



DEPARTMENT OF ANTHROPOLOGY

The students who complete three years of full-time study of an undergraduate programme of study in Anthropology will be awarded a Bachelor's Degree. Some of the desirable learning outcomes which a student should be able to demonstrate on completion of Bachelor's Degree will include the following:

- Demonstrate a fundamental or coherent understanding of the academic field of study, its different learning areas and applications, and its linkages with related disciplinary areas/subjects.
- Use knowledge, understanding and skills required for identifying problems and issues, collection of relevant quantitative and/or qualitative data drawing on a wide range of sources, and their application, analysis and evaluation using methodologies as appropriate to the subject(s) for formulating evidence-based solutions and arguments.
- Communicate the results of studies undertaken in an academic field accurately in a range of different contexts using the main concepts, constructs and techniques of the subject(s).
- Apply one's disciplinary knowledge and transferable skills to new/unfamiliar contexts, rather than replicate curriculum content knowledge, to identify and analyse problems and issues and solve complex problems with well-defined solutions.
- Demonstrate subject-related and transferable skills that are relevant to some of the job trades and employment opportunities.

Model Curriculum for Three/Four Year Degree
Course (With Multiple Entry /Exit Option)

Based on NEP-2020

Anthropology



Odisha State Higher Education Council, Bhubaneswar
Government of Odisha

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1. **Structure and Regulation**.....
2. **Core Courses (4 Credits each)**.....
3. **Multidisciplinary Courses**.....
(3 courses to be chosen from **baskets of Multidisciplinary** for Semester-I/II/III with 3 credits each)
4. **Ability Enhancement Courses**.....
(Odia and English are the compulsory courses under Semester-I/II respectively with 4 Credits each)
5. **Skill Enhancement Courses (SEC)**.....
(3 courses to be chosen from **baskets of SEC** for Semester-I/II/III respectively with 3 credits each)
6. **Value Added Courses**.....
 - a. **Environmental Studies and Disaster management compulsory under Semester-I with 3 Credits**
 - b. 3 courses to be chosen from **baskets of VAC** for Semester-III/V/VI with 3 credits each
7. **Summer Vocational Course**
(Students may choose vocational courses after 2nd Semester and 4th Semester for Certificate Course or Diploma Course respectively with 4 credit each opt for exit)

Programme Outcome:

- To prepare the students for a career in Anthropology
- To prepare the students for Higher Education and Research in Anthropology
- To develop a conceptual understanding of the subject and to develop an inquisitiveness in the subject.
- To enable the student to acquire basic skills necessary to understand the subject and to master the skills to handle equipment's utilized to learn the subject.
- To generally promote wider reading on the subject and allied inter disciplinary subject.

Semester-I

Core I

Introduction to Anthropology

Course Outcomes:

This course aims to impart basics of anthropological knowledge and its major sub Braches such as socio-cultural, biological/physical, prehistoric archaeology, and linguistic anthropology.

Learning Outcomes:

1. The students will learn about how anthropology as a discipline originated and evolved.
2. They will understand various subdivisions of Anthropology. and
3. They will also demonstrate critical understanding of different anthropological perspectives and emerging trends of anthropology.
4. From the practical component they will learn about ethnographic reading and writings and preparation of household census schedule.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods: Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Meaning, definition and scope of Anthropology. Historical development of Anthropology; Relationship of Anthropology with other disciplines (social sciences, humanities and biological sciences); Ethnology and ethnography; Origin, history and development of Anthropology in India.

Unit II:

Meaning, scope and branches of Cultural Anthropology / Social anthropology; Physical anthropology and New physical anthropology, Biological anthropology: meaning, scope and branches; Prehistory/Archaeological anthropology: meaning, scope and branches; Linguistic anthropology: meaning and scope.

Unit III:

Anthropological Perspectives: Synchronic, Diachronic, Interactive; Emic and Etic; Fieldwork Traditions in Anthropology (British, American and Indian). Emerging trends in Anthropology: Global and National Context (Climate Change and Disaster management, Artificial Intelligence and digital technology, medico legal settings, Public policy and governance, public health and nutrition, education, and sustainable development goals).

Unit IV: Practical

1. Ethnographic reading and preparation of a report based on any one monograph.
2. Preparation of a practical record on methods and techniques of prehistoric tool making.
3. Prepare a household census schedule/questionnaires (students are required to follow Census schedule, NHHS schedule, etc)

Text Book Recommended:

- ✓ *Peter N. Peregrine Carol R. Ember, Melvin R. Ember (2020). Anthropology, 15th Edition, Pearson education, New Delhi*
- ✓ *Haviland W.A., Prins, H. E. L, Walrath D., McBride B (2009) Introduction to Anthropology. Cengage Learning India Private Limited, New Delhi.*
- ✓ *Scupin R., De Corse C. R. (2004) Anthropology – A Global Perspectives, Prentice-Hall of India , Private Limited, New Delhi.*
- ✓ *Eriksen T. H. and Nielsen F. S. (2008). A History of Anthropology. Rawat Publications, Jaipur, India.*
- ✓ *Dube SC. (1992). Indian Society. National Book Trust, India : New Delhi.*
- ✓ *Dube, S. C. (1990). Indian Village; Cornell University Press, Ithaca, New York.*
- ✓ *Roy I. B. (2013). Anthropology: The Study of Man, S Chand and Company Limited, New Delhi.*
- ✓ *Banerjee, H. N. (1994). Introducing Social and Cultural Anthropology, K. K. Publication, Calcutta.*
- ✓ *Basu, M. N. (1961). Field Methods in Anthropology and other Social Sciences, Calcutta.*
- ✓ *Hasnain, N (2022). Indian Anthropology, 8th edition, Palaka Prakashan, New Delhi.*

Core II

Applications of Anthropology

Course Outcomes:

This course aims to impart knowledge on application of anthropology in addressing different issues associated human problems. The course also focuses on application of socio-cultural anthropology, archaeological anthropology and biological anthropology.

Learning Outcomes:

1. The students will learn about various applications of anthropological knowledge and techniques.
2. They will demonstrate the skill of application of socio-cultural anthropology, archaeological anthropology.
3. They will be able apply the knowledge of biological anthropology in bio-medical and legal aspects of human.
4. From the practical component they will learn about how to prepare report on an NGO or a project on tourism.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods: Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Applied Anthropology: meaning and scope, Action Anthropology and Development Anthropology; Engaged Anthropology, Experimental Anthropology; Trends in Anthropology: Anthropology of Tourism, Anthropology of Design and Fashion, Public Anthropology, Urban anthropology, Legal Anthropology and Customary law.

Unit II:

Applications of Social/Cultural Anthropology: Role of Anthropology in Development: Sustainable development, Anthropology and Community Development, Anthropology of NGOs, Management Anthropology, Business and Corporate Anthropology. Human

Rights including the rights of special category and marginal groups, protection and enforcement of human rights; Human Development Index

Archaeology as Applied Anthropology, Bio-archaeology, Public archaeology ,Recent Applications and Challenges: Conflict Resolution, Conservation, Cultural Identity and Representation, Cultural Tourism, Public Education, Resource Claims, Salvage Archaeology, Culture Recourse Management; Computational archaeology.

Unit III:

Applications of Physical Anthropology in legal settings: Forensic anthropology and Criminology; Conservation of non human primate, Public health and Nutritional Anthropology, Application of Physical Anthropology in Sports: Kinanthropometry, Industry and Ergonomics, Application of Physical Anthropology in Medicine and Genetics: Genetic Counseling, Genetic screening; Genomic studies: Pharmacogenomics and personalized medicine, Privacy and Ethics of doing research on human subjects.

Unit IV: Practical

1. Prepare a report based on a visit to a Government or Non-Government organization working on tribal and rural development (example: NGO, TRI, Micro-Projects, ITDA etc).
2. Preparation of a report of based on the visit to an archaeological site or archaeological museum.
3. Online searching of articles and books on human rights violation by state and non-state actors.

Text book recommended:

- ✓ *Vidyarthi, L.P. and B.N. Sahay. 2001. Applied Anthropology and Development in India. New Delhi: National Publishing House.*
- ✓ *Vidyarthi, L.P. 1990. Applied Anthropology in India – Principles, Problems and Case Studies. KitabMahal.*
- ✓ *Gisli, P. 2007. Anthropology and the New Genetics. Cambridge: Cambridge University Press.*
- ✓ *Mathur, H.M. 1978. Anthropology in the Development Process. New Delhi: Vikas Publishing House Pvt. Ltd.*
- ✓ *Mair, L. 1961. Studies in Applied Anthropology. London: University of London.*

Semester-II

Core III Introduction to Socio-Cultural Anthropology

Course Outcomes:

This course aims to impart basic socio-cultural anthropological knowledge and its subject matter which includes meaning and scope of socio-cultural anthropology and culture and social institutions.

Learning Outcomes:

Unit-I: Student will learn about meaning, scope and different branches of socio-cultural anthropology and basics of culture.

Unit-II: They will be acquainted with different concepts related to marriage, family and kinship.

Unit-III: They will also learn about primitive religion, political organization and economic organization in simple societies.

Unit-IV: From the practical component they will learn about different qualitative methods and techniques of socio-cultural anthropology.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods: Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I:

Meaning, Definition and Scope of Socio-Cultural Anthropology. Sub-Branches of Socio-Cultural Anthropology; Relationship with other disciplines; Distinction and similarities of Social/Cultural Anthropology from Sociology. Relevance of Socio-Cultural Anthropology today.

Culture: Meaning, Definition and characteristics; material and non-material culture; culture trait and complexes; Enculturation and Socialization. Society and Culture: Comparison.

Unit-II:

Marriage: Concept, Meaning, definition and Function of marriage; Types of marriage: Monogamy, Polygamy (Polygyny and Polyandry), Levirate, Sororate, Cross-cousin and parallel cousin marriage; Ways of acquiring mates; Rules of marriage: Endogamy and Exogamy; Bride wealth/price, dowry and divorce.

Family: Meaning, Definition and Functions. Types of family: Joint family, Nuclear family/elementary/simple family, Extended family.

Kinship: Consanguineal and Affinal; Kin Term: Classificatory and Descriptive; Descent: Unilineal, Bilateral, Double Descent; Kinship Usages/Behaviour: Avoidance, Joking, Teknonymy, Amitate, Avunculate, Couvade.

Unit III:

Religion: Concept, Origin, Functions; Types: Animism, Animatism, Bongalism, Fetishism, Totemism, Manaism, Magic, Witchcraft, Sorcery; Shamanism, Taboo, Sacred and Profane.

Economic Organization: Principles of production, distribution, consumption in simple and complex societies; Various forms of Exchange: Barter, Trade and Market; Reciprocities: Generalized, Balanced and Negative; Redistribution.

Political Organization: Concept of Power and Authority; Types of Authority: State and Stateless Societies (Band, Tribe and Chiefdom); Law and Justice in simple and complex society; Oath and Ordeal; Customary Law; Modern law and justice vrs Primitive Law and Justice

Unit-IV: Practical

Methods and Techniques of Social and cultural Anthropology: The practical will include preparation of a report based on application of any two methods mentioned below on any events, rituals, festivals, fairs, indigenous practices, dance, environment etc in the locality.

