

UNIVERSITY OF CALCUTTA

Notification No. CSR/ 62 /18

It is notified for information of all concerned that the Syndicate in its meeting held on 13.07.2018 (vide Item No.11) approved the Syllabus of Two-Year (Four-Semester) M.Sc. Course of Study in Anthropology under CBCS in the Post-Graduate Departments of the University and in the affiliated Colleges offering Post-Graduate Courses under this University, as laid down in the accompanying pamphlet.

The above shall be effective from the academic session 2018-2019.

(Debabrata Manna)

SENATE HOUSE KOLKATA-700073 The 17th August, 2018

Deputy Registrar (Acting)

University of Calcutta M.Sc. Syllabus – Anthropology, 2018

1 st Semester			
		Marks	Credits
ANTH101	Biological Anthropology	50	4
ANTH102	Social-Cultural Anthropology	50	4
ANTH103	Palaeoanthropology-Prehistoric Archaeology	75	5
ANTH104	Biological Anthropology (Practical)	50	2
ANTH105	Social- Cultural Anthropology (Project)	25	1
	175	(Theoretical) +	13 (Theoretical) +
	75 (Practical) $= 250$	3 (Practical) = 16
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2 nd Semester			
		Marks	Credits
ANTH201	Biological Anthropology	50	4
ANTH202	Social-Cultural Anthropology	25	1
ANTH203	Palaeoanthropology-Prehistoric Archaeology	25	1
ANTH204	Biological Anthropology (Fieldwork/Practic		1
ANTH205	Social-Cultural Anthropology	ur) 20	1
ANTI1203	1 01	75	5
ANTHOR	(Fieldwork/Practical)		5
ANTH206	Palaeoanthropology-Prehistoric Archaeology	50	4
	(Fieldwork/Practical)		
		(Theoretical) +	6 (Theoretical) +
		(Practical) = 250	10 (Practical) = 16
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3 rd Semester			
<u>5 Bennester</u>		Marks	Credits
CBCCA	Choice based Credit Course A	50	4
CBCCB	Choice based Credit Course B	50	4
LDLLD	Choice based Credit Course B	30	4
CBCC	A & B compulsory course in 3 rd semester for C	Group A, B, C in 3 rd sen	nester
Group A: Biolo	ogical Anthropology		
ANTH301A	Biological Anthropology I	50	3
ANTH301A	Biological Anthropology I	50	3
			2
ANTH303A	Biological Anthropology (Practical)	50	2
200 (Theoretic	al, CBCC A & B, Group A) + 50 (Practical) =	250	14 (Theoretical) + 2 (Practical) = 16
Group B: Socia	al and Cultural Anthropology		
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ANTH301B	Social and Cultural Anthropology I		

ANTH302B ANTH303B ANTH304B	Social and Cultural Anthropology II Social and Cultural Anthropology III SOCIAL AND CULTURAL ANTHROPOLO (PROJECT)	40 60 GY 25	2 3 2
	(TROJECT) 225 (Theoretical, CBCC A & B, Group	B) +25 (Project) = 250	14 (Theoretical) +2 (Project) = 16
Group C: Pala	eoanthropology-Prehistoric Archaeology		
ANTH301C ANTH302C ANTH303C	Palaeoanthropology-Prehistoric Archae Palaeoanthropology-Prehistoric Archae Palaeoanthropology-Prehistoric Archae (Practical)	eology II 50	3 3 2
	200 (Theoretic 50 (Practical) =	al, CBCC A & B, Group = 250	C) + 14 (Theoretical) +2 (Practical) = 16
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4th Semester		Masha	Creatite
ANTH401	General Anthropology and Methods	`Marks 50	Credits 2
• ANTH] 401 compulsory course in 4 th semester for	r Group A B C in 4 th ser	nester
Group A: Biol	ogical Anthropology		
ANTH402A	Biological Anthropology I	50	4
ANTH403A ANTH404A	Biological Anthropology (Practical) Biological Anthropology (Dissertation)	50 100	4 6
	100 (Theoretical) +150 (Practical+Diss	· · · · · · · · · · · · · · · · · · ·	6 (Theoretical) + 10 ractical+Dissertation) = 16
Group B: Soci	al and Cultural Anthropology		
ANTH402B	Social and Cultural Anthropology I	50	4
ANTH403B	Social and Cultural Anthropology II	50	4
ANTH404B	Social and Cultural Anthropology (Dissertation)	100	6
	(Dissertation)	150 (Theoretical) + 100(Dissertation) = 250	10 (Theoretical)+ 6 (Dissertation)= 16
Group C: Pala	eoanthropology-Prehistoric Archaeology		
ANTH402C ANTH403C	Palaeoanthropology-Prehistoric Archae Palaeoanthropology-Prehistoric Archae (Dissertation)		8 6
		150 (Theoretical) + 00(Dissertation) = 250	10 (Theoretical)+ 6 (Dissertation)= 16
	1	100(Dissertation) = 230	0 (Dissertation) – 10

