
- The fundamentals of research design, including the strengths and weaknesses of various observational designs, clinical trials
- Knowledge of statistical tools commonly used in epidemiological research
- Learning of principles of ethics and privacy rights in designing epidemiological studies
- To understand the use of epidemiological research in developing health policy

#### Course Learning Outcomes:

Student will be

- Able to critically assess the epidemiological information given in scientific literature related to epidemiology and public health
- Familiar with the epidemiological research designs and their limitations
- Able to apply basic statistical methods used in epidemiology
- Aware of principles of ethics in conducting epidemiological research
- Familiar with the role of epidemiological research in health policy

#### Course Content

**Unit I Basics of Epidemiology:** Definition, scope and use of epidemiology; Measurement of disease frequency: risk, rates, prevalence, incidence, and Disability; Etiology and confounding

**Unit II Epidemiological research methods:** Case-control designs, Population Survey, Cross-sectional studies, Longitudinal studies, and Randomized controlled trials

**Unit III Environmental Epidemiology:** Introduction to environmental epidemiology; Exposures and dose assessment (long term and short term), and health of environmental pollutants.

**Unit IV Infectious Diseases:** Transmission route, seasonal and recurrent epidemics, Heterogeneity in transmission, Burden of communicable diseases, Trends in infectious disease and control measures; Non Communicable diseases.

**Unit V Public Health Policy:** Health policy, planning and evaluation

**Unit VI Statistical methods:** Measures of Central tendency, Dispersion, Normal distribution, Test of significance (Student t Test and Chi-square test), Correlation and Regression, ANOVA, Odds ratio and Confidence interval

**Unit VII** Ethics in epidemiological research

**Practical/Project Report:**

A comprehensive epidemiological research report based on fieldwork

**Suggested Readings**

1. Henryk, Dancygier (2005). Clinical Epidemiology. Lippincott Williams & Wilkins.
2. Patrick, Parfrey., Pietro, Ravani (auth.), Brendan, Barrett., Patrick, Parfrey (eds.) (2009). Clinical Epidemiology: Practice and Methods. Humana Press
3. Thomas C. Timmreck (1998). An introduction to epidemiology. Jones and Bartlett
4. Jacques Cabaret, Serge Morand (auth.), Serge Morand, François Beaudeau, Jacques Cabaret (eds.) (2010). New Frontiers of Molecular Epidemiology of Infectious Diseases. Springer Netherlands
5. Yu-Kang Tu., & Mark S. Gilthorpe (2011). Statistical Thinking in Epidemiology. Chapman and Hall/CRC
6. Moyses Szklo, & Javier, Nieto (2014). Epidemiology: Beyond the Basics. Jones & Bartlett Learning

**Facilitating the achievement of Course Learning Outcomes**

<b>Unit No.</b>	<b>Course Learning Outcomes</b>	<b>Teaching and Learning Activity</b>	<b>Assessment Tasks</b>
1.	Able to critically assess the epidemiological information given in scientific literature related to epidemiology and public health	Class lecture and discussion	Written assignment
2.	Familiar with the epidemiological research designs and their limitations	Class lecture and discussion	Critical review of a research article
3.	Able to apply basic statistical methods used in epidemiology	Class lecture and discussion	Critical review of a research article
4.	Aware of principles of ethics in conducting epidemiological research	Class lecture and discussion	Classroom Debate

## Elective Paper

### Primate Biology and Behavior

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks ( Lecture: 4 hours/week; Practical: 3 hours/week)**

#### Theory

##### Course Objective:

- This paper will enable the students to understand the evolutionary biology of various non-human primates.
- Their physical and anatomical metamorphosis will help the students to understand human evolution too.
- Their population and molecular genetical aspects help us not only to know human evolution but also their use in biomedical research. Furthermore, it helps in breeding and conservation of non-human primates.

##### Course Learning Outcome:

- The students will be enriched with the knowledge of this subject It will help the students to accumulate information about genetic and physical aspects and that can be used for the betterment of mankind.

- Unit I** Aim and scope of evolutionary biology with special reference to nonhuman primates.
- Unit II** Trends in early primate radiation-dentition, postural modifications with special reference to shoulder girdle, pelvic girdle, limbs, hand and foot.
- Unit III** Population genetics of nonhuman primates.
- Unit IV** Cladistic: relationships and molecular evolution of primates: Serological aspects  
Proteins  
Chromosomal aspects  
DNA
- Unit V** Socioecology and population dynamics of nonhuman primates.
- Unit VI** Communication: patterns, signals, display and vocational
- Unit VII** Use of nonhuman primates in biomedical research
- Unit VIII** Breeding and husbandary of non-human primates: Conservation of nonhuman primates.

##### Evolution of Behaviour

- Unit IX** Behaviour taxonomy: hierarchical, associative and sexual
- Unit X** Patterns of social behaviour
- Unit XI** Field and laboratory studies
- Unit XII** Leadership: inter and intra group encounters
- Unit XIII** Dominance
- Unit XIV** Aggression
- Unit XV** Primate Societies

## **Suggested Literature**

1. Russell, Tuttle. (2007). *The functional and Evolutionary Biology of Primates*. Aldine Transaction.
2. Wood Eds. B. A., Martin, L. B., & Peter, Andrews (2009). *Major topics in Primate and Human Evolution..* Cambridge University Press
3. Friderun Ankel-Simons (2007). *Primate Anatomy: An Introduction.,* Academic Press.
4. John G. Fleagle (1998). *Primate Adaptation & Evolution.,* Academic Press .
5. *Primate and Human Evolution (Cambridge Studies in Biological Anthropology) (2006)* Cambridge University Press
6. Karen, B. Strier., Allyn & Bacon. (2006). *Primate Behavioral Ecology (3<sup>rd</sup> edition)*. Bernard, Chapais & Carol, M. Berman. (2004). *Kinship and Behaviour in Primates. ..* Oxford University Press.
7. *Primate Paradigms: Sex Roles and Social Bonds, (1992)* Linda Marie Fedigan. University of Chicago Press.
8. Russell, L. Ciohon & Richard, A. Nisbett (1997). *The Primate Anthology: Essays on Primate Behaviour, Ecology and conservation from National History. .* Prentice Hall.