1. Ethnography

2. Observation
3. Interview
4. Genealogy
5. Case Study
6. Life History

Text book recommended:

- ✓ *Peter N. Peregrine Carol R. Ember, Melvin R. Ember (2020). Anthropology, 15th Edition, Pearson education, New Delhi*
- ✓ *Haviland W.A., Prins, H. E. L, Walrath D., McBride B (2009) Introduction to Anthropology. Cengage Learning India Private Limited, New Delhi.*
- ✓ *Scupin R., De Corse C. R. (2004) Anthropology – A Global Perspectives, Prentice-Hall of India Private Limited, New Delhi.*
- ✓ *Roy I. B. (2013). Anthropology: The Study of Man, S Chand and Company Limited, New Delhi.*
- ✓ *Banerjee, H. N. (1994). Introducing Social and Cultural Anthropology, K. K. Publication, Calcutta.*
- ✓ *Kottak, C. P. (2014) Cultural Anthropology: appreciating cultural diversity, McGraw-Hill.*
- ✓ *Beals, R.L and H. Hoijer. 1971. An Introduction to Anthropology. 4th Ed. New York: Macmillan*

Core IV Introduction to Archaeological Anthropology

Course Outcome:

This course gives the knowledge on the history and development of the Archaeological Anthropology and its relationship with other disciplines. The course also give the knowledge of geological time scale and past cultures.

Learning Outcome

The learning outcomes of this paper are:

Unit I: Understand the basic concept of Archaeology

Unit II: The students will learn about the geological stages occurred in the past and also the dating methods which are very relevant in the study of prehistory.

Unit-III: The students will come to learn about the different Stone Age cultures and stone tool typology and technology.

Unit-IV: The students will learn the practical knowledge of the lithic tools of different Stone Age cultures

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I: Introduction

Definition, Nomenclature and Scope of archaeological anthropology; Historical development of archaeological anthropology; Relationship with other disciplines; New branches of archaeology: Concept of Three Age System (Stone, Copper/Bronze and Iron Ages), Ethnoarchaeology, Environmental Archaeology, Processual Archaeology; Marine Archaeology,

Unit II: Paleoenvironment and Measuring the time:

Geological stages (Tertiary, Quaternary, Pleistocene, Holocene). Major climatic changes during Pleistocene and post Pleistocene periods, glacial and interglacial periods, ice age, pluvial and inter-pluvial climatic phases.

Dating Techniques: Relevance, Relative Dating and Absolute dating (stratigraphy, river terraces, dendrochronology, thermoluminescence dating, pollen dating, glacial varve analysis, potassium-argon method, fluorine dating, C-14 dating).

Unit III: Understanding Past Cultures and Its Tool Typology and Technology:

Palaeolithic Cultures, Mesolithic Cultures, Neolithic and its revolution and Chalcolithic Cultures, Megalithic Cultures.

Stone Tool Typology: Lower Palaeolithic (pebble tools, chopper and chopping tools, bifaces, handaxes and cleavers); Middle Palaeolithic (Clactonian, Levalloisian and Mousterian flakes, discoid cores, tortoise core, fluted core, scrapers, point); Upper Palaeolithic (blade, knife, blunted back, borer, burin, points); Mesolithic (microliths); Neolithic (ring stone, grind stone, celt, adze). Bone tool

Unit IV:

Practical: Tool Identification and Drawing

1. Identify the typology, raw-materials and methods of manufacturing of five stone tools of Palaeolithic, Mesolithic and Neolithic cultural periods
2. Drawing of 10 stone tools of Palaeolithic, Mesolithic and Neolithic cultural periods showing their obverse, reverse, profile, cross-sections with analysis

Suggested Readings

- ✓ *Agrawal, D. P. The Archaeology of India, Curzon Press.*
- ✓ *Allchin, B. and Allchin, F. R. The Rise of Civilization of India and Pakistan. Cambridge University Press. .*
- ✓ *Budtzer, K. W. Environment and Archaeology.*
- ✓ *Burkitt, M. 1963. The Old Stone Age: A Study of Palaeolithic Times. London: Bowes and Bowes.*
- ✓ *D. K. Bhattacharya.2006. An Outline of Indian Prehistory. Delhi: PalakaPrakashan.*

Recommended reading

- ✓ *D. K. Bhattacharya. 1977. Palaeolithic Europe. Netherland: Humanities press.*
- ✓ *Das, B. M., Outlines of Physical Anthropology. KitabMahal.*
- ✓ *Fagan B. M. 2004. People of the Earth: An Introduction to World Prehistory. New Jersey: Pearson Education.*
- ✓ *Hole, H. and R. F. Heizer. 1969. An Introduction to Prehistoric Archaeology. New York: Hold, Rinehart and Winston, INC.*
- ✓ *J. M. and E. S. Higgs. 1969. The Archaeology of Early Man. London: Faber and Faber. Coles,*
- ✓ *Michel, J. W. 1973. Dating Methods in Archaeology, Seminar Press.*
- ✓ *Renfrew, C. and P. Bahn. 2001. Archaeology: Theories Methods and Practices,*
- ✓ *Sakalia, H. D., New Archaeology – Its Scope and Application to India, Ethnographic and Folk Culture Society.*
- ✓ *Sankalia, H. D. 1977. Prehistory of India. Delhi: MunshiramManoharlal Publishers. Pvt. Ltd.*
- ✓ *Sankalia, H. D. Stone Age Tools, Families and Techniques. Pune, Deccan College.*

Semester-III

Core V

Introduction to Biological Anthropology

Course Outcomes:

This course seeks to impart basic biological anthropological knowledge on its development as a discipline and its subject matter which includes evolution, primatology, paleoanthropology and human population diversity.

Learning Outcomes:

Unit -I. Student will understand modern and traditional Biological Anthropology, principles of evolution, and theories of human origin.

Unit-II. They will also learn about primatology and hominization process and Primate Evolution

Unit-III They will also learn about stages of human evolution and Human diversity.

Unit-IV. From the practical component they will learn about how to measure and study various parts of the human body.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Difference in the approaches of modern and traditional Biological Anthropology. Emerging trends in Biological Anthropology. Principles of Evolution: Convergence, Divergence, parallelism, adaptive radiation, speciation, cladogenesis and Anagenesis, Theories of evolution: Lamarckism, Darwinism, Synthetic theory, and Mutation theory.

Unit II:

Man's place in Animal Kingdom. Primatology: Living Primates: Characteristics, Distribution and Classification of order primates. Primate Behaviour: Social and Reproductive behaviour Primate Evolution: Primate Evolution with special reference to skull, jaw, limbs, dentition and brain; Erect posture and Bi-pedalism. (Comparative anatomy and behaviour of human and non-human primates),

Unit III:

Earliest primates of Oligocene, Miocene and Pliocene: Aegyptopithecus, Propliopithecus, Dryopithecus Ramapithecus, Sivapithecus, Sahelanthropus, Ardipithecus and Proconsul.

Anatomical characteristics, distribution, phylogeny and culture of: Australopithecines (gracile & robust), Homo habilis, Homo erectus, Homo sapiens, Archaic Homo: Denisovians and Neanderthal, Modern man: Cro-Magnon, Grimaldi & Offnet, Hominization processes.

Unit IV:

Human Diversity: History and development of understanding human variation and evolutionary thought (pre-19th and post-19th Century); Concept of Race, Racial criteria (metric and non-metric), characteristic of major races of the world and race formation. Classification of the Indian population (Risely, Sarkar & Guha). Race and Racism, UNESCO statement on Race

Practical:

Introduction to Anthropology Laboratory: Dry Lab and Wet Lab, Calibration and Standardization of Instruments, Demonstration of Instruments: Anthropometry, Spreading Calliper, Sliding Calliper, Weighing Machine and Steel tape.

(A) Osteology: identify and draw with labelling different parts of the following human bones: a) Skull, b) Mandible, c) Clavicle, d) Scapula, e) Humerus, f) Radius & Ulna g) Femur, h) Tibia-fibula, i) a Vertebra.

(B) Craniometry: study two human crania / mandible and record the following measurement. The students are to be familiar with different landmarks of the skull and mandible, instruments and methods of taking measurement. 1) Maximum Cranial Length; 2) Nasion - inion Length; 3) Cranial Height; 4) Max Cranial breadth; 5) Bizygomatic breadth; 6) Nasal Length 7) Nasal Breadth 8) Glabella inion Length 9)

Palatal Breadth 10) Palatal Length 11) Breadth of Ramus 12) Length of Ramus 13) Angle of Mandible 14) Facial Angle.

Indices (i) Cranial Index; (ii) Nasal Index; (iii) Upper Facial Index; (iv) Transverse Fronto-Parietal Index; (v) Transverse Cranio-Facial Index

Craniograms Measurements : (1) Maximum Cranial Length; 2. Frontal Chord; (3) Parietal Chord; (5) Occipital Chord (6) Frontal Perpendicular Angle; (7) Parietal Perpendicular Angle; (8) Occipital Perpendicular Angle; (9) Facial Profile Angle; (10) Profile Angle of Nasal Root; (11) Frontal Curvature Angle; (12) Parietal Curvature Angle; (13) Occipital Curvature Angle; (14) Inclination Angle of Foramen; (15) Calvarial Base Angle (16) quadrilateral angle .

Somatometry (Based on Current Techniques) Measurement on Head : (1) Maximum Head Length; (2) Maximum Head Breadth; (3) Bizygomatic Breadth; (4) Bigonial Breadth; (5) Nasal Height; (6) Nasal Breadth; (7) Nasal Depth; (8) Auricular Height; (9) Physiognomic Facial Length; (10) Morphological Facial Length; (11) Horizontal Circumference of the Head; (12) Transverse Arch of the Head;

Profile Angle and indices (i) Cephalic Index; (ii) Nasal Index; (iii) Ear Index; (iv) Physiognomic Facial Index; (v) Morphological Facial Index

Measurement on Trunk and Limbs : (1) Height Vertex; (2) Height Tragus; (3) Height Sternale; (4) Height Illiospinale; (5) Height Tibiale; (6) Height Spherion; (7) Height Acromian; (8) Height Radiale; (9) Height Stylium; (10) Height Dactylion; (11) Sitting Height Vertex; (12) Span (Arm Stretch); (13) Bi-acromial Diameter; (14) Bicristal Breadth; (15) Weight of Body.

indices (i) Length Breadth Index of Hand; (ii) Length Breadth Index of Foot; (iii) Relative Sitting Height Index

Somatometry:

i) Skin Colour; (ii) Hair Colour; (iii) Hair Form; (iv) Hair Texture; (v) Hair Whorls; (vi) Colour of Iris; (vii) Colour of Sclera; (viii) Eye Lids; (ix) Eye Brow (Shape and Quantity); (x) Eye Opening; (xi) Eye Folds; (xii) Supra Orbital Ridges; (xiii) Nasal Root; (xiv) Profile of Nasal Bridge; (xv) Nasal Septum; (xvi) Tip of Nose; (xvii) Fore-head; (xviii) Chin; (xix) Prognathism; (xx) External Ear : Ear Shapes, Ear Lobe attachment, Ear lobe shape size Darwins tubercle; (xxi) Lips; (xxii) Frontal Outline of the Face; (xxiii) Tongue Rolling; (xiv) Tongue Folding; (xv) Hand Clasp; (xvi) Arm Folding