Note: During 3rd semester, students will be offered to choose one of the Groups from A, B and C of Anthropology as special paper with which they will continue up to 4th semester.

UNIVERSITY OF CALCUTTA DEPARTMENT OF ANTHROPOLOGY

M.Sc. Syllabus 2018

1st Semester 250 Marks (16 credits)

ANTH101: BIOLOGICAL ANTHROPOLOGY FULL MARKS: 50 (40+10**) CREDIT: 4

Module BIOANTH 1: History and Development of Biological Anthropology and its application

Paradigm shift in the knowledge of Biological Anthropology; application of biological anthropology in public health, forensic science, nutrition, ergonomics, kinesiology

Module BIOANTH 2: The Theories of Organic Evolution

Neo-Darwinism, concept of neutral alleles, neutral theory of molecular evolution, concept of cladogenesis and anagenesis.

Module BIOANTH 3: Human Evolution

Primate Evolution: Morphological (Hair) and anatomical traits (cranial and postcranial bones, dentition, brain), chromosomal and molecular markers; primate behavior. Phylogeny and evolution of Anatomically Modern Human. Theories of Human origin

Module BIOANTH 4: Biological Human Ecology

Physical environment- the potential stressors, the nutritional stress, infections, diseases, modernization and human biological responses.

ANTH102 Social Cultural Anthropology Full Marks: 50 (40+10**) CREDIT: 4

Modules: SCANTH 1 and SCANTH 2: The Concepts and The Fields: -- Selectively from among: SCANTH 1:

Kinship, Marriage, Family, Tribe, Indigenous, Community, Ethnicity, Demography and Population, Social Stratification, Village, Social Movement, Technology, Material Culture, City, Cultural Syncretism

SCANTH 2:

a) Anthropology of Religion, b) Linguistic Anthropology, c) Development and Anthropology, d) Anthropology of Power and Politics e) Economic Anthropology, f) Ecological Anthropology, g) Psychological Anthropology, h) Symbolic Anthropology, i) Medical Anthropology j) Cognitive Anthropology, k) Legal Anthropology and l) Visual Anthropology

Modules: SCANTH 3 and SCANTH 4: Thoughts and Philosophies-- Selectively from among: SCANTH 3:

Enlightenment Evolutionism, Diffusionism, Historical-particularism, Cultural relativism, Functionalism, Structural-functionalism. Culture and personality, Neo-evolutionism, Materialism,

Cultural Ecology, Interpretative Approach, Manchester School, Symbolism, Structuralism, Reflexivity.

SCANTH 4:

Positivism and Logical positivism, Rationalism and Empiricism, Realism and Nominalism, Idealism, Dialectics, Pragmatism, Hermeneutics, Phenomenology, Essentialism and Constructivism, Reductionism, anti-foundationalism

ANTH103 Palaeoanthropology-Prehistoric Archaeology Full Marks 75 (65+10**) CREDIT: 5

Module: ARANTH 1

Theoretical development of archaeological thought in global perspective and its position in Anthropology; relation with other discipline like History palaeoanthropology etc.