## **Primate Biology and Behavior**

### **Practical/ Project**

1. Preparation and identification of nonhuman primate chromosomes
2. Osteology, craniometry and osteometry of primate bones Blood groups and dermatoglyphics of nonhuman primates.
3. Field studies on mother-infant relationship, social structure, population dynamics of the non-human primates.
4. 7 Day's visit to a non-human primate population living in the natural habitat.

## Elective Paper

### Paper: Dermatoglyphics

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks (Lecture: 4 hours/week)**

#### Course Objective:

- To understand the history and scopes of fingerprints and palm prints.
- To understand the importance of significance of dermatoglyphics in forensic identification.

#### Course Learning Outcomes:

- Understand the variation of patterns in human groups.

#### Theory

**Unit I:** Early history & development of Dermatoglyphics; Development of ridges b. identification of various finger prints, Technique of taking prints.

**Unit II :** Topography of finger prints

**Unit III :** Study of mid phalangeal patterns

**Unit IV :** Mode of Inheritance of Finger prints

**Unit V:** Study of Palm prints. Main Line formula, Palmer formula, Main Line Index -and Transversality, Mode of Inheritance of Main Lines D, C, B & A and the Patterns on the configurational areas of Palm.

**Unit VI :** Practical applicability of Dermatoglyphics in relation to congenital - malformation.

**Unit VII:** Dermatoglyphics phici in relation to Chromosomal aberrations

**Unit VIII :** Uses of Dermatoglyphics in Paternity Disputes - Recent trends in Dermatoglyphics

**Unit IX :** Flexion creases

#### Practical

Collection and analysis of 20 individuals dermal prints.

1. Identification of pattern types: Arch, Loop, Whorl and Composites.
2. Ridge counting: procedure and applicability.
3. Calculation of various indices.
4. Taking of palmer prints identification of palmar main lines, calculation of main line formula, main line index.
5. Identification of patterns in different palmer configurational areas
6. Position of axial triradii.

7. Importance of atd angle.
8. Use of statistical techniques in the analysis of finger and palmer print data.

### **Suggested Literature**

1. Harold, Cummins., & Charles, Midlo. (1961). Fingerprints, Palms and Soles- An Introduction to Dermatoglyphics. Dover Publications
2. MacMillan., & Co., London. (1895). Fingerprints. Francis Galton., Paper Back June 2008.

## Elective Paper

### Paper: Human Population Studies

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 25 marks)**

**Duration: 14 weeks (Lecture: 4 hours/week)**

**Objectives:** The objective of this paper is to relate the relevance of human population studies in anthropology.

**Outcome:** The students will understand:

1. The effect of environment and eco-system on population structure and change
2. Occupational hazards on population process and population ethics.
3. Factors and consequences of human migration pattern.
4. Differential population profile of India and its trends.

**Unit I :** Basic concepts, definition and importance of population studies. Relationship between demography anthropology and population studies

**Unit II :** Population theories – Socio-economic and Biological Theories, Demographic Transition Theory.

**Unit III:** Various types of sampling designs and their relevance in population studies. General and specific estimates of demographic characteristics.

**Unit IV:** Sources of demographic studies – Census, Civil Registration (CRS), Sample Registration System (SRS), National Sample Survey Office (NSSO), International Institute of Population Sciences (IIPS).

**Unit V:** Population of India; Determinants of fertility and mortality in India: Growth of Census studies pre and post independence in India.

**Unit VI:** Population Structure – Population Projection. Population dynamics of Indian Caste and Tribes.

**Unit VII:** National Health Policy and Reproductive Health?

#### **Practical:**

1. 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.
2. Survey of census record.
3. Introduction to sample survey reports and various other governmental and non-governmental records.

#### **Suggested Literature.**

1. Bogue(1969). Principles of Demography.

2. Census of India Official Website <http://censusindia.gov.in> Office of the Registrar General & Census Commissioner, India.
3. Cox, P. (1976). Demography. Vikas Publishing House.
4. Driver, E. D. (1963). Fertility differentials in Central India. Princeton University Press• Princeton.
5. John, R.W. (2002). Population: An Introduction to Concepts and Issues. Thomson Wadsworth.
6. NFHS- I, II, III & IV. 1992-93, 1998-99, 2005-06, 2015-16 India: TIPS Bombay
7. UNDP (2016). Human Development Report Oxford University Press.
8. World Bank (2018). World Development Report 2018, World Bank Publication.
9. Zubrow, E. B. W. (1976). Demographic Anthropology Quantitative Approaches. University of New Mexico Press, Albuquerque.

## **MASTER of Science**

### **Semester IV/ Elective paper**

#### **Course Code: Psychological Anthropology**

**Marks: 150 Total Credits-5: Theory-4 credits (i.e. 100 marks); Practical- 1 credit (i.e. 25 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

#### **Course Objectives:**

- The course explores the relationship between mind, biology, culture and human behaviour. It attempts to bring in the cultural basis of some of key psychological concepts like self identity, perception, memory, emotion, feeling, attitude and prejudices, drives and motivations that influences human cognition and behaviour.
- It also explores the individual basis of some of the key cultural categories like socialization, enculturation, social identity and cultural conformity, expectations and deviance. The paper would look at the concept of normality and abnormality and how it is cross- culturally determined.