Text book recommended:

- ✓ *Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology Wadsworth Publ., USA.*
- ✓ *Das B.M. 2008. Outlines of Physical Anthropology. Kitab Mahal, New Delhi.*
- ✓ *Singh, I. P. and Bhasin, M.K. 1989. Anthropometry: A Laboratory Manual on Biological Anthropology. Delhi: Kamla-Raj Enterprises.*

Suggested Reading

- ✓ *Shukla B.R.K. & Rastogi, S. 1990. Physical Anthropology & Human Genetics: An Introduction. PlakaPrakashan. Delhi.*
- ✓ *Stanford C., Allen J.S. and Anton S.C. (2010). Exploring Biological Anthropology. The Essentials. Prentice Hall Publ, USA.*
- ✓ *Mukherji, D., D. Mukherjee and P. Bharti and A .Mukhopadhy. 2018. Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition. SCHOLAR Booksellers & Publishers, Kolkata.*
- ✓ *Sarkar, R. M. 2004. Fundamentals of Physical Anthropology (New Edition).Book World. Kolkata.*
- ✓ *Reddy V.Rami, 2011. Fundamentals of Physical Anthropology,*
- ✓ *Molnar, Stephen. 1975. Human Variations: Race Types and Ethnic Groups. London: Routledge.*

Core VI**Tribal and Indigenous Communities of India****Course Outcomes:**

This course aims to impart meaning, definition, features of tribal and indigenous communities in India. It also highlights the different plans and policies for tribal development.

Learning Outcomes:

1. The students will learn about the concepts of tribes, characteristics, classification and the importance of studying them.

2. They will be acquainted with the tribes and tribal culture, language and literature and oral traditions of different tribes of Odisha.
3. They will also learn about different programmes and policies of tribal development and also different commissions for ST appointed by government of India.
4. From the practical component they will learn about ethnographic readings, writing annotated bibliography and structure and functions of different national institutes for research and planning for tribal development.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Concept of tribe; General and specific characteristics of Tribes; Classification of tribes (Geographical, Economic, Linguistic and Racial); Scheduled and non-scheduled categories of tribes, Particularly Vulnerable Tribal Groups (PVTGs); De-notified tribes; Anthropology as a field in understanding tribal society; Indigenous Communities: Concept, meaning and characteristics.

Unit II:

Tribes of Odisha: distribution and classification; Origin and development of Tribal scripts in Odisha (Ol Chiki, Sorang Sompeng, Warangchiti); Tribal Literature: myths, legends, riddles and oral epics. Tribal dances: types, styles, pattern and nature. Tribal arts and aesthetics; Youth Dormitory; Tribe-caste continuum. Common Property Recourses (CPRs); customary laws; Indigenous knowledge System

Unit III:

Tribal administrations: Tribal Sub-Plan, 5th and 6th schedules, ITDA, Micro-Projects, MADA, Cluster Approach, Constitutional Provisions and Safeguards for Scheduled Tribes; Tribal Problems in India and their remedial measures; Commissions on tribal affairs: Mandal Commission, Dhebar Commission, Renke Commission, Idate

Commission, Lokur Commission, Bhuria Commission, Xaxa Commission ; National Commission for Scheduled Tribes, International Conventions and Covenant.

Tribal movements and their role in the freedom struggle, Forest policies and tribes; FRA; Forest Right Act and PESA Act, Issues of Displacement, Resettlement and rehabilitation; Role of Anthropologists in Tribal Development; Role of NGOs in tribal Development

Unit IV: Practical

1. Preparation of report on tribal myths, legends, riddles and oral epic either from primary or secondary sources.
2. Students are required to submit a report on institutes of National repute (AnSI, SCSTRTI, &TRIs) and/ or National Commission for Schedule Tribes (Structure, objectives and activities)
3. Write an annotated bibliography on any one tribe.

Text book recommended:

- ✓ *Behura N. K. and Mohanti K. K. (2006) Tribal Odisha: Readings in Social Anthropology. Dominant Publishers and Distributors, New Delhi.*
- ✓ *Chaudhary, B. (1982) Tribal Development in India; Problem & Prospects; Inter-India Publications, Delhi.*
- ✓ *Ota, A. B. & Mohanty, S. C. (2015) Demographic Profile of Scheduled Tribes of Odisha, SCSTRTI, Bhubaneswar.*
- ✓ *SCSTRTI (2004): Tribes of Odisha, Revised Edition, SCSTRTI, Govt. of Odisha, Bhubaneswar*
- ✓ *SCSTRTI: (2008) Tribal Traditions and Customs ,Vol.I Odisha Govt. Press, Cuttack*
- ✓ *SCSTRTI (2015): PVTGs of Odisha ,Vol.I, Ethnography, Director, SCSTRTI, Bhubanaeswar.*
- ✓ *SCSTRTI (2015): PVTGs of Odisha ,Vol.II, Change and Development, Director, SCSTRTI, Bhubanaeswar.*
- ✓ *SCSTRTI (2015): PVTGs of Odisha , Vol. III, anthropology of Health &Medecine, Director, SCSTRTI, Bhubanaeswar.*
- ✓ *Vidyarthi L.P and Rai B.K.. (1976). The tribal culture of India. Concept Publishing Co,Delhi.*

- ✓ Vidyarthi, L.P. 1990. *Applied Anthropology in India – Principles, Problems and Case Studies*. KitabMahal.

Core VII

Indian Anthropology

Course Outcomes:

This course aims to impart basics of Indian society, village community and processes of social changes. The course also highlights the issues of marginalization and social exclusion of different sections of Indian society.

Learning Outcomes:

Unit-I: Student will learn about different concepts with reference to Indian society and issues related to marginalization and social exclusion.

Unit-II: They will also learn about features of Indian village community and the concepts of social mobility.

Unit-III: They will be acquainted with the processes of socio-cultural changes and contributions of important Indian Anthropologists.

Unit-IV: From the practical component they will learn to write a brief report on social issues and develop a book review.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes.

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I:

Basics of India Society: Concept of Ashrama and Purushartha; Caste: Meaning, Origin, Features, Functions and Changes; Caste and class: Comparison

Marginalization and Social Exclusion: SC, ST, OBC, Religious minorities, Children, Women, Aged, Physically and mentally challenged people, LGBT, Persons affected with HIV-AIDS.

Unit-II:

Village Community: Village Community: Types and characteristics, integration and extension; Dominant caste, Jajmani system, Little Tradition, Great Tradition, Universalization, Parochialization, Folk – Urban continuum, Tribe -Caste continuum.

Unit-III:

Social Change: Meaning, Definition, Factors and Impact of Social Change; Processes of Socio-cultural Change: Sanskritization, Westernization, Urbanization, Industrialization and Modernization; Barriers of social change; Indian Diaspora.

Contribution to Study of Indian society: S. C. Roy, M. N. Srinivas, D. N Majumdar, L. P. Vidyarthi, Mackim Marriot, Milton Singer, N. K Bose, G. S. Ghurye, Iravati Karve, B. S. Guha, V.K. Srivastava

Unit-IV: Practical /Semester

The practical component will include the following:

- Preparation of a report on any one social issue based on either secondary or primary sources of information.
- Preparation of a report after visiting a village (rural, tribal, peri-urban).

Text Books Recommended:

- ✓ Hasnain, N. (2010). Indian society and culture: continuity and change. New Royal Book Company.
- ✓ Shah, A. M. (2012). The structure of Indian society: Then and now. Routledge India.
- ✓ Beteille, Andre. Ed. 1969. Social Inequality: Selected Readings. Harmondsworth: Penguin.
- ✓ Hasnain, Nadeem (1994). Tribal India. Delhi: Palaka Prakashan.
- ✓ Bose, N.K. 1967. Culture and Society in India, Bombay: Asia Publishing House.
- ✓ Shankar Rao C.N. 2006. Sociology of Indian Society. Delhi: S Chand.

Suggested Readings:

- ✓ Dube , S.C. 1993, *Indian Society*, New Delhi: National Book Trust.
- ✓ Dube, S.C. 1996, *Understanding Change: Anthropological and Social Perspectives*, New Delhi: Vikas Publishing House Pvt. Ltd.

- ✓ Epstein, Scarlet. 1976. *Economic Development and Social Change*. London: ELTS.
- ✓ Geertz, Clifford (1963). *Agricultural involution; the process of ecological change in Indonesia*. Berkeley: University of California Press for the Association of Asian Studies
- ✓ Giddens, Anthony. 2000. *Introduction to Sociology*, New York: Norton.
- ✓ Graeber, David (2001). *Toward an Anthropological Theory of Value: The False Coin of our Dreams*. New York: Palgrave.
- ✓ Gupta, Dipankar. Ed. 1992. *Social Stratification*. Delhi: Oxford University Press.
- ✓ Kar, P.K. 2009. *Indian Society*. Delhi: Kalyani Publishers.
- ✓ Mandelbaum, D.G. 2010, *Society in India*, Mumbai: Popular Prakashan.
- ✓ Marriott, Mckim. (ed). 1955, *Village India*, Chicago: Chicago University Press.
- ✓ Mukhi, H.R 1986, *Indian Society and Social Institutions*, Lucknow: SBD Enterprises,
- ✓ Ram Ahuja, 1992. *Social Problems in India* Jaipur: Rawat Publications.

Semester-IV

Core VIII

Ecological Anthropology

Course Outcomes:

To introduce students to the foundational principles and historical development of Ecological Anthropology, providing a comprehensive understanding of ecological perspectives and their relevance to human societies.

Learning Outcomes:

Unit I: Students will understand the foundational concepts and historical evolution of Ecological Anthropology and Understand Ecologically Sustainable Development, Environmentalism, and Conservation Strategies like JFM and MFP, recognizing the importance of indigenous knowledge for environmental conservation

Unit II: Learners will grasp the fundamentals of Ecology and Ecosystem.

Unit III: Students will explore the intersection of culture and environment through Ecological Ethnography, examining the cultural components of various societies and their relationship with ecological transitions and state formations.

Unit IV: Engage in hands-on research or project work to investigate on community based contemporary environmental issues, fostering critical thinking and practical application of ecological concepts.

UNIT-I:

Ecological Anthropology: Definition and Scope; History and Development of Ecological Anthropology; Concepts and Perspectives of Ecology: Cultural Ecology, Population Ecology, Systems Ecology, Ethno Ecology, Palaeo Ecology and Social Ecology; Evolutionary ecology and Deep ecology

UNIT: II:

Ecology and Ecosystem: Definition of Ecology; Ecosystem: Concept, meaning, types and components; Ecological Rules: Allens and Bregmans, Human Adaptability Programme; Adaptation and Evolution: Bio-Cultural Adaptation of Man to Heat, Cold and High Altitude; Eco-niche; Energetic and Human Society: Sources of Energy, Food Chain and Web, Flow of Energy, Ecological Equilibrium and Concept of Carrying Capacity

UNIT-III:

Ecological Transition, Concept of Culture Core and its relation with Environment and Other aspects of Culture; Ecological Ethnography: Study of features of Hunter-Gatherers, Nomads and Island Communities, Cultural Component of system: Culture as a Master Variable. Ecological themes of State formation: Neolithic revolution and Hydraulic civilization.

