M.S.C. IN ANTHROPOLOGY SEMESTER UNDER THE FRAMEWORK OF CHOICE BASED CREDIT SYSTEM

2019-20
PANJAB UNIVERSITY, CHANDIGARH

Outlines of Tests, Syllabi and Courses of reading for Choice Based Credit System (CBCS) M.Sc. in Anthropology under the framework of honours school system examination, starting from Academic Session 2019-2020

PREAMBLE

The Department of Anthropology at Panjab University, Chandigarh, has established its academic excellence in the field of Anthropology ever since its inception in 1960 by Late Professor S.R.K. Chopra, F.N.A., as its founder head. The Department is well known for its researches in the fields of palaeoanthropology, epidemiology, forensic anthropology, human growth and development, medical anthropology, palaeoecology, twin studies, and socio-cultural anthropology. It has made notable discoveries of primate and other mammalian fossils from the Siwaliks. It has highly competent and efficient faculty whose work has been internationally recognized with many awards and honours. The faculty has published a number of articles in high impact factor journals such as Nature and The Lancet.

The department offers programs at undergraduate (B.Sc. Hons.) and postgraduate level (M.Sc. Hons.) under the framework of Honours School System. At the same time, the department offers full time Doctoral and Post-doctoral program in Anthropology. It also runs a one-year Diploma Course in Forensic Science and Criminology, which is not only useful for the students having interest in Forensics but also useful for practicing Lawyers and Police officials. These teaching programs at present are being availed by more than 210 students of whom about 45 are research scholars. The department is soon to venture on a special diploma course on Business Anthropology, for which necessary official procedure is being carried out.

The department is well equipped with proper infrastructure and laboratory facilities for teaching and research required in the various sub-fields of Anthropology, namely, Auxology, Dermatoglyphics, Forensic anthropology, Forensic podiatry, Molecular anthropology, Human osteology, Palaeoanthropology, Prehistoric Archaeology, Serology and Bio-chemical Anthropology, etc.

The Department has won accolades for its nationally acclaimed ‘Museum of Man’ which has a Living Primate Gallery, Human Evolution Fossil Gallery, Ethnographic gallery and Pre-Proto historic Gallery. The Museum also displays life-size models based on the fossil material collected from the Siwaliks.
The department’s thrust lies in the extensive fieldwork tradition carried out at different levels in Bachelor’s as well as Master’s level for research in various subfields as per student’s choice. Regular fieldworks are also organised in the fields of Archaeology and palaeoanthropology.

The academic achievements of the Department includes support under UGC Assistance for strengthening of the Infrastructure of the Humanities and Social Science (ASIHSS) Programme in Anthropology for a period of five years i.e. 01-04-2005 – 31-03-2010. The Department has been granted FIST-DST (2010-2011) and is also a UGC Centre for Advanced Studies (CAS-I) in Anthropology (2011-2016). The department has recently been awarded CAS-II by UGC from April 2018 to March 2023 for the five years.

The faculty of the department has to its credit many research projects especially from different funding agencies such as Department of Science and Technology and UGC. Recently, our students have been placed in various government organizations and multi-national companies. A few of them are Anthropological Survey of India, Archaeological Survey of India, Tribal Development Department Himachal Pradesh, Government College, Baramula, Department of Forensic Sciences, Guru Ghasi Das Central University, Bilaspur, State Forensic Science laboratory, Punjab, Central Forensic Science laboratory, Chandigarh, Indira Gandhi National Centre for the Arts, New Delhi, Department of Anthropology, University of Delhi, PGIMER Chandigarh, CRRID, Chandigarh. And Companies such as CKS International, Google, Tata Elxsi, Human Factor International etc.

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COURSE STRUCTURE

M.Sc. IN ANTHROPOLOGY UNDER THE FRAMEWORK OF HONOURS SCHOOL SYSTEM

The M. Sc. programme under the framework of Honours School System is a two-year course divided into four-semesters with a total of 80 credits. A student is required to complete 80 credits for the completion of the course and the award of degree.

Subjects offered in the M.Sc. Course is divided into three categories:

(i) ‘Core Course’ means a course that is Compulsory for a particular programme and offered by the Department, where the student is admitted.

(ii) ‘Discipline Specific Elective (DSE) Course’ means an optional course to be selected by a student out of such courses offered by the Department, where the student is admitted.

(iii) Skill Enhancement Courses (SEC) means an elective course which is taken by the students in the department other than where the student is admitted.

Credit Scheme

1. Core Courses (3 Credits) (11 papers)  \(11 \times 3 = 33\)
   Core Courses practical (2 Credits) \(11 \times 2 = 22\)
   (11 papers)
   Dissertation (8 Credits) \(1 \times 8 = 8\)

2. Elective Courses (4 Credits) (8 papers)
   A.1. Discipline Specific Elective \(4 \times 1 = 4\)
   (4 papers)
   A.2. Discipline Specific Elective Practical \(4 \times 1 = 4\)

3. Skill Enhancement Courses (SEC) \(3 \times 3 = 9\)

Total Credits \(80\)
### Semester I (Credits = 20, Marks = 500)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Subject</th>
<th>Marks (Th. + Pr.)</th>
<th>Credits Total (Th. + Pr.)</th>
<th>Teaching hrs./week (3 hrs Teaching + 1 hr Tutorial)</th>
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<tbody>
<tr>
<td>ANTH-C101</td>
<td>Archaeological Anthropology and Palaeoanthropology</td>
<td>75 (60+15) + 25 (20+5)</td>
<td>5 (3+2)</td>
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<td>ANTH-C102</td>
<td>Biological Anthropology</td>
<td>75 (60+15) + 25 (20+5)</td>
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<td>ANTH-C103</td>
<td>Social-Cultural Anthropology</td>
<td>75 (60+15) + 25 (20+5)</td>
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<tr>
<td>DSE -2 OR</td>
<td>Medical Anthropology OR Human Growth, Development and Nutrition</td>
<td>75 (60+15) + 25 (20+5)</td>
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<td>DSE- 15</td>
<td>Field Methodology</td>
<td>75 (60+15) + 25 (20+5)</td>
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### Semester II (Credits = 20, Marks = 500)

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<th>Course Code</th>
<th>Subject</th>
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<td>ANTH-C201</td>
<td>Anthropological Methods &amp; Techniques</td>
<td>75 (60+15) + 25 (20+5)</td>
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<td>ANTH-C202</td>
<td>Museum Studies</td>
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<td>ANTH-C203</td>
<td>Human Genetics</td>
<td>75 (60+15) + 25 (20+5)</td>
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<td>DSE -4 OR</td>
<td>Fieldwork Methods and Techniques OR Prehistoric Archaeology and Palaeoanthropology-Concepts and Palaeolithic cultures</td>
<td>75 (60+15) + 25 (20+5)</td>
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<td>4 hrs</td>
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<td>DSE- 7</td>
<td>Anthropology of SIA</td>
<td>75 (60+15) + 25 (20+5)</td>
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Postgraduate Syllabus in Anthropology under CBCS

M. Sc. (H.) 2nd year

Semester-III

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Title</th>
<th>Marks</th>
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<td>Core Course Papers</td>
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<tr>
<td>AHS- 531</td>
<td>Human Growth &amp; Somatotyping</td>
<td>12 48</td>
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<tr>
<td>AHS- 532</td>
<td>Human Ecology</td>
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<td>AHS- 533</td>
<td>Human Demography</td>
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<td>AHS- 534</td>
<td>Anthropological Theories</td>
<td>12 48</td>
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<td>4 2</td>
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<td>AHS- 535</td>
<td>Project Report 1: Project Formulation &amp; Data Collection</td>
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| Elective Course Papers Group 1 |

PROGRAMME OPTIONS (Students may choose any of the options A or B)

OPTION-A: Biological Anthropology (Students may choose any three of the following papers)

AHS- 536A Early Human Evolution:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

AHS- 537A Forensic Anthropology:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 4 1

AHS- 538A Human Red Cell Polymorphism:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

AHS-539A Population genetics and Speciation:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

OPTION-B: Socio-Cultural Anthropology (Students may choose any three of the following papers)

AHS-536B Tribal and Rural Anthropology:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

AHS-537B Medical Anthropology:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

AHS-538B Practice in Anthropology:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

AHS-539B Reading in Contemporary Anthropology:
   a) Theory 8 32 40 4 2
   b) Practical 04 16 20 2 1

Elective Course Papers Group 2 13 52 65 3 (each)

Human Genome; System Biology & Bioinformatics; Biochemistry; Biophysics; Biotechnology; Geology; Botany; Zoology; Chemistry; Mathematics, Statistics; Computer Science; Physics;

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Geography; Sociology; Economics; UIAMS, Forensic Science & Criminology, Fashion Technology, Environmental Science, Psychology, Political Science, Any of the Master’s level Course of Panjab University. These are subject to availability.