#### **Course Learning Outcomes:**

- The course would enable the students to understand the cultural, evolutionary and the psychological basis of the key concepts of mind, body and culture.
- It would enable to understand what are the universals in human behaviour and how these universals are influenced by the culture and other factors.
- The students would be able to outline how key concepts like identity, ethnicity, violence and aggression are channelized and operate in the society. Will be able to use concepts like motivation, learning and un-learning and how they could be used for modify

#### **Contents:**

- Unit I** The basis of human behaviour- Evolutionary, Cultural and psychological and biological dimensions. Freud his model of unconscious and its influence on theory and practice of anthropology with special reference religion and symbolism.
- Unit II** The relationships of anthropology, psychology, psycho-analysis and psychological anthropology
- Unit III** Culture and cognition., Socialization childhood and puberty (comparative and cross cultural). Critical understanding of the relationship between Culture and personality and National Culture studies.
- Unit IV** Human universals and cultural particulars with reference to the concepts of Self, Identity, Emotion, consciousness Aggression, Dominance and Violence

**Unit V** Psychiatric anthropology and Mental Health problems : Possession: Anthropological and Psychological dimensions. Social and Cultural aspects of Depression Schizophrenia, Borderline personality, Somatization, Anxiety disorders and Culture bound Syndromes.

**Unit VI** Recent trends in psychological anthropology.

## **PRACTICAL**

Introduction to Psychological Tests : Inferential and Direct. Their critical understanding and modify them with according to cultural factors

Project Work : The students are supposed to prepare a report based on minimum 15 days of fieldwork in a community, on any of the topic related to psychological anthropology. The project should clearly try to delineate how a particular behaviour is influenced by the individual and the cultural factors.

### **Suggested Readings:**

1. Benedict, Ruth. (1946). *The Chrysanthemum and the Sword: Patterns of Japanese Culture*. New York: New American Library.
2. Imgham, J. M. (1996). *Psychological Anthropology Reconsidered*. Cambridge: Cambridge University Press.
3. Schwartz, Theodore., Geoffrey, M. White., & Catherine, A. Lutz, eds. (1992). *New Directions in Psychological Anthropology*. Cambridge: Cambridge University Press.
4. Shweder, Richard A., & Robert, A. LeVine, eds. (1984). *Culture Theory: Essays on Mind, Self and Emotion*. Cambridge: Cambridge University.
5. Spiro, Melford E. (1987). *Culture and Human Nature: Theoretical Papers of Melford E. Spiro*. Benjamin Kilborne and L.L. Langness, eds. Chicago: University of Chicago Press.
6. Strauss, Claudia., & Naomi Quinn. (1997). *A Cognitive Theory of Cultural Meaning*. Cambridge: Cambridge University Press.
7. Sudhir, Kakar. (2001). *The Essential Writings of Sudhir Kakar*. Delhi: Oxford University Press.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	Enable the students to understand the cultural, evolutionary and the psychological basis of the key concepts of mind, body and culture	Lecture and class discussion. Students are to read the suggested readings and come to class for discussion	Written Assignment
2.	Understand what are the universals in human behaviour and how these universals are influenced by the culture and other factors	Lecture and class discussion with case studies	Written Assignment
3	Outline how key concepts like identity, ethnicity, violence and aggression are channelized and operate in the society	Lecture and class discussion	Written Assignment

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Urban Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- The course deals with the Urban anthropology and explores the issues of Urbanisation, urbanism, urban structures and urban ecology.
- The students will be acquainted with understanding of urban problems and their social anthropological solutions besides learning about the social institutions under urban settings.

**Course Learning Outcomes:**

- The students will be able to use the anthropological theories and methods in understanding urban issues, ecology and social structure and propose solution of urban problems through a holistic understanding using anthropological methods.

**Contents:**

**Unit I** Rise of city and civilization in India

- i. Pre-industrial
- ii. Orthogenetic and Heterogenetic

**Unit II** Folk-urban continuum of India

**Unit III** Processes of Urbanisation, urbanism, urban structures and urban ecology

**Unit IV** Basic features of Urban Social Structure

- i. Heterogeneity
- ii. Neighbourhood
- iii. Slums
- iv. Ethnic, Cultural, Linguistic affiliation of an Indian city

**Unit V** Continuity and change in Indian Urban Society

- i. Kinship and family
- ii. Caste
- iii. Religion

**Unit VI** Secular values and Urban setting

- i. Secularism
- ii. Multi-ethnicity
- iii. Cultural integration

## PRACTICAL

The students will be required to undertake two minor research projects, one comprising study of a city based on secondary sources and another on some specific dimension of city, based on primary field research.

1. Identify a problem in an urban area, consult secondary sources to make an annotated bibliography.
2. Write a report on the problem selected using secondary sources.
3. Do fieldwork in any urban area and do any of the following type of primary research.
  - a. Observing an urban situation.
  - b. Understanding neighbourhood relations.
  - c. Analyzing urban Kinship.
  - d. Any other urban problems.

### Suggested Readings:

1. Eames,E & J. G. Good. 1977. Anthropology of the city. Prentice Hall.
2. Fox, R.G. 1977. Urban Anthropology: Cities and their Cultural Setting. Prentice Hall
3. Hannertz, U. 1983. Exploring the city inquires towards an urban anthropology. Columbia University Press.
4. Mangin,W.1970 Peasant in City. Houghon Mifflin
5. Melch, G.G & W.P. Zanner. 1996. Urban Life. Waveland Press
6. Southall, A.W. 1973. Urban anthropology: Cross-Cultural Studies of Urban Citites. Oxford University Press.
7. Southhall,A & A.W. Southall. 1973. Urban anthropology: Oxford University Press.
8. Uzzell, J.D.& R. Provencher. 1976. Urban Anthropology. W.C. Brown Co. Dubuque.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	use anthropological theories and methods in understanding urban issues, ecology and social structure	Lecture and class discussion. Students are to read the suggested readings and come to class for discussion	Written Assignment
2.	propose solution of urban problems through a holistic understanding using anthropological methods	Lecture and class discussion with case studies	Written Assignment

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Gender and Society**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- This course will offer students a firm grounding in understanding social construction of gender categories. The course attempts to address the following questions:
- How are gender differences explained?
- How do race/ethnicity, caste, class and sexuality intersect with gender?
- Does gender constrain or enable individual actions and opportunities?
- How is gender represented in media?