UNIT-IV:

Concept of Ecologically/Environmentally Sustainable Development; Environmentalism: Environmental Movements, Effects of Development Projects and Processes on Environment. Environmental Policy in India; Conservation Strategies: JFM and MFP. Indigenous knowledge for environment.

Practicals:

1. Conduct a comparative study of traditional ecological knowledge systems in different communities.
2. Study sacred grooves /Nature-Man-Sprit- Complex/ Traditional knowledge system locally available
3. Conduct field trip to study local ecosystems and their human impacts to assess environmental sustainability and propose management strategies.

4. Develop a community-based project to address environmental challenges identified through ethnographic research.
5. Design and implement an educational outreach program to raise awareness about the importance of ecological conservation and indigenous knowledge
6. Conduct a research project on the socio-ecological impacts of a specific development project or policy.

Books Recommended:

- ✓ 1. O. Hardesty, D *Ecological Anthropology*
- ✓ 2. Bennet, J.W. *The Ecological Transition*
- ✓ Harris, M. 1971. *Culture, Man and Nature*, New York: Thomas Y Corbell.
- ✓ Ramakrishnan, P.S., 2001 (2015). *Ecology and Sustainable Development: Working with Knowledge systems*. New Delhi. National Book Trust, India

Suggested Readings:

- ✓ 1. , Odum E.P. *Fundamentals of Ecology*
- ✓ 2. Bresser *Human Ecology*
- ✓ Eckstein, P.R. & Ehrlick, Avne, Holdren, J.P. *Human Ecology*
- ✓ Orlove, B. 1980. *Ecological Anthropology. Annual Review of Anthropology. Vol.9.pp.235-73*
- ✓ Rappaport, Roy A. 1967. *Pigs for the Ancestors: Rituals in the Ecology of a New Guinea People*. New Haven: Yale University Press
- ✓ Cohen, Yehudi A. 1968. *Man in Adaptation: The cultural Present*. Chicago: Aldine

Core IX

REGIONAL PREHISTORY

Course Outcomes:

This course gives idea of the Pleistocene events and development of early humans and the knowledge of different sites of Africa, Europe and South East Asia.

Learning Outcomes:

1. To develop ideas about the different prehistoric cultures of India and Odisha.
2. To explain the cultural revolution in Odisha and its comparison to other sites of India.
3. To understand the ecological background of Odishan prehistory and rock art heritage.
4. To understand the megalithic and iron age tradition in the region

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I: Palaeolithic, Mesolithic and Neolithic Period in India:

Lower Palaeolithic: Pebble tool culture, Acheulian culture: Madrasian (Kortalayar Valley), Attirpakkam, Didwana, Belan Valley, Bhimbetka, Chirki-Nevasa, Hunsgi, Krishna Valley. Importance of Hathnora, Narmada valley. **Middle Palaeolithic period in India:** Belan valley, Bhimbetka, Nevasa, Narmada valley. **Upper Palaeolithic period in India:** Renigunta, Billa Surgam, Patne, Bhimbetka, Son and Belan Valleys, **Mesolithic:** Economy and society.. Development in microlithic typology and technology, Sites include Bagor, Tilwara, Langhnaj, Adamgarh, Bagor, Chopani Mando, Bhimbetka, Sarai Nahar Rai, Birbhanpur. **Neolithic Period:** Economic and social consequences of food production. Settlements, population growth, craft specializations, class formation and political institutions. Sites like Burzahom, Gufkral, Ahar, Kayatha, Navdatoli, Eran, Nevasa, Inamgaon, Maski, Sangankallu, Tekkalkota, Piklihal, Nagarjunakonda, Daojali Hading, Sarutaru. Prehistoric Cave art from India: Bhimbetka, Adamgarh.

Unit-II: Metal Age and Megalithic Cultures in India:

Indus Civilization: Expansion of village sites. Salient features, metal technology, art and writing. Architecture and city planning. Chronology, Stages and theories of decline. Important Sites like Amri, KotDiji, Kalibangan, Mohenjodaro, Harappa, Lothal, Dholavira, Rakhigarhi. **Pottery and Traditions:** Ochre Coloured Pottery (OCP), Black and Red ware, Painted Grey Ware (PGW), Northern Black Polished Ware (NBP). Distribution of the pottery types and period. **Bronze/Copper Age:** General characteristics, distribution, people. Iron Age and Urban Revolution: General characteristics, distribution, people. **Megaliths:** concept and types (menhir, dolmen, topical, cist, cairn circle, sarcophagi)

Unit-III: Prehistory and Protohistory of Odisha:

Ecological background, Palaeolithic Mesolithic, Neolithic Culture of Odisha, Metal Age Culture, Rock Art, Copper Double Axe, Living Megalithic tradition, Pre-industrial Iron Smelting Tradition, Distribution of Major explored and Excavated Prehistoric and Protohistoric Sites- Kuliana, Kalabadia, Jashipur, Kuchai, Baidypur, Sankerjang, Bangriposhi, Golabai, Gopalpur, Malikhoja, Banabasa, Pallahara, Telkoi, Dhenkanal, Bang- Harirajpur,

Unit- IV: Practical:

Students have to show the major explored and excavated pre and protohistoric sites of Odisha in Map and to mention their significance, cultural period, explored/excavated by, year of exploration/excavation, material recovered etc

Books Recommended

- ✓ Agarwal, D.P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
- ✓ Allchin, Briget and Raymond Allchin. 1982. *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
- ✓ Chakrabarti, S. 1992. *New Perspectives on Palaeolithic Archaeology of Kuliana, Northern Orissa, Eastern india*. In **Proceedings of the XX Conference of Indian Society for Prehistoric and Quaternary Studies**. Dharward; Karnataka University. Pp. 1-3.
- ✓ Bhattacharya, D. K. 2001. *An Outline of Indian Prehistory*. Delhi: PalakaPrakashan
- ✓ Chakrabarti D.K. 1999. *India: An Archaeological History: Palaeolithic Beginnings to Early Historic Foundations*. Delhi: Oxford University Press.
- ✓ Dash, R.N. 2000. *The Neolithic Culture of Orissa: A Typo-Technological Analysis*. In Basa, K.K. and P. Mohanty edited **Archaeology of Orissa**. Delhi; Pratibha Prakashan. Pp.222-263.
- ✓ Nanda, S.C. 2000 *The Upper Palaeolithic and Mesolithic Cultures of the Indravati Valley, South Orissa: An Ethnoarchaeological Study*. In Basa K.K. and P. Mohanty edited **Archaeology of Orissa, Vol.-I**. Delhi; Pratibha Prakashan. pp. 153-172.
- ✓ Mohapatra, G.C. 1962. *Stone Age Culture of Orissa*. Poona.
- ✓ Ray, Ranjana 1993 *Discovery of a Chalcolithic site near the source of River Baitarani, Orissa* **Journal of the Indian Anthropological Society** 28:97-101.

Suggested Readings

- ✓ Agrawal, D.P. 1971. *The Copper-Bronze in India*. New Delhi.
- ✓ Ball, V. 1876. *On Stone Implements found in the Tributary States of Orissa. Proceedings of the Asiatic Society of Bengal*. Pp.120-121.
- ✓ Banerjee, R.D. 1930. **History of Orissa, Vol.-1**. Calcutta; ProbasiPpress.
- ✓ Basa, K.K. & P. Mohanty (Eds) 2000. *Archaeology of Orissa*. New Delhi: Pratibha Prakashan.
- ✓ Basa, Kishor K. 1994. **Problems and Perspectives in Archaeology of Orissa, India**. Occasional Paper in Anthropology. Utkal University, Bhubaneswar.
- ✓ Basa, Kishor K. 1999. *Neolithic and Post-Neolithic Cultures of Orissa: An Overview*. In Pradhan, S. edited **Orissan History, Culture and Archaeology**. New Delhi, p.31.
- ✓ Chakrabarti, S. 1993. **Exploration at Kuliana and its Neighbourhood, Mayurbhanj District, Orissa 1992-93**. A Report Submitted to the Archaeological Survey of India. New Delhi, pp.1-13.
- ✓ Chakraborti, Subrata 2000 *Recent Advances in Prehistory of Mayurbhanj*. In Basa, K.K. and P. Mohanty edited **Archaeology of Orissa, Vol.I**. Delhi; PratihhaPrakashan. pp.77-101.
- ✓ Senapati, N. and N.K. Sahu. 1967. **Orissa District Gazetteers, Mayurbhanj**. Cuttack; Orissa Govt. Press.
- ✓ Thaper, B.K. 1961-62. *Excavation at Kuchai, District Mayurbhanj*. **IAR** 1961-62, pp. 35-363.

Core X

Research Methodology

Course Outcomes:

This course aims to impart the knowledge of research methodology in Anthropology. It also focuses on types of research, methods of data collection, data analysis and research ethics.

Learning Outcomes:

1. Student will learn about the types of research in Anthropology and different research design.
2. They will be able to understand the significance of hypothesis and Sampling procedures

3. They will develop proper understanding of different types of tools and techniques of data collection.
4. They will also learn about research ethics and able to develop the skill of report writing.

From the practical component they will apply the concepts and methods learnt in above unit in real time situations. .

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I:

Types of research: based on data (Quantitative and qualitative), tools (survey questionire and interview), techniques (content and statistical), method (Experimental and non-experimental) and methodology (field work, case studies, trials), applications and utility of anthropological research; Formulation and selection of a research problem; objectivity of research; Conceptual framework, Review of literature; Field work, Techniques of rapport establishment. Methods of comparison; Restudy in Anthropology.

Unit II:

Research design: Meaning, Definition, Features of research design; Types of research design - exploratory, descriptive diagnostic and experimental research. Hypothesis: Meaning, Definition and characteristics of good hypotheses; Types of Hypotheses; Testing of hypothesis, Sampling: Meaning, Importance of sampling, Types of sampling; probability and non-probability sampling.

Unit III:

Methods of data collection: Observation, Interview, key informant interview,

Focus group discussion, Free listing, pile sorting, Case study and Life history, Genealogical method; pedigree analysis; PRA and RRA; Qualitative data analysis : content analysis ; Scaling (comparative and non-comparative)

Unit IV:

Ethics in research: Ethical issues and principles in the context of human research, bioethics, informed consent; Plagiarism – issues, types.

Report writing – Structure and technique, concepts of preface, notes (end and footnotes), bibliography (annotated) and Types of references, Authorship and publication; Research data bases.

Practical:

Write the review of literature on a topic.