Audit Course Papers (shall not carry any credit)
German/French/Persian/Russian Languages or any other course of Panjab University

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Title</th>
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<td></td>
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<tr>
<td>AHS-541</td>
<td>Human Body Composition and Kinanthropology</td>
<td>12</td>
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<td>AHS-542</td>
<td>Energy Flow and Human Ecological Responsiveness</td>
<td>12</td>
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<td>AHS-543</td>
<td>Human Epidemiology and Public Health</td>
<td>12</td>
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<td>AHS-544</td>
<td>Contemporary and Indian Anthropology</td>
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<td>AHS-545</td>
<td>Project Report 2: Data Analysis and Report Writing</td>
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<th>Elective Course Papers Group 1</th>
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<tbody>
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<td>PROGRAMME OPTIONS (Students may choose any of the options A or B)</td>
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<tr>
<td>OPTION A- Biological Anthropology (Students may choose any three of the followings papers)</td>
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<tr>
<td>AHS-546A</td>
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<td>b) Practical</td>
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<td>AHS-547A</td>
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<tr>
<td>a) Theory</td>
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<tr>
<td>b) Practical</td>
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<tr>
<td>AHS-548A</td>
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<tr>
<td>a) Theory</td>
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<tr>
<td>b) Practical</td>
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<tr>
<td>AHS-549A</td>
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<tr>
<td>a) Theory</td>
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<table>
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<th>OPTION B- Socio-Cultural Anthropology (Students may choose any three of the followings papers)</th>
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<tbody>
<tr>
<td>AHS-546B</td>
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<td>a) Theory</td>
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<td>a) Theory</td>
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<td>b) Practical</td>
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<td>AHS-548B</td>
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<td>a) Theory</td>
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<tr>
<td>b) Practical</td>
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<td>AHS-549B</td>
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<tr>
<td>a) Theory</td>
</tr>
<tr>
<td>b) Practical</td>
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</table>
Elective Course Papers Group 2

13 52 65 3 (each)

Human genome; System Biology & Bioinformatics; Biochemistry; Biophysics; Biotechnology; Geology; Botany; Zoology; Chemistry; Mathematics, Statistics; Computer Science; Physics; Geography; Sociology; Economics; UIAMS, Forensic Science & Criminology, Fashion Technology, Environmental Science, Psychology, Political Science, Any of the Master’s level Course of Panjab University. These are subject to availability.

Audit Course Papers (shall not carry any credit)

German/French/Persian/Russian Languages or any other course of Panjab University

Concept Note:
The fieldwork is essential for anthropological teaching and it is considered that no anthropologist can be considered to be trained without having done some field work. Some areas of anthropology require more field work but all collection of data involves some field work.

EVALUATION
1. To qualify a Course, the student has to obtain minimum of 40% marks.
2. There shall be one Mid-Semester Examination of 20% Marks for Theory papers in each semester. End-semester examination will be of 80% of total marks.
Theory

Total lecture: 60

Unit I: Introduction to Prehistoric Archaeology: Concept and scope of Archaeological Anthropology, relationship with other branches of Anthropology and other disciplines, methods of studying Archaeological Anthropology.
Introduction to Palaeoanthropology: Aims, objectives, problems, affinities with other disciplines and historical development of Palaeoanthropology. Fossils and their preservation and processes of fossilization


Unit III: Geochronology of Quaternary Period: Pleistocene and Holocene Epochs, Villafranchian stage, Glaciation and Interglaciation, Pluviation and Inter-Pluviation, Different types of Geo-climatic events, Relevance of studying Pleistocene Chronology in Archaeological Anthropology. Succession of life through ages with stress on Cenozoic Era.
Archaeological site and its formation: basic categories of archaeological evidences; types of sites and their contexts, cultural formation processes and natural/environmental formation processes.

Unit IV: Prehistoric Culture: Techniques of tool manufacture: Typology: Classification of artefacts and tools (core tool, flake tool etc.) and probable functions.
Introduction to Siwaliks- classification and importance

Practical

Marks: 25 (20+5)

Total lectures: 60

Credits: 2

Typo-technological analysis of prehistoric tools: identification, interpretation and
drawings of the tool types
Drawing and understanding of the material culture and stone tools of Lower Palaeolithic Culture
How and where to look for fossils. Equipment and techniques for collection, washing & screening, field cataloguing, transportation, etc. of fossils.
Chemical and Mechanical techniques for the preparation of fossils with particular reference to primates
Note: Students will be taken for a paleoanthropological fieldwork for better understanding of collection of fossils.

Learning Outcomes
The learning outcomes of this paper are:
1. The students will learn about archaeological anthropology and its relationship with other branches of anthropology and other related disciplines.
2. They will learn about the techniques of dating prehistoric finds.
3. They will also learn about geological timescale and cultural expressions of each epoch.
4. The paper introduces the subject of palaeoanthropology to the beginners by providing conceptual palaeontological, geological and anthropological knowledge necessary to understand the subject of palaeoanthropology
5. The main aim of the paper is to sufficiently equip a student with fundamental concepts and techniques of palaeoanthropology so that he/she can understand and appreciate the advanced concepts of palaeoprimatology and human evolution
6. From the practical component they will learn about how to draw, identify and interpret prehistoric tools.

References


**ANTH-C102 Biological Anthropology**
Postgraduate Syllabus in Anthropology under CBCS

Marks: 75 (60+15)
Credits: 3

Theory

Total lecture: 60

Unit I: Aim, scope and development of Biological Anthropology; theories of evolution (Larmarckism, Darwinism, Synthetic theory); Evolution: microevolution and macroevolution, evidences for human evolution; classification and characteristics of primates, relationship of man to higher primates like chimpanzee, gibbon, orangutan and gorilla, primate behaviour.

Unit II: Cell division, chromosome structure and chromosomal aberrations; Mendel's principles of inheritance; concept of race, controversies on race, racial criteria and formation of races, racial classification of Indian population: Guha, Risley and Sarkar.

Unit III: Primate: emergence and evolution; 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, erect posture and bipedalism, primate behaviour with special reference to rhesus monkeys, baboons, langurs and apes, evolution of brain and senses.


Practical

Marks: 25 (20+5)
Total Lectures: 60
Credits: 2

1. Identification, drawing and description of bones of human skeleton - skull, vertebrae, scapula, clavicle, humerus, radius, ulna, hip bone, femur, tibia and fibula.
2. Somatometry of Cranium and face and determination of Indices.

3. Somatoscopic observations: Skin colour, hair (colour, form and texture), eye (colour, eye fold and eye slit), nose (nasal root, nasal bridge, nasal septum, and nasal tip), lips and chin.

4. Somatoscopic observations: Skin colour, hair (colour, form and texture), eye (colour, eye fold and eye slit), nose (nasal root, nasal bridge, nasal septum, and nasal tip), lips and chin.

Learning Outcomes

1. The students will learn about various theories of evolution.

2. They will learn about classification of animal kingdom and the place of man in the same.

3. They will also learn about the concept of race.

4. From the practical component they will learn how to identify, draw and describe human bones, take somatometric measurements and make somatoscopic observations.

References


### ANTH-C103 Social-Cultural Anthropology

**Marks: 75 (60+15)**

**Credits: 3**

**Total lectures: 60**

**Unit I**: Definition, Origin and development of Social and Cultural Anthropology, relationship with other branches of Anthropology, relationship with other related disciplines like Sociology, Psychology and History.

**Unit II**: Basic Concepts Revisited: Society, social structure; culture, cultural relativism, cultural change; enculturation, acculturation.

**Unit III**: Social Institutions: Family, marriage, kinship and religion; moiety and phratry; clan and lineage.

**Unit IV**: Social and Cultural Anthropology in India and Africa: comparative perspectives on their origin, growth, research priorities, and challenges to survival.

**Practical**

**Marks: 25 (20+5)**

**Total Lectures: 60**

**Credits: 2**
This paper shall include practical in the following methods and techniques of data collection in Social and Cultural Anthropology and preparation of report on how the same were utilised:

1. Observation
2. Interview
3. Questionnaire and Schedule
4. Case study
5. Genealogical Method
6. Content Analysis

Learning Outcomes

The expected learning outcomes of this paper are as follows:

1. The students will learn what is Social and Cultural Anthropology and how it is related to other branches of Anthropology like Physical Anthropology, Archaeological Anthropology and Linguistic Anthropology, besides knowing its relationship with other disciplines with Sociology, Psychology and History.
2. They will learn about the key concepts in Social and Cultural Anthropology like social structure, social change, culture, cultural change, socialisation, and the like.
3. The students will also learn about social institutions like family, marriage, kinship and religion.
4. The practical component will give the students some basic idea about how to collect data on the basis of some of the most widely methods and techniques in Social and Cultural Anthropology.

References

DSE-2 Medical Anthropology

Marks: 75 (60+15)

Theory

Credits-1

Total Lectures:60

Unit I: Introduction: scope of medical anthropology, concepts of health, disease and illness; socio-cultural and environmental dimensions of health; occupational and life-style ailments.

Unit II: Ethno-medicine: meaning and scope, ethnomedical practices in India, traditional healers and their predicaments, ethno-psychiatry, normality and abnormality, culture-bound psychological disorders and cultural healing of psychological disorders.

Unit III: Medical pluralism in India: Ayurveda, Siddha, Unani, Naturopathy, Homeopathy and Allopathic medical practices, co-existence of different medical systems.

Unit IV: Application of Anthropology in medicine: application of anthropological knowledge in promoting healthcare in tribal and rural communities, programmed promotion and changing health behaviour.