Classification of the nomenclature- Archaeology, prehistory, palaeoanthropology, archaeological Anthropology. Ideas on Ethno archaeology, Experimental archaeology, environmental Archaeology, settlement archaeology, Archaeobotany, zoo Archaeology, Salvage Archaeology, Action Archaeology, Primate ethology, Underwater Archaeology, Geoarchaeology.

Module: ARANTH 2

Methods and techniques in Archaeology, justification of Geo-Archaeology as a method. Field Survey; study of Toposheet and geological maps

Methods of Archaeological exploration; pre exploration activities, Intensive and extensive exploration, general idea about survey methods, mapping of archaeological sites

Excavation: Pre excavation activities, actual method of digging and its application in different types of sites, recording and analysis of excavated materials in terms of time and space, interpretation and publication of report.

Concept of chronology in Archaeology: Datable materials, basic principles, advantages and disadvantages, application and recent developments of different dating methods in Archaeology.

Module: ARANTH 3

Geoarchaeology: Basic principles of Stratigraphy, Historical geology, Ideas and relevance about the litho logical, floral and faunal evidences of Stratigraphic section.

Palaeoenvironment: Study of glacial, Periglacial, tropical geomorphology and geological evidences with special reference to Neogene and Quaternary environment.

ANTH104: BIOLOGICAL ANTHROPOLOGY (Practical) FULL MARKS: 50 CREDIT: 2

MODULE: PANTH 1:

- **I:** Anthropometric measurements for stature reconstruction, foot contour, estimation of flat foot, fat patterning, nutritional status
- **II:** Behaviour study of living primates
- **III:** Craniometry of human and non human primates; craniometry for reconstruction
- **IV:** Haemoglobin estimation

ANTH 105: Social and Cultural Anthropology (Project) FULL MARKS: 25 CREDIT: 2 MODULE: PANTH 2: FIELDWORK ANYWHERE WITH APPLICATION OF METHODS ABOUT ANY TOPIC AND SUBMISSION OF REPORT OR TERM PAPER WITH REVIEW OF LITERATURE AND SUBMISSION OF REVIEW PAPER (BOTH RELATED TO WHAT IS LEARNT IN THEORIES)

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

2nd Semester 250 Marks (16 credits)

ANTH 201 BIOLOGICAL ANTHROPOLOGY FULL MARKS: 50 (40+10**)

CREDIT: 4

Module BIOANTH 5: Human Genetics

I: Cytogenetics: Cell cycle, chromosome organization and banding, DNA packaging
II. DNA and RNA, genetic code, protein structure and synthesis with reference to heamoglobin
III Mutations: chromosomal, genomic, and genic
IV: Non-Mendelian inheritance: Genetic imprinting
V: Twin study
VI: Linkage and chromosome mapping

Module BIOANTH 6: Human Growth

I: History of growth studies, significance of growth studies

II: Concept, growth, maturation and development, basic principles of human growth,

III: Methods of growth study: cross sectional, longitudinal, mixed longitudinal, linked longitudinal - merits and demerits;

IV: Discussion on some of the significant growth studies; growth curves. Catch up and Catch Down growth

V: Overview on prenatal and postnatal growth

Module BIOANTH 7: Physiological Anthropology

I: Fundamentals of physiological anthropology - cardiovascular, respiratory and gastrointestinal system with special emphasis on heart, liver, lungs and pancreas.

Module BIOANTH 8: Ethnicity and Disease

I: The importance of anthropology in studying ethnicity and disease

II: Actiology of Communicable Disease (Malaria and Tuberculosis) and Non-communicable Disease (Coronary Heart Disease, Non Insulin dependent Diabetes Mellitus and Hypertension)