Visit a public place (e.g., a park, cafe, library) use observation methods on the interactions and behaviors of people and write a report

1. Prepare an interview schedule/questionnaire

1. Form small groups and conduct a focus group discussion on a topic of interest (e.g., university facilities).
2. Select an individual and create a detailed case study or life history, focusing on significant life events and experiences and write a report
3. Create a genealogical chart for their own family noting relationships and significant traits.
4. Visit a nearby community and engage with residents to gather information using PRA and RRA techniques (e.g., mapping, seasonal calendars).
5. Design a survey with comparative (e.g., Likert scale) and non-comparative (e.g., rating scales) questions on a topic of interest (e.g., student satisfaction with campus services).
6. Students ask their peers / community members to list items related to a specific category for free listing and ask them to sort them into piles based on similarity for pile sorting.

7. Undertake a study on any topic of choice and present the findings.

Suggested Readings

- ✓ *Barnard, H. R. 2006. Research Methods in Anthropology. Qualitative and Quantitative Approaches. Rowman Altamira Press.*
- ✓ *Erwin A. (2004). Applied Anthropology Tools and Practice, Allyn and Bacon.*
- ✓ *Kothari, C. R. Research Methodology, Methods and Techniques, Wiley Eastern Limited: New Delhi.*

Recommended Readings

- ✓ *Bernard, H. R. 1988. Research Methods in Cultural Anthropology, Sage Publications.*
- ✓ *Emerson R M, Fretz R I and Shaw L. 1995. Writing Ethnographic Field Notes, Chicago, Chicago University Press*
- ✓ *Madriga L. 2012. Statistics for Anthropology. Cambridge, Cambridge University Press.*
- ✓ *Wilkinson, T. S. and Bandarkar, P. L. 1984. Methodology and Techniques of Social Research, Mumbai: Himalaya Publishing House.*
- ✓ *Patton, M.Q. 2002, Qualitative Research and Evaluation Methods. London: Sage.*
- ✓ *Srivastava, V (Ed.). 2005. Methodology and Fieldwork. Oxford India Paperbacks, New Delhi*
- ✓ *Pelto, P.J. and Pelto, G.H. 1978. Anthropological Research: The Structure of Inquiry. New York. Cambridge University Press.*

Semester-V

Core-XI

Demographic Anthropology

Course Outcomes:

This course aims to provide students with a comprehensive understanding of demographic anthropology, covering key theories, data analysis tools, Indian demographic trends, national policies, and practical applications through virtual visits

to research centers, facilitating their ability to analyze and interpret demographic data effectively.

Learning Outcomes:

Unit I: Understand the foundational concepts of Demographic Anthropology, including key theories and their relationship to anthropology.

Unit II: Utilize tools for demographic data analysis, including measures of population composition, fertility, mortality, and migration.

Unit III: Analyze demographic trends in India, considering anthropological determinants and addressing issues related to refugees, populations in exile, and LGBTQ+ communities and Examine national policies related to population and health, including the National Population Policy and the Peoples of India Project.

Unit IV: Students will analyze demographic data, investigate Indian demographic trends, and explore Centers or institutes through virtual visits, enhancing their understanding of practical applications in demographic anthropology.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

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

Unit II:

Tools of Demographic Data; Measures of population composition, distribution And growth; Measures of fertility; Measures of mortality; Measures of migration. Selection Intensity and Isonomy analysis

Unit III:

Population of India: Sources of demographic data in India; Growth of Indian population; Anthropological determinants of population growth; Issues of Refugees and population in exile & LGBTQs.

Unit IV:

National policies; National Population Policy; National Health Policy; National Policy on Reproductive Health Care. Peoples of India Project (Anthropological Survey of India).

Practical :

1. NFHS, Census data analysis: Population pyramid construction, population density, dependency ratio and sex ratio estimation (ST/ SC populations of India and Odisha).
2. Calculation of CBR, TFR, ASFR, CDR, MMR, IMR, Mean Age at marriage, Net Migration, Life Expectancy (Secondary source information).
3. Demography of Indian tribal and non-tribal groups: Students are required to submit a brief report on any one group of ST/SC population of India/Odisha.(Source: <https://censusindia.gov.in/>)
4. Virtual visit of Population Research Centers/Institutes: (PRC), IIPS , UNFPS, UN etc. websites (Structure, function and current projects)

Books Recommended

- ✓ *Bhende A. and Kaniikar, T. (2010) Principles of Population Studies. Himalaya Publishing*
- ✓ *Caldwell J.C. (2006). Demographic Transition Theory. Springer.*
- ✓ *Pathak KB and F. Ram (2016). Techniques of Demographic Analysis. Bombay : Himalaya Pub. House.*
- ✓ *Riley N.E. and Mc Carthy, J. (2003) Demography in the Age of the Postmodern. Cambridge*
- ✓ *Sinha VC & E Zacharia (2009). Elements of Demography. Allied Publishers Pvt. Ltd, Kolkata, Revised Edition.*
- ✓ *Srivastava O.S. (1996) Demographic and Population Studies. Vikas Publishing House, India*
- ✓ *University press. UK. Pages 1-13 and 32-98*

Suggested Readings

- ✓ *Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) Population Ecology and Family*
 - *Planning. Serials publications. New Delhi.*
- ✓ *Misra BD (1982). An introduction to the study of population. South Asia publ. ltd. New Delhi.*
 - *National Population Policy <http://populationcommission.nic.in/npp.htm>*
- ✓ *Park K. (2000) Text book of Preventive and Social Medicine. Banarsidas Bhanot, Jabalpur.*
- ✓ *Patra P.K. and Kapoor, A.K. (2009) Demography And Development Dynamics in a Primitive*
 - *Tribe of Himalayas. International Book Distributors, Dehradun*
- ✓ *N. (1986) Demographic Anthropology. Ann. Rev. Anthropol. 15: 219-246*
- ✓ *Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. Social Change*
- ✓ *Satapathy, K. C. (2010) Refugees' Health, Athena Books, Odisha.*
- ✓ *United Nations Reports on Populations : <https://population.un.org/wpp/>*
- ✓ *Zubrow E.B.W. (1976) Demographic anthropology. Quantitative approaches. University of*
 - *New Mexico Press, Albuquerque.*
- ✓ *Census of India (2001,2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO (Can be seen*
 - *from browsing net)*
 - *House. Mumbai (All Units, It covers most topics)*
- ✓ *Howell*
- ✓ *NFHS I, II, III, IV & V: 1992, 1998, 2005, 2015, 2019 India : IIPS Bombay*
- ✓ *Ota, A. B. & Mohanty, S. C. (2015) Demographic Profile of Scheduled Tribes of Odisha, SCSTRTI, Bhubaneswar.*
- ✓ *Ota, A. B. & Mohanty, S. C. (2015) Demographic Profile of Scheduled Castes of Odisha (1961-2011), SCSTRTI, Bhubaneswar.*
- ✓ *SCSTRTI (2004): Tribes of Odisha, Revised Edition, SCSTRTI, Govt. of Odisha, Bhubaneswar*
- ✓ *SCSTRTI (2015): PVTGs of Odisha , Vol. III, anthropology of Health &Medecine, Director, SCSTRTI, Bhubanaeswar.*

- ✓ SCSTRTI (2015): *PVTGs of Odisha ,Vol.I, Ethnography, Director, SCSTRTI, Bhubanaeswar.*
- ✓ SCSTRTI (2015): *PVTGs of Odisha ,Vol.II, Change and Development, Director, SCSTRTI, Bhubanaeswar.*
- ✓ Singh, K. S. (1995-98), *People of India: Scheduled tribes, ASI, Oxford University Press.*

Core XII **Human Growth and Development**

Course Outcomes:

This course seeks to impart knowledge on human growth and development through the exploration of theoretical concepts, measurement techniques, bio-cultural influences, and practical applications, aimed at promoting holistic understanding and assessment of human health and nutrition across the lifespan.

Learning Outcomes:

The learning outcomes of this paper are:

1. The students will learn about the concepts and indicators of human growth and development.
2. They will learn about pre-natal and post-natal growth.
3. They will also learn about various bio-cultural factors that influence growth.
4. From the practical component they will learn about how to assess growth, obesity and
5. Nutritional status.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Learning Outcomes:

Unit I:

Concept of human growth, development, differentiation and maturation; Evolutionary perspective on human growth. Human lifespan development process, significance/ applicability of growth studies. Major stages of human growth and development: Prenatal (conception till birth) and postnatal (birth till senescence) period of growth and their characteristics.

Unit II:

Measurement and assessment of human growth: changing human growth patterns, pattern of normal growth curves, variation from normal growth (canalization, catch-up growth and catch-down growth), Growth references and standards; abnormal growth. Ethnic and gender differences in growth curves, secular trend.

Unit III:

Segmental growth and development; analysis of Human physique and body composition – models and techniques; Somatotyping and human physique with reference to Sheldon, Parnell, Heath and Carter methods.

Unit –IV:

Bio-cultural factors (genetic, social, and ecological factors) influencing patterns of growth and development, methods and techniques to study growth- longitudinal, Cross-sectional, mixed longitudinal.

Food and nutrients: nutritional status assessment and methods of evaluation; nutritional epidemiology- concept of balanced diet, impact of malnutrition (over and under) with special reference to obesity, Kwashiorkor and Marasmus.

Practical:

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

Text book recommended:

- ✓ *Das B.M. 2008. Outlines of Physical Anthropology. Kitab Mahal, New Delhi.*
- ✓ *Mukherji, D., D. Mukherjee and P. Bharti and A .Mukhopadhy. 2018. Laboratory*
- ✓ *Manual for Biological Anthropology: Revised and Enlarged 2nd Edition. SCHOLAR*
- ✓ *Booksellers & Publishers, Kolkata.*
- ✓ *Reddy V.Rami, 2011. Fundamentals of Physical Anthropology,*
- ✓ *Reddy V.Rami, 2011. Current trends in Physical Anthropology and Human Genetics.*

Suggested Readings

- ✓ *Bogin B. (1999) Patterns of human growth. Cambridge University Press.*
- ✓ *Frisancho R. (1993) Human Adaptation and Accommodation. University of Michigan Press.*
- ✓ *Cameron N and Bogin B. (2012) Human Growth and Development. Second edition, Academic press Elsevier.*
- ✓ *Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.*
- ✓ *Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.*
- ✓ *Kathleen K. (2008). Encyclopedia of Obesity. Sage.*
- ✓ *Malina RM, Bouchard C, Oded B. (2004) Growth, Maturation, and Physical Activity. Human Kinetics.*
- ✓ *Sinha R and Kapoor S. (2009). Obesity: A multidimensional approach to contemporary global issue. Dhanraj Publishers. Delhi.*

Core XIII Anthropological Thoughts and Theories-I

Course Outcomes:

This course aims to impart the emergence of Anthropology as an empirical discipline and focuses on various anthropological theories.

Learning Outcomes:

1. Student will learn about the emergence of Anthropology as an empirical discipline and theoretical debates in the discipline as well as theories like evolutionism and diffusionism.
2. They will be acquainted with the theories of functionalism, structuralism and culture and personality schools of thoughts.
3. The students will learn about the importance and application of anthropological theories in understanding and solving human problems
4. From the practical component they will be oriented towards the development of different tools to conduct contemporary research.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods: Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I: Evolutionism and Diffusionism

Emergence of Anthropology as an empirical discipline; Premises of cultural evolution: Auguste Comte, Charles Darwin, Herbert Spencer

Cultural evolutionism: Classical Evolutionism: British school American school and Germany School; Neo-evolutionism (Julian Steward, Leslie White, V. Gordon Child etc.)