**Course Learning Outcomes:**

- The students will be able to understand the social construction of gender categories both historically and in the present.
- Have a grasp on various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.
- Ability to reflect on own experiences and media reports on gender issues in a theoretically and empirically informed way.
- Critical thinking skills.
- Knowledge and understanding of the intersection of gender with ethnicity, caste, class and disability.

**Contents:**

- Unit I** Emergence of theoretical concept of gender; historical and social conditions that favored a gendered approach; the cross cultural implications of the concept of gender; classical notions of femininity and masculinities; Diachronic conceptualization of men and women with respect to nature and culture; medical and western science's contribution to understand human body and comparison to non-western modes of thinking
- Unit II** Construction of personhood in society; men's and women's position within kinship network; rules and norms pertaining to rights and duties, inheritance and rules of marriage; laws pertaining to women with special reference to South Asia
- Unit III** Intersections of gender with other social categories like caste, race, and ethnicity. Black feminist challenges, postcolonial feminism; gender and disability

**Unit IV** Gender and Globalization: How concepts of gender are being critiqued and reconstructed in the contemporary world. Gender representation in media; New reproductive technologies, new perspectives on sexuality

### **PRACTICAL**

1. Make a fully annotated bibliography on any topic on the theory of gender.
2. To evaluate gender representation in media with focus on cinema, news, advertisement, music etc. This exercise requires a visual presentation, to be screened and discussed.
3. To critically review constitutional and legal rights of women in India. Debate and discussion.
4. Write a research design to study a relevant gender based social issue.
5. Formulate research tools for studying the problem and submit a report.

### **Suggested Readings:**

1. Butler, Judith. 2006. *Gender Trouble: Feminism and the Subversion of Identity*. Routledge
2. Dube, Leela. 1997. *Women and kinship: comparative perspectives on gender in South and South-East Asia*. Tokyo: United Nations University Press.
3. Gunewardena, Nandini, and Ann E. Kingsolver. 2007. *The gender of globalization: women navigating cultural and economic marginalities*. Santa Fe, N.M.: School for Advanced Research Press.
4. Harrison, Faye Venetia. 2005. *Resisting racism and xenophobia: global perspectives on race, gender, and human rights*. Walnut Creek [Calif.]: AltaMira Press.
5. Kapadia, Karin. 1995. *Siva and her sisters: gender, caste, and class in rural South India*. Studies in the ethnographic imagination. Boulder, Colo: Westview Press.
6. Krijnen, Tonny, and Sofie Van Bauwel. 2015. *Gender and Media: Representing, Producing, Consuming*. Oxon: Routledge.
7. MacCormack, Carol P., and Marilyn Strathern. 1980. *Nature, culture, and gender*. Cambridge [Eng.]: Cambridge University Press.
8. Misra, K. K., and Janet Huber Lowry. 2007. *Recent studies on Indian women: empirical work of social scientists*. Jaipur: Rawat Publications.
9. Naples, Nancy A., and Manisha Desai. 2002. *Women's activism and globalization: linking local struggles and transnational politics*. New York: Routledge.
10. Reiter, Rayna. 1977. *Toward an anthropology of women*. New York: Monthly Review.
11. Rosaldo, Michelle Zimbalist, Louise Lamphere, and Joan Bamberger. 1974. *Woman, culture, and society*. Stanford, Calif: Stanford University Press.

12. Unnithan-Kumar, Maya. 1997. *Identity, gender, and poverty: new perspectives on caste and tribe in Rajasthan*. Providence: Berghahn Books.
13. Valle, Teresa del. 1996. *Gendered anthropology*. European Association of Social Anthropologists. London [u.a.]: Routledge.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	The students will be able to understand the social construction of gender categories both historically and in the present.	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	Have a grasp on various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.	Lecture and class discussion based on suggested readings	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	Ability to reflect on own experiences and media reports on gender issues in a theoretically and empirically informed way.	Discussions	written assignment, visual presentation
4	Knowledge and understanding of the intersection of gender with ethnicity, caste, class and disability.	Class lecture; class discussions. Students are encouraged to share their experiences in a theoretically and empirically informed way.	Written assignment or verbal presentation

**MASTER of Science**  
**Semester IV Elective paper**

**Course Code: Development Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

1. To define and distinguish the terms “applied, development anthropology, and anthropology of development”.
2. To articulate important ethical issues impacting contemporary work in development anthropology
3. To critically evaluate development projects, community participation, and empowerment in India, ;

**Course Learning Outcomes:**

1. The students will be able to learn key debates in the anthropology of development;
2. Gain aptitude to understand development encounters from different perspectives, and in different regional and institutional contexts;
3. Understand conceptual and ethical reflection on what and how anthropologists can contribute in practice.

**Contents:**

**Unit I:**

Theoretical overview of the relationship between Development and Anthropology; key concepts and arguments in both applied ‘development anthropology’ and the ‘anthropology of development’; Gender and development.