Practical
The students shall conduct interviews of 10 individuals on what they do when they fall sick, who they go for consultation first and what medicines they take and prepare a 5000 word report interpreting the data collected from the interviewees.

Learning Outcomes

1. The students will learn about basic concepts about health, sickness and disease from anthropological perspectives.
2. They will learn about various ethnomedical practices in India.
3. They will also learn about medical pluralism in India.
4. From the practical component they will learn about collection of data and writing of report on how people respond to sickness or ill-health.

References


OR

**DSE-15 Human Growth, Development and Nutrition**

**Marks: 75 (60+15)**

**Theory**

**Credits: 1**

**Total Lectures: 60**

**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 factors: secular trends, adaptation of growth rates to environmental stresses; methods of studying human growth; measurement and assessment of human growth: changing human growth patterns, human growth curves of different body parts and tissues, catch-up growth, maturation, growth references and standards; abnormal growth.

**Unit III:** Segmental growth and development; analysis of human physique and body composition: Sheldon, Parnell, Heath-Carter methods of somatotyping; significance of age in growth studies; methods of assessing age-chronological age, dental age, skeletal age, secondary sex character age, morphological age, age-grouping; decimal age calendar.
Unit IV: Food and nutrients: nutritional status assessment and methods of evaluation; concept of balanced diet, nutritional epidemiology, impact of malnutrition under-nutrition and over-nutrition; body composition: methods of study, changes during growth, variation and covariates.

Practical Marks: 25 (20+5)
Total Lectures: 60 Credits: 1
1. Nutritional anthropometry
2. Somatotyping: Heath-Carter method
3. Body composition: bone mass, body mass, percentage body fat (PBF), segmental fat, body age

Learning Outcomes
1. The students will learn about the concepts of growth, maturation and development.
2. They will learn about factors responsible for growth.
3. They will also learn about various methods of somatotyping.
4. From the practical component they will learn about measurement of nutritional level, somatotyping and body composition.

References
SEC-1 Field Methodology

Theory

Marks: 75 (60+15)

Total Lectures: 60

Credit: 2

Unit I: What is fieldwork? Importance of fieldwork in social science research, fieldwork and anthropology, selection of fieldwork site, selection of field guide and key informants, building rapport, learning the language.

Unit II: Fieldwork and Participant Observation, Interview, Pile Sorting, Free Listing, Qualitative and Quantitative methods of data collection

Unit III: Genealogical Method, Case Study Method, Life History, Focussed Group Discussion

Unit IV: Participatory Rural Appraisal, Participatory Reflection and Action Method, Rapid Rural Analysis

Practical

Marks: 25 (20+5)

Total Lectures: 60

Credit: 1

The practical component of this paper will include experiencing fieldwork situation for a fortnight and collecting data on any topic relevant to the field situation. It will also include a training in classification and tabulation of data, statistical treatment of data, drawing figures and flow charts, etc. and writing of report.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the importance of fieldwork in social sciences in general and anthropology in particular.
2. They will learn about the steps to be taken before finalising the site of fieldwork.
3. They will also learn about participant observation and how to elicit the native’s point of view.
4. From the practical component they will learn how to conduct fieldwork, collect relevant data, classify them and prepare a report on the same.

References


Semester: II
ANTH-C201 Anthropological Methods and Techniques
Marks: 75 (60+15)

Theory
Credits: 3

Total lectures: 60

Unit I: Fieldwork and anthropology: fieldwork traditions in anthropology: British and American traditions; fieldwork in Indian Anthropology.

Unit II: Preparing for the field: selection of the locale, learning the language, formulation of research questions/hypotheses, research design.

Unit III: Methods and techniques of data collection in anthropological fieldwork: comparative method, observation – participant and non-participant, interview - structured and unstructured, interview guide, focused group discussion; genealogy, schedule and questionnaire, participatory rapid appraisal, key informants.

Unit IV: Analysis, interpretation and presentation of data: classification and analysis of field data, interpretation of data, presentation of data through case studies, tables, figures and charts; appendices.

Practical
Marks: 25 (20+5)

Total lectures: 60
Credits: 2

The practical component for this paper will include a week-long fieldwork on a topic assigned by the teacher in charge and writing of a report on the same.

Learning Outcomes
1. The students will learn about fieldwork and its relationship with anthropology.
2. They will learn about preparing for fieldwork and selection of fieldsite.
3. They will also learn about various methods and techniques of data collection.

4. From the practical component they will learn about how to use the various methods and techniques of data collection and write a report on a given topic.

References


Srinivas, M.N. 1983. The Observer and the Observed. Faculty Lecture 1, Faculty of Arts and Social Sciences, University of Singapore.


**ANTH-C202 Museum Studies**

**Marks: 75 (60+15)**

**Credits:3**

**Total lectures: 60**

**Unit I:** History and Development: meanings, definitions and objectives; history of museums in India; types of museums: classified by collection (archaeology, ethnography), by who runs them (govt/private), by areas they serve (national, regional), by audience they serve (general public, educational institutions, specialists), by the way they exhibit their collection (traditional, open air, interactive); importance of anthropological museums, concept of New Museology.

**Unit II:** Acquisition, documentation and display: policies for collection, modes of acquisition; documentation: need and methods; display.

**Unit III:** Collection management: storage, conservation: causes of decay, preservation of organic and inorganic objects, preventive and curative conservation, security and disaster planning.

**Unit IV:** Theoretical issues: colonialism and museum, traditional museology to ‘New Museology’, ethical issues and repatriation, challenges and opportunities for museums in twenty first century.

**Practical**

**Marks: 25 (20+5)**

**Credits:2**

**Total lectures: 60**

1. Documentation of at least one specimen of each category of plant (wood, bamboo), fibre (cloth/linen), metal and animal.
2. Conservation method for each of the above category of specimens.
Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the history and development of museums in India.
2. They will learn about acquisition, documentation and display of museum specimens.
3. They will also learn about storage and conservation.
4. From the practical component they will learn about how to document and conserve different categories of specimens.

References


**ANTH-C203 Human Genetics**

**Marks: 75 (60+15)**
Theory

Total lectures: 60

Unit I: Concept of gene, Watson-Crick model of DNA structure, types of RNA and their functions, genetic code, human DNA polymorphism, evidence of human evolution from mtDNA and Y-chromosomal DNA haplogroups, neutral theory and its reconciliation to synthetic theory.

Unit II: Methods of studying heredity, Mendelian inheritance in humans - autosomal and sex-linked genes, sex-controlled and limited genes, ABO, MN and Rh systems, sex determination, Lyon hypothesis.

Unit III: Laws of equilibrium and probability in human genetics: problems and solutions concerning dominant, recessive, sex-linked and sex-controlled traits; marriage patterns and their genetic consequences in human populations.

Unit IV: Concept of genetic variation, causes of genetic variation between and within human populations with special reference to the role mutation, selection, genetic drift, isolation and gene flow.

Practical

Marks: 25 (20+5)

Total lectures: 60

(a) Identification of mode of inheritance of a trait through construction and analysis of pedigree (Autosomal dominant and recessive traits, sex-linked traits- X-linked recessive, dominant and Y–linked traits).

(b) ABO and Rh blood groups typing of at least five individuals.

(c) Calculation of gene frequency- ABO, MN and Rh blood groups.

(d) Testing of Hardy-Weinberg equilibrium on the basis of gene frequency.

(e) Dermatoglyphics: qualitative and quantitative analysis.

i. Finger Print

ii. Palmar Print

iii. Planter Print
(f) Online search of Mendelian traits through OMIM.

**Learning Outcomes**

1. The students will learn about origin and growth of human genetics.
2. They will learn about how offsprings inherit genetic traits from their parents.
3. They will also learn about dominant, recessive and sex-linked genes.
4. From the practical component they will learn about identification of mode of inheritance of a genetic trait, blood group typing, calculation of gene frequency, and analyse dermatoglyphic traits.

**References**


**DSE-4 Fieldwork Methods and Techniques**

**Marks: 75 (60+15)**

**Theory**

**Credits: 1**

**Total Lectures: 60**

**Unit I**: Fieldwork and anthropology: fieldwork traditions in anthropology: British and American traditions, fieldwork in Indian Anthropology.

**Unit II**: Preparing for the field: selection of the locale, learning the language, formulation of research questions/hypotheses, research design.

**Unit III**: Methods and techniques of data collection in anthropological fieldwork: comparative method, observation: participant and non-participant, interview: interview guide, focused group discussion; genealogy, schedule and questionnaire, participatory rapid appraisal, key informants.

**Unit IV**: Analysis, interpretation and presentation of data: classification and analysis of field data, interpretation of data, presentation of data through case studies, tables, figures and charts; appendices.

**Practical**

**Marks: 25 (20+5)**

**Credits: 1**

Total Lectures: 60

The practical component of this paper will involve going to the field, which may be the students’ own town or village, conduct fieldwork there for at least two weeks, collect data on a topic approved by the department, and prepare a report.

Learning Outcomes

The learning outcomes of this paper are:
1. The students will learn about the importance of fieldwork in anthropology and major fieldwork traditions in anthropology.
2. They will learn about the steps to be taken before starting the fieldwork.
3. They will also learn about major methods and techniques of data collection.
4. From the practical component they will learn about presentation and interpretation of data and preparation of the report.