Cultural Diffusionism: British School, American School and Germany School

Particularism – Franz Boas.

Unit II: Functionalism, Structuralism and Culture-Personality

Functionalism – B. K. Malinowski; Structural-Functionalism – Emile Durkheim, Radcliffe-Brown, Firth, Fortes, Eggan, Parsons.

Structuralism – Levi-Strauss, Evans-Pritchard, Edmond Leach and S. F. Nadel.

Culture and Personality/Psychological Anthropology – M. Mead, R. Benedict, DuBois, Linton, Kardiner.

Unit III: Cultural Materialism

Cultural Materialism: Marvin Harris.

Symbolic Anthropology – Victor Turner, Raymond Firth, Mary Douglas.

Deep Ethnography, Interpretive Anthropology – Clifford Geertz.

Marxist Anthropology; Phenomenology; Postmodernism, Post structuralism– Michel Foucault, Jacques Derrida, Pierre Bourdieu.

Unit IV: Practical

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

1. To identify a topic relating to contemporary issue and formulate research questions and clearly identify the theoretical perspectives from which they are derived.
2. Identification of variables of a study.
3. Identification of universe and unit of study with justifications.
4. Choice of appropriate research technique and method in the context of theoretical framework.
5. Data collection and analysis

Essential Readings:

- ✓ *Barnard, A., 2000. History and Theory in Anthropology. UK: Cambridge University Press.*

- ✓ Geertz, Clifford, 1973. *The Interpretations of Cultures*. New York: Basic Books, Inc.
- ✓ Harris, M., 1968. *The Rise of Anthropological Theory*. New York: Harper Collins Publishers.
- ✓ Jerry D. Moore, 1997. *An Introduction to Anthropological Theories and Theorists*. New Delhi: Rawat Publications.
- ✓ Malefijt, Annemarie De Waal, 1974. *Images of Man: A History of Anthropological Thought*. London: Alfred A. Knopf.
- ✓ Upadhaya, VS and G. Pandey, 1993. *History of Anthropological Thought*. Delhi: Concept.
- ✓ Behera, N. K., 1988. *Anthropological Thought and Theories*. Calcutta: Institute of Social Research and Applied Anthropology.

Semester-VI

Core XIV

Human Genetics

Course Outcomes:

The paper aims to provide an in-depth understanding of Human Genetics starting from classical genetics, Human Cytogenetics, Molecular genetics and Population Genetics, enabling students to comprehend the genetic methods and their application in disease association studies and evolutionary research.

Learning Outcomes

1. The student will learn about the Mendel's Laws, inheritance modes, and epigenetics and basics of Human cytogenetics.
2. The student will understand DNA structure, gene function, and gene expression and methods in human genetics
3. The students will understand basics of population genetics and evolutionary process producing genetic variation. They will also learn about common genetic variation existing in human species.
4. The students will learn to utilize genetic databases and conduct practical genetic tests.

Teaching Learning Process:

Lectures and Discussions, Seminars, Assignments and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Human Genetics: Meaning and Scope, Mendel's Laws of inheritance, Mendelian and Non Mendelian modes of Inheritance; epigenetic inheritance, penetrance and expressivity. Human Cytogenetics: Structure and function of an animal cell, cell theory and cell division (Mitosis and Meiosis), Chromosomal structural and numerical chromosomal aberrations in man Lyon's hypothesis, Euchromatin and heterochromatin.

Unit II:

Structure and Function of DNA, concept of gene, DNA replication. Repair and recombination, gene expression, coding and non-coding regions. Expression of genetic information: from Transcription to Translation - the relationship between genes and protein. Human genome project.

Unit III:

Pedigree analysis, methods of assessing chromosomal abnormalities (Banding techniques; Karyotyping; FISH); Sib-pair and Twin studies Heritability estimate; Genotyping and Sequencing methods.

Unit IV:

Processes for genetic variation; Mutation: Gene mutation-Spontaneous, Induced, causes of mutations, Genetic drift, Inbreeding and Natural selection. Genetic Polymorphism: Balanced and Transient; Genetic Markers: Human blood group systems, Secretor factor, Red Cell Enzymes; G6PD, hemoglobinopathies, DNA markers. (Autosomal, mt DNA and Y chromosome)

Practical:

1. Exposure to the OMIM and NCBI database and websites Scitable
2. Analyze Genetic traits for Hardy-weinberg equilibrium
3. Color Blindness Test Using Ishihara card
4. Blood group typing-A1,A2,B,O, MN and Rh(D) blood groups
5. Preparation of Karyotyping and identification of disorders based on karyotype

pictures

6. Construction of Pedigree for a genetic disease
7. Project report based on data collection related to one mendelian disorder on the basis of brief field visits, in nearby areas.

Books recommended:

- ✓ *Shukla B.R.K. & Rastogi, S. 1990. Physical Anthropology & Human Genetics: An Introduction. PlakaPrakashan. Delhi.*
- ✓ *Klug WS (2012). Concepts of Genetics. Pearson.*
- ✓ *Lewis R. (2009). Human Genetics: Concepts and Application. The McGraw–Hill Companies, Inc.*

Suggested reading:

- ✓ *Vogel F. and Motulsky A.G. (1996). Human Genetics: Problems and Approaches.*
 - *Springer, 3rd revised edition.*
- ✓ *Brown TA. (2007). Genomes. Garland Science.*
- ✓ *Cummings MR (2011). Human Heredity: Principles and Issues. Brooks/Cole,*
 - *Cengage Learning*
- ✓ *Das B.M. 2008. Outlines of Physical Anthropology. Kitab Mahal, New Delhi*
 - *Giblett, ER. (1969). Genetic Markers in Human Blood. Blackwell Scientific, Oxford.*
- ✓ *Jobling M, Hurler M and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. New York: Garland Science*
- ✓ *Verma, P.S. and V.K. Aggarwal (1974). Cell Biology, Genetic, Molecular Biology, Evolution and Ecology. S.Chand and Company Pvt. Ltd., New Delhi.*

Core XV

FIELDWORK BASED DISSERTATION

Empirical study among the tribes, castes, marginalized, LGBTQ or minority communities of Odisha is to be conducted in rural or urban areas for a minimum periods of 20 days in semester VI under the guidance of a teacher or teachers. Two copies of dissertation and field

dairy are to be submitted for examination after the 20 days field work and presentation of seminar. The Examination of Dissertation shall be conducted by an internal and an external examiner.

Dissertation based on 20 day's fieldwork	40 Marks
Seminar Presentation	30 Marks
Field Dairy	10 Marks
Viva voce test on dissertation	20 Marks

Semester-VII

Core XVI

Anthropological Thoughts and Theories-II

Course Outcomes:

This course aims to impart the biological, socio-cultural and archaeological anthropological thoughts and theories.

Learning Outcomes:

Unit-I: Student will understand the biological vrs Socio-cultural theoretical debates.

Unit-II: Develop critical understanding of archaeological thoughts and its application to contemporary research in the field of archaeology.

Unit-III: They will be able to analyze the theories of subaltern school, ethnicity and anthropology and gender to solve the current human problems.

Unit-IV: From the practical component they will learn about the identification of research topics and thematic analysis of review of literature and formation of hypothesis.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I:

Man's place in Nature, Nature vs Nurture, Biological vs. Cultural Evolution, Gene-culture co-evolution theory, Social biology: Primate Kin and Human Kinship, Anthropology and the Concept of Race.

Unit II:

History of archaeological thought, notions of practice and agency in archaeology, symbolism in archaeology, New Archaeology/Processual Archaeology, Post-Processual Archaeology, Marxist archaeology, Ethno archaeology.

Spatial technology and archaeological theory, Analogy in archaeological interpretation, System Theory, Explicit theory, Formation Process (Cultural, Natural), Cultural-historical (historical particularism, national archaeology) archaeology, Social archaeology.

Unit-III:

Subaltern School-Dipesh Charkravarty, Partha Chateerjee, David Hardiman, Sumit Guha. Ethnicity – Fredrik Barth, Max Weber. Anthropology and Gender – Leela Dube, Renato Rosaldo, Marilyn Strathern, Zora Neale Hurston. Orientalism & India: James Mill, William Jones; Postcolonialism - Talal Asad.

Unit-IV: Practical

1. Develop research tools for conducting the following kinds of research
 - a. Historical Studies, b. functional studies c. village and community studies.
2. To identify a topic relating to contemporary issue and formulate research questions and clearly identify the theoretical perspectives from which they are derived.
 - a. Review of literature and thematic analysis
 - b. Formulation of hypothesis.
 - c. Distinction between hypothesis testing and exploratory research.
 - d. Identification of universe and unit of study with justifications.

Suggested Text Books:

- ✓ *Barnard, A., 2000. History and Theory in Anthropology. UK: Cambridge University Press.*
- ✓ *Harris, M., 1968. The Rise of Anthropological Theory. New York: Harper Collins Publishers.*
- ✓ *Jerry D. Moore, 1997. An Introduction to Anthropological Theories and Theorists. New Delhi: Rawat Publications.*
- ✓ *Malefijt, Annemarie De Waal, 1974. Images of Man: A History of Anthropological Thought. London: Alfred A. Knopf.*
- ✓ *Upadhaya, VS and G. Pandey, 1993. History of Anthropological Thought. Delhi: Concept.*

Core XVII

Anthropology of Health and Wellbeing

Course Outcomes:

This course seeks to impart knowledge on various dimensions of illness, sickness, disease and wellness. Along with social and biological determinants of health, the course would

cover various theoretical perspectives in health and wellness and healthcare policies and programmes initiated by government agencies. Also the course would discuss the changing perspectives of health at local and global levels.

Learning Outcomes

The learning outcomes of this paper are:

1. Gain insight into the anthropology of health, encompassing its history, cultural perspectives, and ethnomedicine.
2. Student should be able to Analyze various conceptual and theoretical debates in anthropology of health and wellbeing. Also to have a critical understanding of various medical systems.
3. Student should be able to examine prevalent diseases, National Health Policy-2017, National Nutrition Policy, and implications for healthy aging in India.
4. Student should be able to critically examine the changes taking place in the field of health and healthcare both from local and global perspectives.

Teaching Learning Process:

Lecture, class room exercises, project based learning, data collection and analysis, fieldwork and report preparation and presentation.

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

UNIT-I: Introducing Anthropology of Health & Wellbeing

Anthropology of illness, sickness and health. Pathogenic factors to ill health and disease. Social determinants of health: Income, Education, Unemployment, Working life conditions, Food insecurity, Housing, basic amenities and the environment, Social inclusion and non-discrimination. Biological determinants of health: sex, age, race, inherited conditions and genetic make-up. Anthropology of health & wellbeing

UNIT-II: Understanding the Theoretical basis of Health and Illness

Theoretical perspectives in medical anthropology – medical ecological, cultural interpretive theory and critical medical anthropological theory. Medical systems in

indigenous and pre-capitalist societies, Ethno-medicine, medical pluralism and medical syncretism. An outline of medical systems in India.