**Unit II:**

Politics of aid, donors, states; poverty, its meaning, measurement, and experience; significant anthropological contributions to debates over poverty, scientific and ‘indigenous’ knowledge for development; indigenous communities and issues of displacement

**Unit III:**

Evaluation of work of policy makers, development projects, and popular ‘community participation’ and ‘empowerment’ in development with relevant case studies from India; Sustainable development, conservation and environment, migration, technology, and education

#### **Unit IV:**

Non-governmental organizations (NGOs) and civil society in contemporary development; the role of anthropologists in development

#### **PRACTICAL**

Students are required to submit critical evaluative case study of any development project in India with special reference to the following exercises:

1. Identify any development project in India and construct a brief ethnography of the project.
2. Collect all available material debating the project
3. Make a project report (text or visual) with your own critical evaluation of the debate.
4. Provide a comprehensive bibliography.

#### **Suggested Readings:**

1. Edelman, Marc & Angelique Haugerud (eds) 2005. *The anthropology of development and globalisation: From classical political economy to contemporary neoliberalism*. Oxford: Blackwell.
2. Gardener, K. & D. Lewis 2015. *Anthropology and Development: Challenges for the twenty-first century*. London: Pluto
3. Escobar, Arturo. 1995. *Encountering Development: The Making and Unmaking of the Third World*, Princeton, N. J. Princeton University Press.
4. Harrison, E. & Crewe, E. 1999. *Whose development? An ethnography of aid*. London: Zed Books
5. Mosse, David, and David Lewis. 2005. *The Aid Effect: Giving and Governing in International Development*. Pluto Press
6. Olivier de Sardan, Jean-Pierre. 2005. *Anthropology and Development: understanding social change*. London: Zed Press.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	The students will be able to learn key debates in the anthropology of development;	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	Gain aptitude to understand development encounters from different perspectives, and in different regional and institutional contexts;	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	Understand conceptual and ethical reflection on what and how anthropologists can contribute in practice.	Class lecture; students are expected to be aware of current affairs in the country. Any current issue pertaining to development in India will be debated and discussed in the light of anthropological insights.	Discussion and written assignment. Students may use flow chart, visual presentation: images or video.

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Ecological Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- The students will try to understand the relationship between ecology and culture using the theories and methods of anthropology.
- It would be based on the Cognitive, Phenomenological and other contemporary approaches to understand the complex manner in which ecology and environment interacts.

**Course Learning Outcomes:**

- The students will be critically able to understand the contemporary ecological issues and how they are shaped by social and cultural factors.
- They will be able to understand and apply the important indigenous and alternative models of ecology to issues of sustainable development and climate change.

**Contents:**

- Unit I** Cultural/ Social Ecology: concept, definition and relevance; Sustainable Development.
- Unit II** Cultural ecology: Concept, its development and different theories, Deep Ecology, Eco-feminism
- Unit III** Nature and Culture: Concept of Nature across Different culture;
- Unit IV** Indigenous Knowledge and alternative models
- Unit V** Contemporary environmental issues and debates – Climate Change, Human Activity and Anthropocene. Climate Change Adaptation and Issues in disaster anthropology

**PRACTICAL**

1. Critically review and ethnographic work on ecological anthropology
2. Make a project proposal and an annotated bibliography.
3. Make a report on any contemporary environmental issue.

**Suggested Readings:**

1. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
2. Descola, Philippe, and GísliPálsson. 1996. Nature and society: anthropological perspectives. London: Routledge.
3. Guha, Ramachandra. 1990. The unquiet woods: ecological change and peasant resistance in the Himalaya. Berkeley: University of California Press.
4. Guha, Ramachandra. 2003. Social ecology. Oxford in India readings in sociology and social anthropology. Delhi [u.a.]: Oxford University Press.
5. Shiva, Vandana. 2009. Staying alive. [S.l.]: Zed Books Ltd.

**Facilitating the achievement of Course Learning Outcomes**

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	critically able to understand the contemporary ecological issues and how they are shaped by social and cultural factors	Lecture and class discussion.	Written Assignment
2.	understand and apply the important indigenous and alternative models of ecology to issues of sustainable development and climate change	Lecture and class discussion based on suggested readings	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Medical Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

This course will offer students an understanding of health and illness issues from the cultural and social perspectives. The paper discuss contemporary health issues in national and international scenarios and how anthropological knowledge can solve these problems

**Course Learning Outcomes:**

The students should able to link the biological aspect of the health and disease with the social and cultural factors and how they impact issues of mental health, reproductive health, communicable and non-communicable diseases. They should also be able to critically understand the National Health Policy and the health care programmes of different states of India

**Contents:**

**Unit I:**

Medical anthropology: Historical development and subject matter, Emergence of Medical Anthropology in India.

**Unit II:**

Development of theory in medical anthropology

**Unit III:**

Traditional systems: classical systems, alternative systems, medical pluralism

**Unit IV:**

Medical anthropology and mental health

**UNIT V:**

Issues and trends in international health: AIDS, Diarrhoea, ARI, Reproductive health and Vector borne diseases

## **UNIT VI:**

Health care in India: National Health Policy; health care programmes

### **PRACTICAL**

The students shall be required to undertake two projects: one based on secondary sources and the other based on primary data collected through fieldwork in a community.

1. Make a project proposal on any relevant issue in Medical Anthropology.
2. Collect secondary data using a multisource approach like books, formulas, newspapers, media etc.
3. Submit a project report based on the above material.
4. Do a short field-work to investigate any of the following.
  - a. Cultural approach to health and healing.
  - b. Traditional health practitioners.
  - c. Collection of medical biographies.
  - d. Indigenous knowledge of medicine.
  - e. Any other as suggested by concerned teacher.