References


Srinivas, M.N. 1983. *The Observer and the Observed*. Faculty Lecture 1, Faculty of Arts and Social Sciences, University of Singapore.

OR

**DSE-7 Prehistoric Archaeology and Palaeoanthropology-Concepts and Palaeolithic cultures**

**Marks: 75 (60+15)**

**Total Lectures:60**

**Credits:1**

**Unit I:** Introduction to hominoid and hominid evolution; Natural tools and man-made artifacts; Origin of techniques of Stone Age tools

**Unit II:** Material culture of early hominids- Olduwan Culture, Osteodontokeratic culture, Abbevillian Acheulian developments in Europe and allied developments in India (Didwana, Soan Valley, Hunsgi) (Lower Palaeolithic Culture).
Various trends in primate evolution – Evolution of bipedalism, Effective exploitation of the terrestrial habitat, Increasing brain size and complexity, Extensive manipulation of the natural objects and tool making Continental drift, food habits and alternative interpretation, etc.

**Unit III:**
Material culture of Neanderthaloids-Levallois and Mousterian cultures in Europe and allied developments in India (Bhimbetka, Nevasa) (Middle Palaeolithic culture).

Unit IV: Field methods in archaeology: exploration: purpose and surveying equipment, methods of exploration: excavation: meaning and objectives, instruments used in excavation, methods of excavation: Trial Trenching, Vertical Excavation, Horizontal Excavation; Excavation of Burial, Rock Shelter and Caves; Early primate evolution with emphasis on Siwalik primates

Material culture of *Homo sapiens*-Development of Advance-Hunter Culture in Western Europe and allied developments in India (Renigunta, Billa Surgam, Upper Palaeolithic). Upper Palaeolithic culture.

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<tr>
<th>Practical</th>
<th>Marks: 25 (20+5)</th>
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Understanding and drawings of Stone tools of Middle Palaeolithic culture, Upper palaeolithic culture, Mesolithic culture Microlithic Tool Types), Neolithic Tool Types

Moulding and casting of fossils

Methods of identification of fossils with particular reference to primates (casts). Dental morphology and taxonomy of selected fossil groups and their illustration, interpretation and reporting style.

Note: Students will be taken for an archaeological fieldwork/Museum visit for better understanding of stone tools.

Learning Outcomes

1. The students will learn the basic concepts, techniques and methods used in field archaeology.
2. They will understand the importance of formation processes and reconstructing the environment of archaeological sites.
3. They will also equip themselves with skill in undertaking fieldwork.
4. The aim of the paper is to sufficiently equip a student with fundamental concepts and techniques of palaeoanthropology.

5. They will understand the various trends in primate evolution and early primate evolution.

References


Craig B. Stanford, John S. Allen, and Susan C. Antòn: *Biological Anthropology*,


**SEC-2 Anthropology of SIA**

**Theory**

**Marks: 75 (60+15)**

**Total Lectures: 60**

**Credits: 2**

**Unit I:** Social impact assessment: definition, history and approaches to SIA.

**Unit II:** Environmental impact assessment and social impact assessment,

**Unit III:** Features of SIA: Inclusive development, equity and sustainability, stake holder primacy, participatory planning, mitigation and monitoring.

**Unit IV:** Development and SIA-Relationship and Applications in Social Science Research.

**Practical**

**Marks: 25 (20+5)**

**Total Lectures: 60**

**Credits: 1**

The student will make a social impact assessment of any one development project by using relevant methods of data collection in the field for one week and write a report on the same.
Learning Outcomes

1. The students will learn about the concepts and approaches in SIA.
2. The students will learn how to conduct an SIA and write a report on the same.
3. The students will also have experience in conducting fieldwork.

5. The students will learn how to conduct an SIA and write a report on the same.
6. The students will also have experience in conducting fieldwork.

References


M. Sc. (H.) 2\textsuperscript{nd} year
Semester-III

AHS- 531 Human Growth and Somatotyping

Total: 60
Semester Exam.: 48
Internal Assessment: 12

Objectives: The objective of this paper is to acquaint the students with patterns of human growth and physique in relation to evolutionary biology.

UNIT-I

Introduction: Concept and basic principles of growth; Human physical growth as a primate characteristic; growth processes; Measurements and Standards of Growth: Longitudinal, Cross-sectional & Mixed-longitudinal growth curves; Phases of growth-pre-natal and post-natal: Infancy Childhood, Adolescence, Puberty and Senescence.

UNIT-II

Developmental processes and measures of maturity like skeletal, dental and sexual maturity and their relationships. Aging Processes: theories of aging/morbidity- mortality relationships/ senescence of specific systems. Hereditary and Environmental Influences on growth; Secular Trends

UNIT-III

Sheldon’s Method of Somatotyping: Endomorphy, Mesomorphy, Ectomorphy, Technique of Somatotyping, Somatochart.

UNIT-IV

Health & Carter Modified Somatotype Method: Concept and background, Somatotype components, measurements used, somatochart and somatotype plotting; somatotype dispersion index, somatotype dispersion distance.

Note:

1. For the semester examination a total of nine questions will be set, two each from each of the units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS


Tanner, J.M. (1989) : Foetus into Man – Physical Growth from Conception to
Postgraduate Syllabus in Anthropology under CBCS


**FURTHER READIDNGS**


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**AHS- 532 Human Ecology**

Total: 60
Semester Exam.: 48
Internal Assessment: 12

**Objectives:** Ecological Anthropology concentrates on basic scientific and academic research on the relationship between human population and ecosystems with an emphasis on the influence of culture. The paper also facilitates understanding of the mechanisms of human adaptation to environmental stress.

**UNIT-I**

Basic concepts of ecology, ecosystems and organization of ecosystems, Ecology of human populations, Environmental Anthropology, Environmental Determinism, Environmental possibilism, Cultural Ecology, Ecological models, Biological and Evolutionary approaches to human ecology.

**UNIT-II**

Resources and Community Ecology: Resources, Major types of human subsistence patterns, Community ecology; Human populations and resource distribution; Concept of ecological assessments.

**UNIT-III**

Stressors: Stress and environmental Physiology, Human Adaptation to temperature variations (hot and cold). Adaptation to High Altitude, Ultra-Violet Radiation, High Activity and other Physical Stressors.

**UNIT-IV**

Modernization and Chronic Disease; Major chronic diseases in modernized human populations; Pollution, General Stress and Chronic Disease; Adiposity and Chronic Disease.

**Note:**

1. For the semester examination a total of nine questions will be set, two each from each of the units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

**ESSENTIAL READINGS**

Kormondy, E.J. and Brown, : Fundamentals of Human Ecology, New Jersey,
Postgraduate Syllabus in Anthropology under CBCS

Prentice Hall.

Dehra Dun: Natraj Publishers.

Communities. Springer.

Univ. Press

SUGGESTED READINGS

of Michigan Press.

Brill.

Moran, Emilio F. (Ed.).(1990) : The ecosystem approach in anthropology. The University
of Michigan Press.


University Press.

Steward, J. (1955) : Theories of Culture Change. Urbana: University of
Illinois. Press.

of Chicago Press.

Hannen, Nora and Wilk, R. (editors) (2006) : The Environment in Anthropology: A Reader in

Crumley, Carole L. (editor), (2001) : New Directions in Anthropology and
Environment:

Intersections Walnut Creek, CA: Alta Mira Press.


Hardesty, Donald L. (1977) : Ecological Anthropology. New York: John
Wiley and Sons.

the Role of Anthropology in Environmental discourse. New York: Routledge.

Yale University Press.

Ellen, Roy and P. H. Burnham (Eds.) (1979) : Social and Ecological Systems. Association of

AHS- 533 Human Demography

Total: 60
Semester Exam.: 48
Internal Assessment: 12
Objectives: Demography, Epidemiology and Public Health have both biological and socio-cultural dimensions and are of much value to anthropology. This course on these subjects helps in defining various basic concepts, methods and tools used demographers, epidemiologists and public health specialists to study the health and dynamics of populations. The theories of populations and the concepts form the core content of this course.

DEMOGRAPHY

UNIT-I
Basic concepts, scope and measures in demography; Nature and importance of Demography; Relationship between Demography and Anthropology; Demographic rates, Period rates and Person-years; Concepts of a cohort; Probability of occurrence of events.

UNIT-II
Sources of Demographic data – Census, Registration and Survey Data in India. Population size and composition: Sex ratio and population pyramids.

UNIT-III
Components of demographic processes – Fertility, Mortality, Migration and Marriage: Types, Measurements, Theory and Trends.

UNIT-IV
Tribal Demography in India – its structure and growth.

Theories of Population – Malthusian, Optimum, Socio-cultural and Demographic transition.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

GOVERNMENT OF INDIA (2001) : Census of India 2001: Final population totals. New Delhi: Census Commissioner of India

FURTHER READINGS


AHS- 534 Anthropological Theories

Total: 60
Semester Exam. : 48
Internal Assessment: 12

Objectives: Theory is essence to learning any discipline. This course is aimed at providing a holistic understanding of anthropological theories and its relevance in constructing empirical realities. Anthropology is a field science. Empirical data that is generated in the field with the help of designed tools has to be interpreted with the help of theoretical models. This course equips students to master art of interpretation and analysis.
**Pedagogic Exercise:** The course will have four class room seminars after the completion of each unit of the syllabus. Students will be required to write eight assignments two from each unit of the course.