Unit III: Understanding Health Policies and Programmes

Layout of public health care services in India, Key features of National Health Policy of India, 2017, Key component of National Health Mission, Healthcare services for reproductive health, Family planning, adolescents and aged, National health programs for eradication of Leprosy, Tuberculosis, vector-borne diseases, and Campaigns like Anti-tobacco, Mental health

Unit-IV: Understanding Health in changing Global Perspectives

Biomedicine as a hegemonic system of medicine. Commodification of health and healthcare. Socio-ethical issues in emerging medical biotechnologies such as new reproductive technology, genomics, stem cell therapy and global clinical trials.

Practical:

1. Prepare a Schedule on Socio-economic and Cultural determinants of Health.
2. Estimation of prevalence rate, incidence rate, odds ratio et c / Analysis of recent NFHS data.
3. Prepare a list/ chart of a few common communicable and non-communicable diseases with their causal factors, spread and management. (visit: International Classification of Disease -11, <https://www.who.int/standards/classifications/classification-of-diseases>)
4. Case Studies of Traditional and Modern healthcare providers (ASHA, Anganwadi Workers, AYUSH, *Jani, Dehury* etc).

Practical component Learning Outcome:

Apply theoretical knowledge by conducting data analysis, disease management, and case studies of healthcare providers, fostering comprehensive understanding and critical thinking skills.

Books Recommended:

- ✓ *Foster G.M. and B.G. Anderson .1978. Medical Anthropology. New York: John Wiley and Sons*

- ✓ Hahn, Robert A. 1999. *Anthropology in Public Health. Bridging Differences in Culture and Society*. New York: Oxford University Press.
- ✓ Helman, Cecil G. 1994. *Culture, Health, and Illness*. 3rd ed. Oxford:
- ✓ Kalla, AK and PC Joshi (eds.) 2004. *Tribal Health and Medicine*. Concept Publishing Company, New Delhi.
- ✓ Park and Park. 2009. *Community Health and Social Medicine*. M/s Banarasidas Bhanot Publishers, Jabalpur
- ✓ Pool R. and W. Geissler. 2005. *Medical Anthropology*. London: Open University Press.
- ✓ Sharma B.V (2016). *Medical Anthropology: Tradition & Change*. Concept Publishing Company, New Delhi.

Books Suggested:

- ✓ Chaudhury, B. 2003 *Health, Forest and Development: The Tribal Situation, Inter India Publications, New Delhi*.
- ✓ Chaudhury, B. 2007 *Health, Environment, Development and Other Essays: Anthropological Perspectives, IIP, New Delhi*.
- ✓ Chaudhury, B and S. Biswas. 2014. *Anthropology and Health Issues, Rawat Publications*.
- ✓ Dash, J, P. K. Patra and K. C. Satapathy. 2014. *Ethnomedical Practices in Tribal Areas, SSDN Publishers & Distributors, New Delhi*
- ✓ Mutatkar, R. K. 2017. *Ayush in Public Health (In 2 Vols. Set), Concept Publishing Company Pvt. Ltd*.
- ✓ Mutatkar, R. K. and A. Danda. 2010. *Studies on Bio-Medical Anthropology: Profiles of Health Cultures, Aryan Books International*
- ✓ Joshi, P. C. and A. Mahajan(eds). 1990. *Studies in Medical Anthropology, New Delhi: Reliance Pub. House*

<https://www.who.int/standards/classifications/classification-of-diseases>

Course Outcomes:

This course gives idea of the Pleistocene events and development of early humans and the knowledge of different sites of Africa, Europe and South East Asia.

Learning Outcomes:

1. Know the palaeo-environment of Africa, Europe and South East Asia
2. Able to identify the difference between different prehistoric cultural periods of Europe and Africa and South East Asia
3. Improve their research skill by learning to use prehistoric artifacts.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes.

Assessment Methods Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I: Palaeo environment of African and Europe

Pleistocene events and Early Human: Pleistocene events in the Glaciated area, Periglacial area and Pluviated area. Land and Records of Early Human in Africa and Europe. Out of Africa-Human Migration

Unit-II: Prehistory of Africa

Palaeolithic Cultures: Lower Palaeolithic Pebble Tools Culture – evidences from Hadar, Laetoli, Olduvai Gorge, KoobiForra; Acheulian Culture in Africa – Evidences from Olduvai Gorge, Isimila, Kalambo Falls, Olorgesailie; Middle and Late Palaeolithic culture of North Africa. Rock Art.

Unit-III: Prehistory of Europe and South East Asia

Palaeolithic Cultures of Europe; Palaeolithic Cultures (Handaxe tradition, Acheulian tradition, Clactonian Tradition, Levalloisian tradition, Tayacian tradition); Middle palaeolithic Cultures (Mousterian); Upper Palaeolithic Cultures (Aurignacian tradition, Solutrean tradition, Magdalenian Tradition), Palaeolithic Art and Motives (Engraving, Drawing and painting). **Mesolithic Cultures of Europe:** Mesolithic Cultural traditions of Western Europe (Azilian, Tardenoisean, Asturian, Larnian), Mesolithic Cultural traditions of Northern Europe (Maglemosian, Kitchen-Midden),

People, Subsistence and Settlements. Hoabinhian Culture of the Southeast Asia, Neolithic Culture in Southeast Asia, Neolithic Cultures of Southeast Asian Islands

Unit-IV: Practical

- Students have to show the Prehistoric sites of Africa, in the Map and have to write their significance.
- Students have to show the Prehistoric sites Europe in the Map and have to write their significance.
- Students have to show the Prehistoric sites South East Asia in the Map and have to write their significance.

Books Recommended:

1. Bellwood, P.S. 2007. *Prehistory of Indo-Malaysian Archipelago*. Australian National University Press.
2. Barry, Cunliffe (Ed.) 1987. *Prehistoric Europe: An Illustrated History*. New York: Oxford University Press
3. Cole, S. 1963, *Prehistory of East Africa*. Pelican Books.
4. Fagan, Brian M. 1977, *People of the Earth: An Introduction to World Prehistory*. Boston, Toronto: Little Brown and Company.
5. West, R. G. 1977. *Pleistocene Geology and Biology*. London and New York; Longman.
6. Rammi Reddy, V. 1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.

Suggested Readings:

- ✓ *Bhattacharya, D.K. 1978. The Emergence of Culture in Europe. Delhi: B.R. Publishing Corporation*
- ✓ *Bonsall, C. (Ed.), 1989. The Mesolithic Europe. Edinburgh*
- ✓ *Champion, T., Clive Gamble, Stephen Shennan, Alsadair Whittle 1989. Prehistoric Europe. New York: Academic Press, Harcourt Brace Jovanovich, Publishers.*
- ✓ *Clark, Grahame, World Prehistory: A New Outline: Cambridge, England: The University Press.*
- ✓ *Clark, J.D. 1956. Prehistory of Southern Africa. New York.*
- ✓ *Phillipson, David. W. 1990. African Archaeology. Cambridge: Cambridge*

Core XIX

Anthropology of Development and Public Policy

Course Objective:

This course aims to impart the concept of development and public policy and also focuses on different theories of development and issues related to development.

Learning Outcomes:

1. Student will understand the concept of development and public policy.
2. The students will learn about outline of the theories of Classical Economic development.
3. They will be able to demonstrate the skill of preparation of Development Action Plans, Cost-Benefit Analysis, and Participatory Research Methods.
4. They will be acquainted with structure and function of an organization.

Teaching Learning Process: Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods: Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I: Conceptualising Development and Public Policy

Development: Meaning, evolution and history of the concept; Development anthropology and anthropology of development.

Sustainable Development: Meaning and evolution of the concept; History of the sustainable development – Brundtland, Rio and SDGs

Public policy: Introduction to public/social policy, Foundations of public policy, Process of making of public/social policy

Unit II: Theories in Development

Classical Theories: Modernization theory, Structuralism, Dependency theory, Basic needs theory; Neoclassical theory: Structural adjustment

Post-development theory: Sustainable development, Human development theory; Rights-based approach to development

Unit III: Issues in Development

Poverty and Inequality: Meaning and concept of poverty; Causes of poverty, Measurement of poverty; Consequences of poverty, How to eradicate poverty?

Climate change, Corruption, Education, Migration, Unemployment (cause, extent, consequence and solution);

Politics of aid and intervention, close reading of anthropological ethnographies throwing light on the nature of policy-making, bureaucracy and programmes in a variety of sectors;
Role of anthropology and anthropologist in development

Unit IV: Practical

1. Students will visit field or an agency (public/private) that implemented certain development programmes and study.
2. Analyze the data collected and prepare a detailed evaluative report on any public/social policy and its impact on the concerned people.
3. One seminar presentation (on the research findings).

Essential Readings:

- ✓ *Escobar, Arturo. 1995. Encountering Development: The Making and Unmaking of the Third World. Princeton, New Jersey: Princeton University Press.*
- ✓ *Ferguson, James 1994. The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho. Minneapolis: University of Minnesota Press.*
- ✓ *Gardner, Katy and David Lewis, 1996. Anthropology, Development and the Post-modern Challenge. London: Pluto Press.*
- ✓ *Nederveen Pieterse, Jan 2001. Development theory: Deconstructions/Reconstructions. New Delhi: Sage Publications.*
- ✓ *Sachs, Wolfgang (ed) 1992. The Development Dictionary: A guide to Knowledge as Power. London and New York: Zed Books*
- ✓ *Scott, James C 1998. Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed. New Haven: Yale University Press.*

Semester- VIII

Core XX

Project work

Students will develop and undertake a short term project of 3 months or more on any of the area given below.

Evaluation will be based on review of literature on the topic, submission of a research article and presentation based on project work.

Core XXI Anthropological Genetics Genetic research in Anthropology

Course Outcomes:

To provide students with a comprehensive understanding of anthropological genetics, covering its meaning, scope, historical development, methods of analysis, processes shaping human variation, and its applications.

Learning Outcomes:

1. Understand anthropological genetics' historical development, human genome organization, and molecular markers used in genetic studies.
2. Apply population genetics models, understand human variation processes, and interpret molecular data for genome diversity studies.
3. Utilize genetic databases, comprehend genotyping and sequencing methods, and analyze genetic evidence for human origins and disease evolution.
4. Perform practical genetic experiments, analyze genetic databases, and simulate population genetics models for understanding human variation and evolutionary processes.

Teaching Learning Process:

Lecture, class room exercises, project based learning, data collection and analysis and presentation.

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit I:

Meaning, Scope and Historical development of anthropological genetics. Organization and inheritance of human genome; Structure of DNA, Replication, transcription, translation,

Unit II:

Genes and non-coding DNA , Mt DNA , Y chromosome, Molecular Markers in Anthropological Genetic Studies; SNP , CpG islands , VNTR, Transposable elements (LINES AND SINES), Ancient DNA, Data base for variation ; Ensemble, Human dbVAR, NCBI Human genome Project, Hap-Map Project , 1000 Genome Project.