Module BIOANTH 9: Basic statistics

I. Concepts, probability, sampling, descriptive statistics

ANTH 202: Social Cultural Anthropology

E.B. Tylor, L. H. Morgan, H. Spencer, A Comte, K. Marx, F. Nietzsche, E. Kant, E. Durkheim, M. Weber, T. Parsons, M. Mauss, T. Veblen, G. Simmel, F. Boas, S. Freud, A. R. Radcliffe-Brown, B. Malinowski, M. Mead, R. Benedict, E. Sapir, R. Lowie, R. Redfield, M. Marriott, R. Firth, K. Polanyi, M. N. Srinivas, M. Singer, N. K. Bose, G.S. Ghurye, Irawati Karve, Louis Dumont. E. E. Evans-Pritchard, Julian Steward, L. A. White, F. de Saussure, C. Lévi-Strauss, E. Leach, E. Goffman, B. S. Cohn, S. Sinha, P. Bourdieu, M. Sahlins, C. Geertz, V. Turner, H Lefebvre, M Bakhtin, F. Barth, M. Gluckman, J Clifford, G. Marcus, T. Asad, L Abu-Lughod, M. Godelier.

Module SCANTH 6: The Recent Theories-- Selectively from among: Conflict theory, Feminism: its Phases and Branches, Critical theory, Post-Positivism, Post-structuralism, Postmodernism and Postcolonialism

ANTH 203: Palaeoanthropology-Prehistoric Archaeology

Module: ARANTH 4

Hominization process and Bio-cultural evolution of man

Module SCANTH 5: Life and Works -- Selectively from among:

An outline of Palaeoenvironment, fossil man, cultural stages and spatiotemporal distribution of different prehistoric cultures in Indian subcontinent, South East Asia, Middle and Near East.

ANTH204:BIOLOGICAL ANTHROPOLOGY (Fieldwork/Practical) MARKS 25 CREDIT: 1

Module PANTH 2: Field based project report on health/ nutrition/ growth/non-human primate study/inheritance patterns of biological traits/population studies

ANTH205: Social & Cultural Anthropology(Fieldwork/Practical) Full Marks: 75 (65+10**) CREDIT: 5

Module PANTH 3: Student's seminar/presentation based on suggested readings and / or Group discussion and preparation of materials on any themes/ topics of any module of 1st and 2nd Semester (Student's own and clear understanding with common examples and positive reflection of English Training is the target). The seminars will be given in regular coursework with documented reports for verifying them, if needed.

Module PANTH 4: Fieldwork and Relevant Preparation in any place other than Kolkata Metropolis; Practices of all facets of fieldwork; Interpretation of data and analytic tools to be taught in fieldwork training

Qualitative, Quantitative, mixed approaches and other methods of data collection are to be considered for training. With training for Ethnography and learning research plan for intensive fieldwork and theoretical review students are to submit copy of field report for adjudication.

Full Marks: 25 CREDIT: 1

Full Marks: 25 CREDIT: 1

ANTH206: Palaeanthropology Prehistoric Archaeology(Fieldwork/Practical) Full Marks: 50 (40+10**) CREDIT: 4

Module: PANTH 5

Fieldwork training in Pre-historic Archaeology - field survey and exploration in selected areas. Or Techno-metric analysis and functional interpretation of prehistoric artifacts (selected series)

****** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

3 rd Semester Full mark: 250				
		Marks	Credits	
CBCCA	Choice based Credit Course A	50	4	
CBCCB	Choice based Credit Course B	50	4	

3rd Semester: SPECIAL PAPERS 250 Marks (16 credits) GROUP A: BIOLOGICAL ANTHROPOLOGY

ANTH 301A: BIOLOGICAL ANTHROPOLOGY: I

Full Marks: 50 (45+5**) CREDIT: 3

Module BIOANTH 10: Human Molecular Genetics

- **I.** Chemistry and topology of DNA, unique sequences, repetitive DNA, satellite DNA, C-value, genetic code and regulation, mutations damage, DNA repair mechanism.
- II. Concepts of RFLPs, VNTRs, STRs, SNPs, CNVs, mtDNA
- **III.** Cancer Genetics and its management (breast cancer and colon cancer)

Module BIOANTH 11: Human Variation

- I. Polymorphism: Red cell antigen (ABO, Rh, MNSs) and white cell antigen (HLA) Red Cell enzyme (G6PD and Haemoglobin), Serum Protein (HP)
- II. Quantitative trait loci: Concepts, Multifactorial and Polygenic

Module BIOANTH 12: Immunogenetics

- I. Immunology: Immune system, immunoglobulins, cell mediated immunity, clinical immunity.
- **II.** Monoclonal antibodies, antigen-antibody interactions
- **III.** Application of immunological markers of different types of diseases; role of tissue antigen typing (HLA) from the perspective of organ transplantation.