### **Suggested Readings:**

1. Alland, A . 1970. *Adaptation in Cultural Evolution: An approach to Medical Anthropology*. Columbia University Press.
2. Brown, Peter.J., and Svea Closser. 2016. *Understanding and Applying Medical Anthropology*. Routledge.
3. G.M. Foster and B.G Anderson. 1978. *Medical Anthropology*. McGraw- Hill Companies.
4. Helman, Cecil. 2007. *Culture, Health and Illness*.5<sup>th</sup> edition. Oxford: Butterworth-Heinemann
5. Kakar, Sudhir. 2013. *Shamans, Mystics and Doctors*. Knopf Doubleday Publishing Group.
6. Kalla, A.K.and P.C . Joshi . 2004. *Tribal Health and Medicines*. Concept Publishing Company.
7. Landy, David. 1977. *Culture, Disease and Healing: studies in Medical Anthropology*. Macmillan University Press.
8. Manderson, Lenore, Elizabeth Cartwright, Anita Hardon. 2016. *The Routledge Handbook of Medical Anthropology*. Routledge.
9. Mc Elroy, Ann, and PK Townsend. 2018. *Medical Anthropology in ecological perspective*. Routledge.
10. Simons, Ronald,C., and CC Hughes. 2012. *The Culture-Bound Syndromes: Folk Illnesses of Psychiatric and Anthropological Interest*. Springer Science & Business Media

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	to link the biological aspect of health and disease with the social and cultural factors	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	issues of mental health, reproductive health, communicable and non-communicable diseases	Lecture and class discussion.	Debate and discussion
3.	critically understand the National Health Policy and the health care programmes of different states of India	Class lecture and discussions	written assignment

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Anthropology of Religion**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

- The present course introduces students to the study of religion, both as a phenomenon and as a social institution, thereafter feeding their scholarly instincts through knowledge of world religions, lived religions and matters of religious concerns significant to political, economic and environmental discourses governing the global canvas.

**Course Learning Outcomes:**

- This course will attempt to inculcate a nature of appreciation towards religion within students, make students understand the relevance of religion in contemporary times and would develop an insight of understanding religious life using the anthropological lens.
- The students will get the opportunity to understand the definitional boundaries, contested meanings, approaches and methodologies for anthropological studies of religion in society.
- The students can explore the processes of construction of religious identities through language, ideology, narratives and discourses in Indian contexts. They can explore the diverse ways in which religious identities are interpreted and utilized to build up ideas towards religious tolerance and respect for Human Rights.
- The Students will receive apt insight to work with interfaith alliances and faith based NGOs so that in future they can be capable of assisting governments in their initiatives towards environment conservation through religion.
- The students can understand the applicability of religion and spirituality to the world of medical science wherein they can collect narratives on peoples experiences on alternative modes of healing acknowledging practices like Yoga and holistic healing therapies.

**Contents:**

**Unit I Introduction to Anthropology of Religion:** Approaches to understand Religion, Great Narratives in Religion, Major Concepts in the study of Religion, World religions and Lived religions.

**Unit II Contextualizing Religion:** Religion in simple and complex societies, Religious ethics and morality, Religious markets, Tourism, Pilgrimage and voluntary work, Religion and Developmental initiatives, Religion in medicine, well-being and faith-healing, Faith based NGOs and Politics of Charity, Recent Movements in religion, Religion and Governance.

**Unit III Religion in Gender discourse:** Embodiment, Gender and sexuality in religion, Gender Representations in religious art, folklore, music and myths, Religion and recognition of

Gender Rights, Feminist movements in Religion, Ritual experts, Faith and Emergent Masculinities, Gender in reincarnations, Positions of 'the third genders' in Religion.

**Unit IV Religion in Contemporary Global issues:** Religious violence, conversions , extremism and fundamentalism. Religion and Human Rights , Religious freedom of minorities, Religion in the politics of representations, Religious dialogues to promote World peace, and UN efforts. Environment in Religious Worldview , Environmental conservation through Religion, Religion and sustainable development, Religious environmentalism.

**Unit V Religion and Spirituality in India:** Contribution of Indian Anthropologists to the Study of Religion, New Religious Movements in India, Religion and aesthetics, Cognitive interpretations of Religions. Religion in modern India Religion and Education in India,

(Note: Anthropological Narratives, Ethnographic contributions of Indian anthropologists and examples through Indian Religions shall be focused upon to gain insight into the varied dimensions of Religion. )

## PRACTICAL

**Unit I Introduction to Anthropology of Religion:** Review of an ethnography.

**Unit II Contextualizing Religion :** Collection and Analysis of case studies.

**Unit III Religion in Gender Discourse:** Preparation of an annotated bibliography .

**Unit IV Religion in contemporary global issues:** Analysis on Religion, violence and peace measures in contemporary contexts or, Preparation of a project report on religion and environment.

**Unit V Religion and Spirituality in India:** Collection of Narratives of narratives from peoples experiences with religion and spirituality in India.

## Suggested Readings:

1. Bielo, James. S. *Anthropology of Religion: The Basics*, (Routledge Publishing, 2015).
2. Gottlieb, R. *This sacred earth: religion, nature, environment*. (Routledge Publication, 2004).
3. King, E.Francis. *Material Religion and Popular Culture*.(Routledge,2009)
4. Lambeck, Michel.*A reader in Anthropology of Religion*.(Wiley Blackwell, 2008).UK.
5. Lessa, William. A. And EvonZ. Vogt. *Reader in Comparative Religion: An Anthropological Approach*, (Harper and Row Publisher, 1979)
6. Pechilis, Karen and Silva J Raj, *South Asian Religions: Traditions and Today*. (Routledge,2013)
7. McGuire B.Meredith. *Lived Religion:Faith and Practice in Everyday Life*(Oxford University Press:2008)
8. Pals, D. *Nine Theories of Religion* (Oxford University Press, 2014).