Unit III:

Process shaping human variation: Hardy-Weinberg model of population genetics, Mutation and recombination, Genetic Drift, Selection, Migration, Consanguinity Neutral theory of Molecular Evolution. Interpretation of Molecular Data: Fixation Index , Inbreeding Coefficient, Mutation rate, Selection Coefficient , genetic distance and phylogenetics in genome diversity studies , use of odds ratio and chi square in disease association studies.

Unit IV:

Application of molecular: Genetic uniqueness of Human and Hominin; The sequence and structural differences between humans and other great apes, Genetics Evidence of origin of man in Africa and Out of Africa model of human dispersal, Evidence from Ancient DNA Neanderthal and Denisovan , Genetics of Simple and complex disease.

Unit IV Practical: (Any Two) 30hrs

Wet LAB

1. DNA Isolation and Gel Electrophoresis: Students can extract DNA from human samples (blood or saliva) and then perform gel electrophoresis to visualize and analyze DNA fragments, reinforcing the concepts of DNA structure and the principle of gel electrophoresis.
2. PCR (Polymerase Chain Reaction): Students can amplify a specific DNA segment using PCR, allowing them to practice the PCR technique, understand the process of DNA amplification, and explore the applications of PCR in anthropological genetic studies.
3. SNP Genotyping: Using readily available SNP markers, students can perform a simple genotyping experiment to understand the significance of single nucleotide polymorphisms (SNPs) in studying human genetic variation.

Dry Lab

4. Exploring Genetic Databases: Students can access and explore databases such as Ensemble, Human dbVAR, NCBI Human Genome Project, Hap-Map Project, and 1000 Genome Project to analyze and interpret genetic variations and patterns among different populations.
5. Hardy-Weinberg Model Simulation: Students can conduct a simulation of the Hardy-Weinberg equilibrium to understand the concept and its application in population genetics, studying how allele frequencies remain constant in an idealized population.

6. Phylogenetic Analysis using Genetic Distance: Students can analyze DNA sequences from different populations to calculate genetic distances and construct a phylogenetic tree, illustrating the relationships between various human populations and gaining insights into human evolutionary history.

Text Books

Sl. No.	Book	Author
1.	Anthropological Genetics: Theory, Methods and Applications	Michael H. Crawford Cambridge University Press 2007
2.	Human Evolutionary Genetics	Mark Jobling, Edward Hollox, Matthew Hurles, Toomas Kivisild, Chris Tyler-Smith Garland Science, Taylor & Francis Group, 2014
3.	Population Genetics	Matthew B. Hamilton Wiley Blackwell A John Wiley & Sons, Ltd., Publication, 2009

Suggested Reading

1. Brown, T. A. 2002. Genomes 2 Edition. Wiley-Liss, UK.
2. Sudbery, P. 2009. Human molecular genetics, 2nd Edition. Pearson (LPE).
3. Cummings, M. R. 2009. Human Genetics. Cengage Learning.
4. Gardener, A.; R. T. Howell and T. Davies. 2008. Human Genetics. Viva Books Private Limited, New Delhi.
5. Vogel, F and Motulsky, G. 1998. Human genetics: Problems & Approaches. Springer, Berlin.
6. Tamarin, R. H. 2002. Principles of Genetics. Tata Mc Graw-Hill Edition.
7. Gelehr, T. D., F. S. Collins and D. Gineburg. 1998. Principles of Medical Genetics. Williams

& Wilkins, USA

8. Li, Wen-Hsiung. 1997. Molecular Evolution. Sinauer Associates, Inc., Publishers, USA.

9. Cavalli-Sforza, L., P. Menozzi, and A. Piazza. 1996. The History and Geography of Human Genes. Princeton University Press.

Core XXII Museum and Cultural Resource Management

Course Outcomes:

This course seeks to impart basic knowledge on Museum and its importance in the society. It also emphasises on the history & development of the Museum and teaches about the administration and collection management of the Museum.

Learning Outcomes

1. The students will learn about the basic concept of museum and museum movements.
2. The students will learn about the history and development of museums in India and museum administration.
3. They will learn about acquisition, documentation and display of museum specimens.
4. They will also learn about storage and conservation.
5. They will also learn about tourism and education in museum.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

Unit-I: Introduction to Museum Profession and Cultural Resource

Definitions, origin, Nomenclature, History and Development, types, Concept and Definition, History, Spiritual places, Cultural landscapes, Archaeological sites and artifacts, Historical documents, Religious sites and practices, Cultural use of natural

resources, Folklore, tradition, and other social institutions; Role of museum in tourism and cultural conservation, importance of heritage sites; Ethnographic museum and its Importance in education, culture conservation, ethnographic museums in India, Elwin and concept of Tribal Museum,

Unit-II: Tangible and Intangible Cultural Heritage

Meaning, Types and Functions (hunting-gathering, fishing, agricultural and other subsistence related artifacts, archaeological heritage, material related to settlement, subsistence, art and craft, household activities, kitchen, life cycle rituals, religion, aesthetics, transportation, storage system, water management system, musical instruments etc), significance

Meaning, definition, the practices, representations, expressions, knowledge, skills, Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage, performing arts, local and traditional knowledge, social practices, rituals and festive events and traditional skills, Knowledge and practices concerning nature and the universe, Traditional craftsmanship methods of Inheritance.

Unit-III: Management of Cultural Resources

Preservation of cultural resources-archeological sites, historic buildings, museum objects, paintings, any other items of cultural value, nonphysical cultural resources (folklore, language, oral histories, other intangible but culturally important items).; Conservation, Management Versus Academic Research, Research Design, Safeguarding and Public Participation, Public Archaeology, The Role of Museums in Cultural Resource Management; Professional organizations relating to museology and Heritage management- ICOM, UNESCO, ICCROM, Commonwealth Association of Museums; Museums Association of India, Museums Association Types of Museums in India, and their roles in Heritage Management

Unit- IV: Practical

The students are required to learn the principles of museum, documentation, labelling and display of the museum specimens of material cultures of tribal and rural people. Each student has to apply the above methods, whichever is applicable, on specimens of following materials.

- a. Plant remains: Wood, Bamboo

- b. Fiber remains: Cloth/ Linen
- c. Metal remains: iron, brass, copper, silvers.
- d. Animal remains: Bone, antler, horn, leather/hide

A report will be prepared by visiting an Anthropological Museum and doing empirical study on ethnographic specimens of material cultures of tribal, rural communities of Odisha. The museum visit is to be conducted for a minimum period of two week under the guidance of a teacher or teachers. Two copies of report are to be submitted for examination on the basis of museum visit. The Examination of Report shall be conducted by an internal and an external examiner.

Suggested Readings:

- ✓ *Behera, B.K. and S.K. Mohanty, 2007, Museology and Museum Management in India, Mayur Publications, Bhubaneswar, Orissa.*
- ✓ *Bhatnagar, A.1999, Museum, Museology and New Museology, Sandeep Prakashan, New Delhi.*
- ✓ *Diwvedi, V. P. and G.N. Pant(Ed) 1980, Museum and Museology: New Horizon, Agam Kala Prakashan, New Delhi.*
- ✓ *Ghoshmaulik, S.K. and K. K. Basa (Ed) 2001, Understanding Heritage: Role of Museum, Academic staff Collage, Utkal University, Bhubaneswar, India.*

Books Recommended:

- ✓ *Basa, Kishor K. (ed). 2010. Multiple Heritage: Role of Specialized Museums in India.*
- ✓ *Chakrabarti, Mahua. 2016. Museums of India. New Delhi: National Book Trust.*
- ✓ *Ghosh, D. P 1968. Studies in Museum and Museology in India. Calcutta: Indian Publications.*
- ✓ *Mohanta, Basanta Kumar and Vipin Kumar Singh. (eds). 2012. Traditional Knowledge System and Technology in India. Delhi: PratibhaPrakashan*
- ✓ *Mohanta, Basanta Kumar and ByomakeshTripathy. 2015. Ethnographic Museum (A Pictographic Catalogue of the Ethnographic Museum of the Indira Gandhi National Tribal University, Amarkantak, M.P.). New Delhi: Aayu Publications.*

Core XXIII An Introduction to Linguistic Anthropology

Course Objective:

This course aims to impart meaning and scope of linguistic anthropology, relation between language and culture, classification world languages and types of linguistic studies.

Learning Outcomes:

1. The students will understand linguistic anthropology and different approaches to linguistic studies and classification of languages.
2. They will develop the idea of the influence of language on culture and vice-versa.
3. Students will be able to understand the verbal and non-verbal components of languages and communication.
4. They will demonstrate the skill of conducting a language survey and prepare a report on the same.

Teaching Learning Process:

Lectures and Discussions, Seminars and Presentations, Practical Classes

Assessment Methods:

Examination schemes and mode shall be as prescribed by the University/ Higher education department from time to time.

UNIT-I: Basics of Linguistics Anthropology

Concept and Scope of Linguistic Anthropology; Linguistic Anthropology and other Behavioural Sciences; Universals of Language, Types: Descriptive and Historical Linguistic; Origin and Evolution of Language; Language and Gene.

Classification of Languages: Typological and Genealogical; Synchronic and Diachronic study of Languages; Functional study of Languages; Glottochronology; India as a Linguistic Area; Speech variation and the study of Indian civilization.

UNIT-II: Language and Culture

Cultural Influence on Language and Linguistic Influence on Culture; Sapir–Whorf Hypothesis; Linguistic and Culture Change; Taxonomy of languages and cultures; Socio-cultural contexts of linguistic acculturation.

UNIT-III: Language and Communication

Verbal and Non-Verbal (Signs and Symbols); Communication and Sociability; Language and Speech; Linguistic Contact: Patterns of Contacts, Diaglosia and Multilingualism; Ethnography of Speaking; speech and personality; Communication and functions speech;

UNIT-IV: Practical

1. Mapping of World and Indian languages
2. Studying one of the tribal languages of Odisha/India and preparing a short report
3. Students are required to visit DPEP to have an understanding about SSA, MLE etc

Suggested Readings / Books Recommended:

- ✓ *Ardver, E.(ed) Social Anthropology and Language*
- ✓ *Bloomfield, L. Language*
- ✓ *Bright, W. Socio-linguistics*
- ✓ *Burling, R. Man's Many voices-Language in its Cultural Context*
- ✓ *Gleason, H.A. An Introduction to Descriptive Linguistics*
- ✓ *Gumperz and The Ethnography of Communication Hymas(eds.)*
- ✓ *Hockett, C.F. A Course in Modern Linguistics*
- ✓ *Hoijer, H. (ed) Language in Culture*
- ✓ *Hymes, D.(ed) Language in Culture and Society*
- ✓ *Kroeber, A.L. (ed) Anthropology Today*
- ✓ *Lehmann, H.P. Historical Linguistics*
- ✓ *Levi Strauss, C. Structural Anthropology (Selected chapters)*
- ✓ *Mishra, K. K. Text Book of Anthropological Linguistics*
- ✓ *Sapir, E. Language*