Module: BIOANTH 13: Population Genetics

- **I.** Linkage and recombination, linkage disequilibrium.
- **II.** Estimation of allele frequency and Hardy Weinberg principle, Driving forces of evolution
- **III.** Measures of genetic diversity: heterozygosity, Polymorphism information content, concepts and measure of genetic distance, Wright's FST, FIT and FIS.
- **IV.** Bioinformatics: Concept, bio tool and sequence alignment
- **V.** Estimation of inbreeding coefficient

Module: BIOANTH 14: Introduction to Demography and Anthropological Demography

I. Definition and Scope: Development of demography as a scientific discipline; Nature and scope of demography and changes over the time (demographic transition). Multi-disciplinary nature of demography and its relationship with other social science disciplines. Relationship between demography and anthropological demography, Reconciling Anthropological Demography and human evolutionary ecology. Components of population change. Demography as a measure of public health and adaptive fitness.

II. Fertility: Importance of studying fertility in population dynamics; basic terms and concepts; theories, measures, determinants, choice of mates and demographic strategies

III. Mortality and morbidity: Basic Concepts and Measures of Mortality and Morbidity, and determinants; significance of the studying of morbidity and mortality

IV. Migration: Concepts, pattern, determinants and consequences of migration and issues related to migration.

Module BIOANTH 15: Human Biology

I. Prenatal growth: Concept, growth and development during foetal life birth weight as a reflection of growth during fetal life. Postnatal growth: Growth and Development of different body parts, subcutaneous tissues and physiological variables during childhood and adolescent periods; Factors affecting growth.

II. Ageing and senescence with special reference to somatic and skeletal maturation, skeletal variables, Dental maturation.

ANTH302A: BIOLOGICAL ANTHROPOLOGY: II Full Marks: 50 (45+5**) CREDIT: 3

Module BIOANTH 16: Application of Biological Anthropology

A. Human Genetics

- **I.** Pharmacogenetics: Definition, concept, use of pharmacogenetics in the management of some genetic disorders (AKU, PKU, Tay Sachs and G6PD).
- **II.** Genetic counseling: Concept, steps, risk assessment, support and management.

B Forensic Anthropology:

Concepts and development of Forensics, methods and principles of personal identification (hair, bones, body fluids, dermatoglyphics), Medico-legal aspects, Paternity exclusion and ascertainment

C. Ergonomics:

Concept and application

D. Nutritional Anthropology:

Concept, measures of nutrition- invasive and non invasive methods with reference to some empirical studies; policies on nutritional intervention; recommended dietary allowance, food, diet, nutrition and diet prescription and proscription

Module BIOANTH 17: Phylogentics and molecular evolution of primates

Nucleic acid phylogenies based on DNA-DNA hybridization,

Nucleic acid phylogenies based on restriction enzyme sites: nucleic acid phylogenies based on nucleotide sequences comparisons and homologies, combined nucleic acid phylogenies.

Module BIOANTH 18: Physiological anthropology

- I. Physical working capacity and physical fitness and well being. Effect of environmental hazards, lifestyle, and occupational factors in physical functions.
- **II.** Body composition and physique, human energetic, physical activity and kinesiology.