9. Sullivan F., Winnifred, Hurd S. Elizabeth, Mahmoodsaba and Peter D. Danchin. (eds.) *Politics of Religious*. (University of Chicago Press, 2015).
10. Turner, Edith.: *Among the Healers: Stories of Ritual Healing around the world* (Prager Publishers, 2005)
11. Yudith, Kornberg Y. Greenberg. *The Body in Religion: Cross Cultural perspectives* : (Bloomsbury Academic, 2017)

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	To understand the meaning of Religion and acknowledge different theories, methodologies and discourses anthropologists have established as lenses to understand religion	Classroom Discussions on readings provided to the students.	Written Assignment
2.	To understand the significance of traditional and modern religion and link the role of Religion to development	Discussion on documentaries/Visual ethnographies in the domain of religion and development.	Presentation
3	To understand the role of religion in construction of cross-cultural interpretations on Gender.	To discuss narratives existing in day to day life of people to trace link between religion and gender.	Debate and Discussion. Students will be evaluated on their critical thinking and analytical skills.
4	To understand meaning of religious freedom and human rights in religious contexts. To think for solutions of Religious violence and Religious Fundamentalism	To discuss topics of contemporary relevance in related domain based on the general awareness issues and focus group discussions	Students seminar. Individual participation will be credited.
5	To understand the ways in which environment can be protected and conserved through religious means. To understand how faith based N.G.O's operates	To discuss relevant case studies in related domain	Report Writing on any relevant contemporary issue linking environment and religion
6	To understand the value of religion and spirituality in everyday life of people of India	Classroom discussions and collection and analysis of narratives of people to know the influence of religion on people of India	A short essay writing

**MASTER of Science**  
**Semester III/ IV Elective Paper**

**Course Code: Visual Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

(Students will be able to describe how anthropologists have used visual methods to produce anthropological knowledge; learn to critically analyse visual media; produce a photo essay and visual documentary)

**Course Learning Outcomes:**

1. Students will be able to examine how aspects of culture can be visually interpreted and expressed, and how images can be understood as artifacts of culture.
2. This course will help students understand the nature of anthropological film and the emergent new media of everyday life in a globalizing world.
3. Students will be able to develop their personal film and media making skills.

**Contents:**

- Unit I**     **Fundamental concepts in visual anthropology.** Usage of images in anthropological writings (Margaret Mead, Gregory Bateson, Malinowski)
- Unit II**     **Anthropological study of visual representation such as museums and archiving,** dance and other kinds of performance, visual arts, production and reception of mass media; ethnomusicology; visual culture, virtual ethnography; anthropology of dress and gendered embodiments
- Unit III**     Classical Ethnographic Photography: Contexts and Trends. Colonialism and Exhibited others; Ethnographic Photography: Conventions and Methodologies; Ethnophotography; photo elicitation; photo essay; autophotography
- Unit IV**     **Ethnographic films:** Classical works of prominent ethnographic filmmakers (Jean Rouch, John Marshall, Robert Gardner, and Tim Asch), indigenous filmmakers (Navajo, Kayapo) and emergent new media makers; Theoretical issues concerning ethnographic film; ethical dimensions of ethnographic film; Case studies in ethnographic films; New trends in ethnographic films.

## PRACTICAL

- Basic principles of producing ethnographic films: text and its focus, camera angles, lighting and decision making behind the camera. Filming as a Team- Roles and Responsibilities- Copyright and Legal Issues; Collaborative and Participatory Methods for Fieldwork (Ethics)
- Analyze visual data from classical and contemporary ethnographies signifying how 'otherness' is constituted.
- A gendered analysis of visuals produced during colonial and postcolonial times.
- Collection, reporting and analysis of photo-ethnographic data.
- Photo essay based on short fieldwork on location in Delhi.

### Suggested Readings:

1. Adair, John and Sol Worth. 1967. The Navajo as film maker: A brief report of research in the cross-cultural aspects of film communication. *American Anthropologist*. 69:76-78.
2. Anderson, K.T. 2003. Toward an anarchy of imagery: Questioning the categorization of films as "ethnographic". *Journal of Film and Video*. 55:73-87
3. Banks, M and J. Ruby. (eds). 2011. *Made To Be Seen: Perspectives on the History of visual anthropology*. Chicago: University of Chicago Press.
4. Boellstorff, Tom, Bonnie Nardi, Celia Pearce, T.L.Taylor. 2012. *Ethnography and Virtual Worlds: A Handbook of Method*. Princeton University Press.
5. Eicher, Joanne.B. 2000. The Anthropology of Dress. *Dress* . 59-70
6. El Guindi, Fadwa. 2015. 'Visual Anthropology: Essential Method and Theory'. In H.Russell Bernard and Clarence C. Gravlee (eds) *Handbooks of Methods in Cultural Anthropology*. Lanham: Rowman and Littlefield.
7. Hockings, Paul. 2003. *Principles of Visual Anthropology*. Berlin: Mouton de Gruyter.
8. Pink, Sarah. 2010. *Doing Sensory Ethnography*. Sage Publications.
9. Rouch, Jean.1995. The camera and man. In *Principles of visual anthropology*, 2<sup>nd</sup> ed., ed. P. Hockings, 79-98. Berlin: Mouton.
10. Singh, K.S. 1992. Cultural policy, cultural pluralism and visual anthropology: An Indian Perspective. In *Visual Anthropology and India: Proceedings of a seminar*, ed. K.S.Singh, 7-15. Calcutta: Anthropological Survey of India.