**UNIT-I**

**UNIT-II**
Precursors and conditions for the rise of functionalism – Early functionalism (Emile Durkheim) and Functionalism in anthropology and links with psychology and biology (Bronislaw Malinowski).

Historical particularism and cultural relativism: Concept of Enculturation, Franz Boas and his student A.L. Kroeber.

**UNIT-III**
The rise of structural-functionalism and the scientific approach to anthropological study: the work of Radcliffe-Brown.

Modifications of structural-functionalism by Evans-Pritchard, Fred Eggan (controlled comparison), Meyer Fortes (introduction of the element of time), Raymond Firth (social organization and social change).

**UNIT-IV**
Mentalist approaches to culture: Structuralism – the work of Claude Levi-Strauss and modifications to the approach by Edmund Leach.

Going beyond social integrationist approaches to theories of conflict: the work and approaches of Max Gluckman.

Social Action as the basis of society rather than a more static view – the basic ideas propagated by Max Weber. Development of the idea of social action and the institutional view of society by Talcott Parsons.

**Note:**

1. For the semester examination a total of nine questions will be set, two each from each of the units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the units I, II, III, IV and the compulsory question.

3. All questions will carry equal marks.

**ESSENTIAL READINGS**


Hasnain, Nadeem : Indian Anthropology.


**FURTHER READINGS**


AHS- 535 Project Report 1: Project Formulation and Data Collection Total: 80

Project formulation; Research design/methodology: Data collection, sorting and basic Presentation.

PROGRAMME OPTIONS
(Students may choose any of the options A or B)

OPTION-A: Biological Anthropology
(Students may choose any three of the following papers)

AHS- 536A Early Human Evolution:

a) Theory 40

Total:

Semester Exam: 32
Internal Assessment: 08

Objectives: The course is designed with a view to enhance the understanding and appreciation of the advanced concepts of Human Evolution—the fundamentals of which the students have already studied in the first year. Further, the course also provides information on diagnostic features, description, distribution through time and space as well as the phylogenetic status of early hominids leading to the present day man besides sufficiently equipping the students with information on Palaeopathological as well as paleodemographical processes involved in interpreting the osteological as well as cultural remains – the analysis of such data interpreting it in terms of various demographic variables as well as disease in prehistoric populations.

UNIT-I

Various trends in human evolution. Diagnosis, description, distribution through time and space and phylogenetic status of the following: Australopithecus africanus, A. robustus, A. afarensis, A. ramidus.

UNIT-II
Diagnosis, description, distribution of *Homo habilis*, *Homo erectus*—*Homo erectus javaniesis*, *H. erectus pekinensis* and *H. erectus narmadensis*.

UNIT-III

Early *Homo sapiens* – Salient features, distribution and phylogenetic position of 2nd (i.e. Swanscombe and Steinheim) and 3rd interglacial (i.e. Fontechevade, Ethringsdorf, Krapina, Quinzano and Saccopastore) hominids.

UNIT-IV

*Homo sapiens neanderthalensis*—salient features, Osteological evidences, distribution, tools, life-ways, phylogenetic position, adaptation and Neanderthal problem.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

<table>
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<tr>
<th>Author(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>Brace, C.L. and Montagu, M.F.A.</td>
<td>Human Evolution: An Introduction to Biological Anthropology (Macmillan Company, New York)</td>
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FURTHER READINGS

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<tr>
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<tr>
<td>Shachley, Myra.(1980)</td>
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</tbody>
</table>
b) Practical

Total: 20
Semester Exam.: 16
Internal Assessment: 04

Craniomtery, Statistical Analysis of Craniometric Datas.

AHS- 537A Forensic Anthropology:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: This course is an introduction to the basic principles of Applied Physical Anthropology. The main focus of the course is on forensic anthropology which is an applied field within the larger discipline of biological anthropology. This course is designed to teach the basic analysis and interpretation of human remains, primarily the determination of personal identity, for the medico-legal profession. The identification process seeks to provide information such as the initial recognition of skeletonized remains, including dentition, as human and the determination of age-at-death, sex, stature, ancestry, and any other characteristics that may lead to a positive identification. It imparts training in for individualization to solve problems of medico-legal significance. Additionally, the course also introduces the basic concepts of human engineering and the application of the techniques of physical anthropology in industry, medicine, nutrition, and sports.

UNIT-I


UNIT-II

Forensic Osteology: Determination of sex from human skull, hip bone and long bones. Determination of age of human skeleton from ectocranial suture closure, ossification, etc.

UNIT-III

Identification of race. Reconstruction of stature from long bones (complete and fragmentary), Personal identification from human skull by photographic superimposition technique.

UNIT-IV

Forensic Odontology: Scope, estimation of age from teeth in young and adult; estimation of age from individual tooth; population variations in morphology; utility of dental evidence in personal identification.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

FURTHER READINGS

b) Practical

Measurement of long bones and clavicle, scapula, innominate bone.

AHS- 538A Human Red Cell Polymorphism:
Postgraduate Syllabus in Anthropology under CBCS

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: This course aims to impart knowledge regarding various human genetic markers. Most of the markers that are focused are the various blood groups and red cell proteins. The course aims to help the student appreciate the genetic basis, the global distribution and the correlated conditions of health and disease. Many of these markers have forensic uses and these are focused also. This course equips the student with the skills to handle various genetic markers in the human blood and other systems as tools in population genetic research and forensic work. A corollary skill development will enable the student to pursue work in areas of allied medical research.

UNIT-I
Blood Groups: Genetics of A1A2BO, MNSU, Rh, Kell, Duffy and Xg blood group systems. ABH Secretion and Lewis antigens.

UNIT-II
Erythroblastosis fetalis, ABO blood groups and disease. Geographical distribution of A1A2BO, MNSU, Rh and ABH antigens.

UNIT-III
Haemoglobins: Genetics of Haemoglobins, Haemoglobins variants: HBA, Foetal Haemoglobin, HbS, HbC, HbD, HbE. Thalassemias and related Conditions, Hbs and malarial Hypothesis.

UNIT-IV
Red Cell Enzyme: The Acid phosphatases, Glucose-6 Phosphate dehydrogenase (G6PD); Phosphogluconate dehydrogenase (6-PGD) and Phosphoglucomutase (PGM), Genetic basis of enzyme defects. Clinical symptoms and Methods for analysis of enzyme defects, Enzyme variants observed in human populations.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the UNITS I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type Units covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS
FURTHER READINGS


b) Practical

Total: 20
Semester Exam.: 16
Internal Assessment: 04

Dermatoglyphics of finger and palms

AHS 539A Population Genetics and Speciation:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Description: This course surveys population genetics theory as applied to micro-evolutionary change in human populations. We will look at the effects of mutation, selection, mating patterns, recombination, and genetic drift on changes in the genetic composition of human populations. Initial emphasis is on mathematical analyses of these relationships at the micro-level. We will then use this knowledge to examine applications of population genetics theory to human population history and evolution.

Objectives: The objectives of this course are to (1) To provide a solid foundation for understanding the genetic basis of evolution (2) To provide sufficient historical, intellectual, and mathematical background so that you can evaluate contemporary research in anthropological genetics (3) To provide with tools, concepts, and ways of thinking about quantitative problems in biological anthropology and evolutionary biology;

UNIT- I

UNIT-II
Kin selection, Sexual selection, Mating patterns, Mate selection, Sex ratio, Nonrandom breeding: Inbreeding and assortative mating, Path diagram construction and inbreeding coefficient, allelic identities by descent, genetic effects of inbreeding.

UNIT- III
Genetic polymorphism in natural population: Definition, Human Genetic Variation and methods of its quantification; Heterozygosity: Classical and Balance hypotheses; Genetic Polymorphism and Natural Selection: Balanced, Transient and Neutral.
Mutational/Genetic load: Definition, Types and its Estimation, Extent and impact on human health.

UNIT--IV
Isolating mechanisms, Concept of species and modes of speciation: sympatric, allopatric, stasipatric; Molecular population genetics: Molecular evolution (neutral theory, punctuated equilibrium).

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type Units covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

FURTHER READINGS

b) Practical

Collection of bloods and serum samples, storage of samples of red–cell. Suspensions; Agglutination, agglutinin titre, A1 A2 B0 and Rh Blood group typing; -ABH-Secretion. Haemotological techniques: Demonstration of Electrophoresis.

ESSENTIAL READINGS

FURTHER READINGS

OPTION-B: Socio-Cultural Anthropology
(Students may choose any three of the following papers)

AHS-536B Tribal and Rural Anthropology:
Postgraduate Syllabus in Anthropology under CBCS

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: Tribes are an important segment of the Indian society but they have remained relatively isolated from the mainstream. This course is intended to acquaint the students of anthropology with the basic attributes of the different people who constitute the Indian population. The scheduled tribes present a wide spectrum of economic and cultural development. The objective of this paper is to familiarize the students with elementary concepts of caste and class and to help them develop a comprehensive knowledge of the tribal communities in India, their problems, the approaches to their development, the changing scene and the future to equip the students to tackle the issue.

Peasants form a minority of present and past populations. Hence, it is important to learn and know about them. An understanding of their class affiliation and social structure will also help to unravel the causes and consequences of the peasant revolts that are so important in understanding the social unrest in the country. The students will thus develop skills in developing ideas regarding the Indian peasantry, which will aid them in further analysis of recent events based on agricultural communities. Their own analysis of the peasant movements and presentation based on these aspects will help them to hone their ideas.

UNIT-I


UNIT-II

Definition of peasants as an economic and sociological category. The concept of folk society. The peasant mode of production. The middle peasant thesis.

UNIT-III


UNIT-IV


Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

Chaudhuri, B. (1982) .. Tribal Development in India. Delhi: Inter-India Publications
<table>
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<tr>
<th>Author</th>
<th>Title</th>
<th>Publisher/Reprint Details</th>
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<tr>
<td>Kumar, A. (2002)</td>
<td>Tribal Development in India</td>
<td>New Delhi: Sarup and Sons</td>
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<tr>
<td>Redfield, R. (1960)</td>
<td>Peasant Society and Culture</td>
<td>Chicago: University of Chicago</td>
</tr>
<tr>
<td>Singh, K.S. (1972)</td>
<td>Tribal Situation in India</td>
<td>Shimla: Indian Institute of Advance Studies</td>
</tr>
<tr>
<td>Verma, R.C. (1990)</td>
<td>Indian Tribes Through the Ages</td>
<td>New Delhi: Director publication Division, Ministry of Information and Broadcasting, Govt. of India</td>
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<tr>
<td>Elwin, V. (1960)</td>
<td>A Philosophy of NEFA</td>
<td>Shillong: North East Frontier Agency</td>
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<tr>
<td>Elwin, V. (1957)</td>
<td>A New deal for Tribal India</td>
<td>Delhi: Ministry of Home Affairs</td>
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**b) Practical**

Total: 20  
Semester Exam.: 16  
Internal Assessment: 04

Identification and description of various implements used by tribals in hunting, fishing, agriculture, fire-making, habitation and ornaments, means of transport.

**ESSENTIAL READINGS**

52
AHS-537 B Medical Anthropology:

a) Theory

Objectives: Through this paper, an attempt has been made to familiarize the students with the basic tenets of medical social anthropology with history and theoretical/conceptual framework and globally existing different types of medical systems, the socio-cultural contexts of the medical systems, both indigenous and modern. It is also to equip the students in understanding the compatibility of different systems of medicine and evolving projects blending the traditional complimentary nature and biomedicine foci.

UNIT-I
Medical anthropology: History, scope, perspectives and methodology; Theories, applications and methods. Development of medical anthropology-medicine as a social process, functional views of medicines, the applied roots of medical anthropology.

UNIT-II
Medical Systems: Medical systems as socio-cultural adaptive strategies: Disease theory and health care systems; Some universals in medical systems; Medical systems are integral parts of culture, Illness is culturally defined. All medical systems have both preventive and curative sides, Medical systems have multiple functions. Anthropological approaches to the study of human adaptation to health and disease.

UNIT-III
Medical Anthropology and Ecology: Eco-systems and socio-cultural systems; Ecological interest of Medical Anthropologists: Palaeopathology; Disease and evolution; Diet and evolution; Epidemiology; Ecology and Development; Disease of development-River basin development, Land reclamation, Road construction, Public health programmes. The ecology of disease and health.

UNIT IV
Medical Pluralism: Biomedicine, Homoeopathy, Ayurveda, Siddha, Unani, Naturopathy, Faith healing; Traditional Chinese and Tibetan systems of medicine; Traditional and modern systems of medicine; Strength and weaknesses of traditional systems.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 objective type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

SUGGESTED BOOKS

b) Practical

Total: 20
Semester Exam.: 16
Internal Assessment: 04

- Approaches for individual, group and community-level behavior change.
- Application of meta-narratives and meta-analysis in the medical anthropological context.

AHS-538 B Practice in Anthropology

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: This course is aimed at orienting the students towards an application of the knowledge of anthropology in various socio-cultural fields. It makes provisions for developing skill to practically administer/execute projects beneficial to the society, making use of available technological and human resources. An emphasis is laid on action-oriented projects/programmes to equip the students with the practical work and knowledge. This may help them, on one hand to earn their livelihood through their own expertise and skill and, on the other, contribute meaningfully to the welfare and development of the society.

UNIT-I
Meaning, definition and scope of applied and action anthropology. The academic critique relationship and distinction between applied anthropology and action anthropology. Applications of applied anthropology- The Vicos Project. The applied anthropologist’s role. Emerging trends in applied anthropology.

UNIT-II
Applied versus pure anthropology, Recent development of applied anthropology, specialized roles of applied anthropologists.
Acculturation and applied anthropology: The problems- Acculturation in Mexico, Melanesia, The problem at Bikini.

UNIT-III
Applied Anthropology and Culture Change: Innovation, Social Acceptance, Performances, Integration. Planned and directed change: Stimulants and barriers to culture change with suitable cases.

UNIT-IV
Problems and issues arising out of the impact of modernization, industrialization, urbanization and technological changes in traditional cultures. Case study from India and other countries.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 objective type questions covering the whole syllabus. There will be no choice in the compulsory question.

2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.

3. All questions will carry equal marks.

SUGGESTED BOOKS

- If only they would listen the anthropology of Business and Business of Anthropology in applying anthropology. Aaron Podolofesky and Peter, J. Brown eds. California: Mayfield.

b) Practical

To evaluate models of cultural change.

“Necessity is the mother of invention”: The students will take up certain innovations and such examples Indian rural/urban areas and evaluate these in the context of the models taught in your class.
AHS-539B    Reading in Contemporary Anthropology:

a) Theory

Objectives: The course is designed to give students insights in changing perspectives of the subject in the recent past. From classic to contemporary is a journey that defines the context and future course for any discipline. The discipline of social and cultural anthropology is continuously evolving itself. There are fresh issues that confront humanity along with technological revolutions. Conflict regarded as quintessential to any society acquires different dimensions with changing lifestyles. Assertion of identity has remained critical to man’s instinctive survival. It assumes varied expressions in rapidly transforming social situations.

UNIT-I

Theories in Contemporary perspective:

Post-Modernism – Clifford Geertz
Profit over people – Chomsky
Globalization

UNIT-II

Theories of Development
Reflexive, Critical and Dialogical Anthropology

UNIT-III

Technology and Society:

Corporate Anthropology
Anthropology of Management

UNIT-IV

Non-governmental organizations (NGOs) and other civic society organizations and Anthropology
Media and Anthropology

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

b) Practical

Note:
Total: 20
Semester Exam.: 16
Internal Assessment: 04
Qualitative tools used in postmodern researches with examples: case studies, observation, Pile sorting, narratives, Action research.
Data analysis methods for qualitative analysis and its advantages over quantitative research techniques. Theme identification, Hermeneutics, content analysis, cohort analysis.

ESSENTIAL READINGS

Goldin, Ian and : Globalization for Development: Trade, Finance, AID,
Semester IV

Compulsory Papers

AHS-541 Human Body Composition and Kinanthropology

Total: 60
Semester Exam.: 48
Internal Assessment: 12

Objectives: The objective of this paper is to acquaint the students with patterns of human body composition in relation to evolutionary biology, biocultural factors, sports, intrinsic and extrinsic factors such as genes, hormones, the physical and social environment, and mathematics.

UNIT-I

Definition and scope of body composition; Methods of studying body composition: Surface anthropometry including Matiegka’s methods; Densitometry, Hydrometry and Roentgenogrammetry; Body composition of the foetus; Body composition changes during infancy, childhood, adolescence and adulthood.

UNIT-II

Modern techniques of studying body composition: Gamma Ray spectrophotometry, Computer Axial Tomography (CAT) scanning, Photon absorptiometry, Bioelectrical impedance, The urinary creatinine excretion method; Fat patterning in human body; Obesity: Assessment and Management.

UNIT-III

Kinanthropology: meaning and scope; Importance of sports in human society; Role of heredity and environment in body dimensions and proportions; Relationship of different types of sports efficiency and different body proportions.

UNIT-IV

Ecological, ethnic and genetic variation of body shape and size in relation to sports efficiency and physical performance; Somatotype and physiological profile of sportsmen and women.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

Harrison, G. A., J.S. : Human Biology – An Introduction to Human Evolution, Variation,


**FURTHER READINGS**


**AHS-542 Energy Flow and Human Ecological Responsiveness**

**Objectives:** Ecological Anthropology concentrates on basic scientific and academic research on the relationship between human population and ecosystems with an emphasis on the influence of culture. The paper also facilitates understanding of the mechanisms of human adaptation to environmental stress.

**UNIT-I**

Biomes and Human Populations: Introduction, characteristics and organization of Biomes, major Biomes of the world.