### Facilitating the achievement of Course Learning Outcomes

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1	Examine how aspects of culture can be visually interpreted and expressed, and how images can be understood as artifacts of culture.	Lecture and discussions	Photoessay in a specific context.
2	To understand the nature of anthropological film and the emergent new media of everyday life in a globalizing world.	Screening of ethnographic films, students need to write a report of their experience, not necessarily the summary.	Written Assignment
3	To develop their personal film and media making skills.	Students are expected to know basics of video editing. Concepts will be discussed in the class.	Ethnographic film making

**MASTER of Science**  
**Semester IV/ Elective paper**

**Course Code: Business and Corporate Anthropology**

**Marks: 150 Total Credits-6: Theory-4 credits (i.e. 100 marks); Practical- 2 credit (i.e. 50 marks)**

**Duration: 14 weeks ( L= 4 hours per week, Practical=3 hours per week)**

**Course Objectives:**

1. To understand the meaning of Business anthropology and Corporate Anthropology in contemporary contexts.
2. To learn different methodologies of advancing Business Anthropology in Business Organisations & Corporate Environment
3. To critically evaluate the ethical concerns of a Business Anthropologist to work in Business Organisations and Corporate Sectors as an insider (employee)and as a (consultant) outsider.

**Course Learning Outcomes:**

1. The students will be able to learn key concepts in the Business and Corporate Anthropology.
2. Gain aptitude to understand ethnographic encounters from different perspectives in Business and Corporate organizations including Healthcare sectors and NGO's.
3. Link anthropological skills to Information technology, communications networks and Human Resource Management to serve as Business and Corporate Anthropologists.

**Contents:**

**Unit I Introduction-History and Growth of Business and Corporate Anthropology :** Industrial Anthropology and Human Relations School(1930-1960); The Ethics questions(1960-1980),The rebirth of Business Anthropology, 1980 and Beyond. Basic concepts: Group, Role and Status, organisation, Corporate, organisational culture, Business and Business Management and behaviour Network.

**Unit II Anthropology and consumer behaviour:** Basic concepts- customer ,consumer, market anthropological theory and practice in marketing and consumer behaviour.

**Unit III Doing Anthropology in Organisational contexts:** Applied anthropology in industry, Complex Health care organisations, Health Economy, Libraries, Hospital management, NGO's etc.Advancing ethnography in corporate environments: Challenges and oppurtunities.

**Unit IV Globalization, international trade and anthropology-** Understanding the process of globalisation, information technology , communication networks and international trade.

**UNIT V Techniques for Conducting Fieldwork for Business Organizations :** conventional ethnographic methods, Rapid ethnography, Ethnography for systems development and product design, Doing corporate ethnography as an insider and outsider, Analysis of Relationships, Semiotic analysis, Video based introduction Analysis, Virtual ethnography and making use of electronic data. multiple techniques and rapid assessment.

## **PRACTICAL**

Conduct a Corporate ethnography at a Business Organisation or a Corporate Sector and write a report. Make a brief report only on any one dimension of the corporate sector and give your assessment.

### **Suggested Readings:**

1. Baba, M. Anthropology and Business [A]. (2006) In H. James Birx (Ed.) Encyclopedia of Anthropology, [C]. Thousand Oaks, CA: Sage Publications, 83-117. • Jordan, A. Business Anthropology,[M].(2003),
2. Bestor, Ted. 2004. "Tsukiji: The Fish Market at the Center of the World" University of California Press.
3. Comaroff, John L. and Jean Comaroff. 2009 "Ethnicity Inc." University of Chicago Press Frank, Thomas 1997. The Conquest of Cool: Business Culture, Counterculture and the Rise of Hip Consumerism. University of Chicago Press.
4. Elizabeth M. Eddy and William Partridge (Eds.) 1978. Doing Business with Management. In Applied Anthropology in America,. New York: Columbia University Press. Pp. 245- 260.
5. Hart, Keith, and Horacio Ortiz. 2014. "The Anthropology of Money and Finance: Between Ethnography and World History". Annual Review of Anthropology. 43: 465-482.
6. Ho, Karen Zouwen. 2009. Liquidated: An ethnography of Wall Street. Durham: Duke University Press.
7. Hoffer, Lee D. 2006. Junkie business: the evolution and operation of a heroin dealing network. Australia: Thomson/Wadsworth.
8. Jordan, Ann T.2003. Business Anthropology. Waveland Press, Long Grove, Illinois. 2003.
9. Melissa Cefkin, 2010.(ed) Ethnography and the corporate encounter: Reflections on Reserach and of Corporations.
10. Ortiz, Horacio. 2014. "The Limits of Financial Imagination: Free Investors, Efficient Markets, and Crisis". American Anthropologist. 116 (1): 38-50.
11. Tian, R, M. Lillis, and Van Marrewijk, A.H. 2010. General Business Anthropology. Miami, FL: North American Business Press.
12. Tian, R.2010,The Unique Contributions and Unique Methodologies: A Concise Overview of the Applications of Business Anthropology [J]. International Journal of Business Anthropology, 1 (2):70-88.

13. Tian, R. and A. Walle. 2009, Anthropology and Business Education: Practitioner Applications for a Qualitative Method[J]. International Journal of Management Education, 7(2):59-67.
14. Zaloom, Caitlin. 2006 "Out of the Pits: Traders and Technology from Chicago to London" University of Chicago Press.

### **Facilitating the achievement of Course Learning Outcomes**

Unit No.	Course Learning Outcomes	Teaching and Learning Activity	Assessment Tasks
1.	learn key concepts in the Business and Corporate Anthropology.	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Written Assignment
2.	Gain aptitude to understand ethnographic encounters from different perspectives in Business and Corporate organizations including Healthcare sectors and NGO's	Lecture and class discussion. Students are expected to read the suggested readings and come to class for discussion	Debate and discussion. It is compulsory for every student to participate in class discussion. Their performance will be evaluated and will be incorporated in the final internal assessment marks.
3.	Link anthropological skills to Information technology, communications networks and Human Resource Management to serve as Business and Corporate Anthropologists	Class lecture and discussions	written assignment, visual presentation based on case studies