**UNIT-II**

Nutrient Cycling in Ecosystems, Human populations and nutrient cycles, Human populations and the hydrologic cycles, Salt Requirements & Adaptation, Humans and Protein Requirements

**UNIT-III**

Malnutrition: Adaptation to malnutrition, Infectious Disease as a biotic stress, Vector-Borne Diseases, Diseases passed through Direct Contact. Diseases passed through sanitation route, Disease passed through intimate contact, Interactions of Infectious Disease, malnutrition and other stresses.

**UNIT-IV**

Human Ecology and the Ecology of Humans; Optimization; Models in Human Ecology.

**Note:**

1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.
READINGS


SUGGESTED READINGS


Crumley, Carole L. (editor),(2001) : New Directions in Anthropology and Environment: Inter Units Walnut Creek, CA: Alta Mira Press.


Ellen, Roy and P. H. Burnham : Social and Ecological Systems. Association of
AHS-543: Human Epidemiology and Public Health

Objectives: Epidemiology and Public Health have both biological and socio-cultural dimensions and are of much value to anthropology. This course on these subjects helps in defining various basic concepts, methods and tools used by epidemiologists and public health specialists to study the health and dynamics of populations.

UNIT-I
Basic epidemiological concepts and approaches, uses and aims, subdivisions and scope of epidemiology; Dynamics of disease transmission: Agents and modes of transmission of human infectious diseases; Natural history of disease (prognosis)
Basic measurements of morbidity; Incidence and prevalence rates, Disease outbreaks, Surveillance; Descriptive epidemiology.

UNIT-II
Analytical and Experimental Epidemiology:
Associations and Causation; Epidemiological methods: Randomized trials, Cohort studies, Case-Control studies, Cross-Sectional studies, Crossover design
Methods used to estimate individual’s risk for a disease: Absolute Risk, Relative Risk, Odd Ratio

UNIT-III
Concept of health and wellbeing; International statistical classification of Disease and Related Health Problems (RHP) Dimensions of health; Indicators of health; Components of wellbeing, Determinants of health, Responsibility for health

UNIT-IV
Health Planning and Management: Basic concepts and theoretical foundations to the principles of management and planning with an emphasis on public health and health care settings.

Health care of the community; Levels of health Care; The Millennium Development Goals (MDG); Concepts and definition of MDG indicators, Evaluation of public health interventions

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS
Postgraduate Syllabus in Anthropology under CBCS


FURTHER READINGS


AHS-544: Contemporary and Indian Anthropology

Total: 60
Semester Exam.: 48
Internal Assessment: 12

Objectives: This course is aimed at providing a holistic understanding of anthropological theories and its relevance in constructing empirical realities. Anthropology is a field science. Empirical data that is generated in the field with the help of designed tools has to be interpreted with the help of theoretical models. This course equips students to master art of interpretation and analysis.
**Pedagogic Exercise:** The course will have four class room seminars after the completion of each UNIT of the syllabus. Students will be required to write eight assignments two from each UNIT of the course.

**UNIT-I**
Psychological approaches in Anthropology and the Culture and Personality school as the legacy of Franz Boas.
Basic ideas of culture and personality in anthropology.
Development of issues in the works of Ralph Linton, Kardiner, Cora du Bois.

**UNIT-II**
Contemporary Social Theories, including basic ideas of gender theories, feminism and women’s studies.
Deep ethnography, and the work and ideas of Clifford Geertz.
Basic ideas of ethnomethodology.

**UNIT-III**
The uniqueness of Indian anthropology: Basic ideas in Indian anthropology.

Contributions of Indian Anthropologists: S.C. Roy (the beginning and origin of anthropology in universities), and his students N.K. Bose (further development of the subject and relationship with Indian nationalism), D.N. Majumdar (uplifting and creating standards of Indian anthropology).

**UNIT-IV**
Anthropology in India as a practical discipline: basic ideas.
Contribution of S.C. Dube in development of tribes and communities and in study of Indian villages.
The contributions of Verrier Elwin in the mapping of tribal India ethnographically and in terms of maintaining and protecting their culture.

**ESSENTIAL READINGS**

- Hasnain, Nadeem : Indian Anthropology.

FURTHER READINGS


AHS-545  Project Report 2: Data Analysis and Report Writing

Data analysis, Report writing; Defence through viva voce.

Total: 80

PROGRAMME OPTIONS

(Students may choose any of the options A or B)

OPTION A- Biological Anthropology

(Students may choose any three of the followings papers)

AHS-546A  Dimensions and Implications of Human Evolution:

a) Theory

Total: 40

Semester Exam.: 32
Internal Assessment: 08
Objectives: The course is designed with a view to enhance the understanding and appreciation of the advanced concepts of Human Evolution—the fundamentals of which the students have already studied in the first year. Further, the course also provides information on diagnostic features, description, distribution through time and space as well as the phylogenetic status of early hominids leading to the present day man besides sufficiently equipping the students with information on Palaeopathological as well as paleodemographical processes involved in interpreting the osteological as well as cultural remains—the analysis of such data interpreting it in terms of various demographic variables as well as disease in prehistoric populations.

UNIT-I

Emergence of Modern Man—Osteological evidences from Europe, Africa, Asia, Australia, and Americas, their development, life-ways, dwellings, aesthetic expressions, tool inventory, migration routes and subsistence patterns, etc.

UNIT-II

Antiquity of man and various view points of Hominid evolution (Asia versus Africa).

UNIT-III

Demography of early human population—Palaeopathology-traumatism, malformation and non-specific osteological variables (i.e. osteoarthritis, spondylitis, rickets, symmetrical osteoporosis and tumors), dental pathology.

UNIT-IV

Palaeodemography – skeletal analysis and determination of demographic variable in Prehistoric populations (i.e., migration, fertility, morbidity and mortality) and post-neolitic population growth.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type Units covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS

Postgraduate Syllabus in Anthropology under CBCS

Swedlund, A.C. and Armelagos (1976): Demographic Anthropology (B. George, J. Publishers)

FURTHER READINGS


b) Practical

Total: 20
Semester Exam.: 16
Internal Assessment: 04

Craniograms; Mandibulometry

AHS-547A Forensic Biology:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: This course is an introduction to the basic principles of Applied Physical Anthropology. The main focus of the course is on forensic anthropology which is an applied field within the larger discipline of biological anthropology. One of the objectives the course is to impart to the students basic knowledge about the analysis, interpretation and use of crime scene evidence of fingerprints, blood and some body fluids, hair and dentitions for individualization to solve problems of medicolegal significance. Additionally, the course also introduces the basic concepts of human engineering and the application of the techniques of physical anthropology in industry, medicine, nutrition, and sports

UNIT-I


UNIT-II

Hair: Morphology of hair, distinction between human and animal hair. Differentiation of scalp, body and pubic hair. Age, sex and population differences, in brief.
Postgraduate Syllabus in Anthropology under CBCS

UNIT-III

Forensic serology: Nature of human blood; identification of blood stain and determination of its species and blood group; identification of seminal stains. Application of blood groups in personal identification and disputed paternity.

UNIT-IV

Human engineering (Human Factors): Seats, work space and gear (such as anti-gravity suits, oxygen masks, readymade garments for mass use). Anthropology and medicine, including growth, nutrition, and sports.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question. 
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS


FURTHER READINGS

Postgraduate Syllabus in Anthropology under CBCS

New Jersey: Prentice Hall
Whitehead, P.F. Sacco : A Photographic Atlas for Biological Anthropology

b) Practical

Personal identification from skeletal material.

ESSENTIAL READINGS


FURTHER READINGS


AHS-548A Enzyme, Serum proteins and other Genetic Variation:

a) Theory

Objectives: This course aims to impart knowledge regarding various human genetic markers. Most of the markers that are focused are the various serum proteins. The course aims to help the student appreciate the genetic basis, the global distribution and the correlated conditions of health and disease. Many of these markers have forensic uses and these are focused also. This course equips the student with the skills to handle various genetic markers in the human blood and other systems as tools in population genetic research and forensic work. A corollary skill development will enable the student to pursue work in areas of allied medical research

UNIT-I


UNIT-II

Immunoglobulins; Molecular Structure, Types and Chemical properties. Role of Immunoglobulins in immunity. The Gm and Inv groups, Methods of detection and global distribution.

UNIT-III

Histocompatibility antigen (HLA): History of discovery, subtype, genetics, inheritance and linkages with other genetics treats. Association of HLA and various critical diseases of skin, renal conditions, spondilytis and other neurological conditions. Assessment of risk factors.

UNIT-IV

69
Miscellaneous variations: Inheritance and distribution of taste deficiency for Phenylthiourea, Colour vision abnormalities and Finger and Palm prints.

**Note:**
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
4. All questions will carry equal marks.

**ESSENTIAL READINGS**


**FURTHER READINGS**


**b) Practical**

Dermatoglyphics of Soles, Physiological Variables.

**ESSENTIAL READINGS**


**FURTHER READINGS**

AHS-549A  Gene Flow and Quantitative Genetics:

a) Theory  

Total: 40  
Semester Exam.: 32  
Internal Assessment: 08  

Description: This course surveys population genetics theory as applied to micro-evolutionary change in human populations. We will look at the effects of mutation, selection, mating patterns, recombination, and genetic drift on changes in the genetic composition of human populations. Initial emphasis is on mathematical analyses of these relationships at the micro-level. We will then use this knowledge to examine applications of population genetics theory to human population history and evolution.

Objectives: The objectives of this course are to (1) To provide a solid foundation for understanding the genetic basis of evolution (2) To provide sufficient historical, intellectual, and mathematical background so that you can evaluate contemporary research in anthropological genetics (3) To provide with tools, concepts, and ways of thinking about quantitative problems in biological anthropology and evolutionary biology.

UNIT- I  
Genetic Migration and Drift: Types of migrations and their genetic effects, models to study genetic effect of migration: one-way model, island model, Estimation of migration rates; how does migration limit genetic divergence?

Gene flow, effects of gene flow, genetic clines, racial admixture, calculation of admixture.

UNIT-II  
Founder effect, Isolate breaking (The Wahlund Principal), Random genetic drift, Effective population size; fluctuations in population size.

UNIT- III  
Quantitative Genetics: Multifactorial inheritance, Types of quantitative traits: continuous, meristic and threshold traits; Phenotypic variation and components of phenotypic variation – Genotypic and environmental. Estimation of quantitative genetic parameters: genetic kinship, identical by descent, resemblance between relatives, calculating the number of polygenes, quantitative trait loci (QTL).

UNIT-IV  
Twin study method-concordance rates and analysis of variance approach. Assumptions underlying the classing twin method.  
Concept of heritability, broad-sense and narrow-sense heritability; Estimates of heritability from twin and family studies; Artificial selection and realized heritability; Norm of Reaction and Phenotypic plasticity.

Note:  
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.  
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.  
3. All questions will carry equal marks.

ESSENTIAL READINGS

FURTHER READINGS

b) Practical

PTC tasting ability, Colour-vision abnormalities analysis, Exercises on gene and genotype frequencies in random mating populations, numerical exercises on estimation of heritability from given data.
Identification of some common genetic diseases/syndromes and variable expression of genes from photographs/karyotypes/slides; and mode of inheritance from pedigree data.

ESSENTIAL READINGS

FURTHER READINGS

OPTION B- Socio-Cultural Anthropology
(Students may choose any three of the followings papers)

AHS-546B Tribal Anthropology and Peasant Movements:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08
Objectives: Tribes are an important segment of the Indian society but they have remained relatively isolated from the mainstream. This course is intended to acquaint the students of anthropology with the basic attributes of the different people who constitute the Indian population. The scheduled tribes present a wide spectrum of economic and cultural development. The objective of this paper is to familiarize the students to help them develop a comprehensive knowledge of the tribal communities in India, their problems, the approaches to their development, the changing scene and the future to equip the students to tackle the issue.

UNIT-I
The constitutional safeguards for the Scheduled Tribes and Scheduled Castes: Protective, Developmental, Political, and others. Major Tribal groups. Tribal states in India.

UNIT-II

UNIT-III
Tribal movements for autonomy, revivalistic/nativistic-Santhal Movement, Bisa Movement, Kabirpanthi Movement, Naga Movement.

UNIT-IV
Peasant movement in India – some case studies – Bardoli, Telengana, Tebhaga, Malabar.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

ESSENTIAL READINGS
Chaudhuri, B. (1982) .. Tribal Development in India. Delhi: Inter-India Publication
                         New Delhi: Oxford University Press
                     Kegan Paul Ltd.
                     Prakashan (Reprint)
Kumar, A. (2002) .. Tribal Development in India. New Delhi: Sarup and Sons
Maharatna, Arup (2005) .. Demographic Perspectives on India’s Tribes. New
                         Delhi: Oxford University Press.
Chaudhuri, Buddhadeb (1982)  

FURTHER READINGS  

b) Practical  
Total: 20  
Semester Exam.: 16  
Internal Assessment: 04  
74
OBJECTIVES: This course is designed to develop and appreciate the material culture of simpler societies. This skill is necessary for employment in many organizations like museums, etc.

- Mapping of various settlements of tribal peoples in India, tribal states in India.
- Developmental schemes and strategies (Plan/Sub Plan): Large-Scale Agricultural Multipurpose Societies (LAMPS), Integrated Tribal Development Project (ITDP), Community Development Project (CDP), Integrated Rural Development Project (IRDP), Component Plan for SC, Tribal Youth Self-Employment Scheme (TRYSEM), Reservation for Women in Panchayati Raj, Role of Voluntary Organizations in Development.

ESSENTIAL READINGS


FURTHER READINGS


AHS-547B Cultural Disease and Illness:

a) Theory

Objectives: Through this paper, an attempt has been made to familiarize the students with the basic concepts in ethnomedicine, ethnopsychiatry and applied medical anthropology. This paper familiarises of the students with the socio-cultural dimensions of health and illness. India is a classic example of co-existence of several systems of medicine-medical pluralism. It is our endeavour to expose the students to the varied realm of religico-medical practitioners India and worldwide

UNIT-1

Ethnomedicine: Terminological problems: Disease etiologies-Personalistic medical systems, Naturalistic medical systems, casualty concepts in personalistic and naturalistic systems; Disease classification, cultural aspects of ethnomedicine. Medical aspects of social systems. Significance of ethno-medical studies. Major aspects of ethnomedicine--Ethnomedicine of the body and the mind; Concept of health and illness: Health seeking behavior and the health system response-Approaches to health seeking behavior, Intervention and policy making.

UNIT-II

UNIT-III

Social groups, cultural pattern and health. Illness and behaviour. Health behaviour and medical anthropology. Tribal health in India: Concept of disease and cure. Socio-cultural issues: Health, nutrition and demography; Interaction of traditional and modern medical practices with case studies; Tribal medicine and their modern use (with specific case studies).

UNIT-IV


Note:

1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 objective type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

SUGGESTED BOOKS

b) Practical

- Planning and evaluation for community health programmes, including proposal development and evaluation.
- Preceptor-guided field experience in public health practice through an association or public health-oriented community programme.

AHS-548B Anthropology in Action:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: This course is aimed at orienting the students towards an application of the knowledge of anthropology in various socio-cultural fields. It makes provisions for developing skill to practically administer/execute projects beneficial to the society, making use of available technological and human resources. An emphasis is laid on action-oriented programmes to equip the students with the practical work and requisite knowledge. This may help them, on one hand to contribute meaningfully to the welfare and development of the society and on the other to earn their livelihood through their own expertise and skill.

UNIT-I

Emerging trends in Applied Anthropology. Anthropology and public policy- policy and policy studies, anthropological approaches to policy, policy as a critical mirror. Application of anthropological knowledge in programmes sponsored and administered by governmental and non-governmental agencies.

UNIT-II

Community Development; Tribal development; other poverty alleviation programmes. Applied anthropology: Context for domains of application, Health and medicine. Development-induced, displacement and resettlement.

UNIT-III
Anthropological Practice in Business and industry. Anthropology Applied to Education, communication and the elderly.
Anthropological approaches in community, health, natural health promotion and disease control programmes such as population control, nutrition, mother and child health, health education.

UNIT-IV
Anthropology in relation to disease especially Leprosy, TB, AIDS, etc.

Note:
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 objective type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

SUGGESTED BOOKS

Postgraduate Syllabus in Anthropology under CBCS


b) Practical

Total: 20
Semester Exam.: 16
Internal Assessment: 04

To evaluate the current situation of disease like T.B., AIDS and Leprosy and their impact on society using recent concepts.

AHS-549B Current Anthropology and Policy:

a) Theory

Total: 40
Semester Exam.: 32
Internal Assessment: 08

Objectives: The course is designed to give students insights in changing perspectives of the subject in the recent past. From classic to contemporary is a journey that defines the context and future course for any discipline. The discipline of social and cultural anthropology is continuously evolving itself. There are fresh issues that confront humanity along with technological revolutions. Conflict regarded as quintessential to any society acquires different dimensions with changing lifestyles. Assertion of identity has remained critical to man’s instinctive survival. It assumes varied expressions in rapidly transforming social situations.

UNIT-I

Policy Issues:
Nations Boundaries and Mobility. Anthropology of Diaspora Populations.

UNIT-II

Anthropology of Traditional Art and Craft. Public Policy and Anthropology.

UNIT-III

Some Current Research Concerns:

UNIT-IV

Human rights issues in the domain of Anthropology.
New Social movements (Feminist and Environment movement).
Ethnicity and Identity concerns, Religion and Politics, pluralism and Multi-Culturalism.

**Note:**
1. For the semester examination a total of nine questions will be set, two each from each of the Units I, II, III, IV. There will be one compulsory question of 8 to 10 short answer type questions covering the whole syllabus. There will be no choice in the compulsory question.
2. Students will be required to attempt five questions, choosing one question from each of the Units I, II, III, IV and the compulsory question.
3. All questions will carry equal marks.

**b) Practical**

Secondary source collections, use of primary materials as text, its analysis and interpretation. Analysis of data: use of softwares, internet data, networking (especially to understand aspects of globalization) and peer-reviewing, making policy summaries, compiling area reports, etc. Presentation of data. Report-writing/File – Handwritten/typed

**Total: 20**

- Semester Exam.: 16
- Internal Assessment: 04

**ESSENTIAL READINGS**


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