ANTH 303A: BIOLOGICAL ANTHROPOLOGY (Practical)

Module: PANTH 6A

- I. Somatotyping: Heath Carter method
- II. Hair Study: histomorphological and quantitative
- III. Body composition: bone mass, body mass, percentage body fat (PBF), segmental fat, body age
- **IV.** Harvard step test
- V. Blood pressure, pulse rate, oxygen saturation and lung volume
- VI. Blood sugar level
- VII. Osteometry

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

Group B: Social and Cultural Anthropology

ANTH301B: Social and Cultural Anthropology I Full Marks: 25 CREDIT: 1

Module SCANTH 7 and SCANTH 8: Introduction to Logic, Philosophical Anthropology, Research Approaches and Methods

SCANTH 7: Introduction to Logic, Philosophical Anthropology and Indian Philosophical traditions:

Introduction to Philosophical Anthropology; Introduction to History of Logic and the topics of logic, Deductive, Inductive and Abductive reasoning, Indian Logic; Debates in Logic; The principal Epistemological, Ontological and Ethical Issues in Anthropology

SCANTH 7: **Indian Traditions of Thoughts and the Thinkers**: The Indian Thoughts—The Potential and Possibilities in Anthropology: Nature and Development of Indian Thoughts and Indian philosophical traditions¹, Indian traditions of other knowledge systems.

SCANTH 8: Research Approaches and Methods: Explanation, Understanding and Interpretation; Introduction to qualitative research; Diversity in Qualitative research, Qualitative and quantitative

Full Marks: 50 CREDIT: 2

¹ Selectively from among -- The Vedas and Other Sources, The Central Ideas of the Upanisads, The Dualistic Tradition of the Sankhya, The Yoga Tradition, The Activist Tradition and the Mimamsa School, The Tradition of the Carvakas, The Logical Tradition of the Nyaya, The Pluralistic Tradition of the Vaisesika, The Traditions of Jainism, The Traditions of Buddhism, The Vedanta Traditions, The Bhakti Traditions

research; Mixed Research; Paradigms of Research; Thick descriptions; Interpreting and understanding; reflexivist research; micro and macro level analysis; Fieldwork: Introduction, historical overview; methods and techniques of data collection in ethnographic fieldwork; Forms of qualitative data (e.g. Theme, Coding, Comparison, etc.) and their analysis focusing on key methods; links of ethnography to range of participatory techniques (e.g. PRA, PAL approaches, etc.)

ANTH302B: Social and Cultural Anthropology II

Full Marks: 40 CREDIT: 2

Module SCANTH 10: The Western Traditions of Thoughts and the Thinkers

Plato, Peirce, James, Dewey, Ricoeur, Husserl, Heidegger, Kierkegard, Kant, Hegel, Marx and Nietzsche, Popper, Wittegenstein, Levinas, Rorty, Foucault, Sartre, Marle-Ponty, Gramsci, Althusser, Badiou and Marion, Baudrillard, Lacan, Lyotard, Deleuze, Butler, Derrida

Module SCANTH 11: Demography, Population Dynamics, Social Organization and Indian Civilization

I. Population study: Methods, Concepts and Theories (an overview); Population Composition, fertility, mortality, migration including seasonal migration and transhumance; Population change in India: Factors and consequences; Structure and dynamics of tribal society in India;

II. The Social Organizations in India and Indian Civilization: The Major Approaches to the study of Social Organisations in India (tribe, caste, varna, dalit, peasant, jajmani system, great and little traditions, other traditions and processes, etc.) and Indian Civilization.

Module SCANTH 12 and Module SCANTH 13

SCANTH 12 The Anthropological Theories in Details: Any three major theoretical developments in Anthropology: The detailed and critical study of the development of the theories, research methods and the contributions of the respective anthropologists; Use and implications of the theories in Anthropology of South Asia.

Module SCANTH 13: Psychological Anthropology, Cognitive Anthropology, Symbolic Anthropology and Linguistic Branches of Anthropology (with feasible emphasis on Indian Context): The developments, theories/ approaches, principal concepts and methods of research individually in Psychological Anthropology, Cognitive Anthropology, Symbolic Anthropology; their interrelatedness and links with linguistic branches of Anthropology, Disciplinary and Interdisciplinary Developments, Myth, Shamanism and Indigenous systems of healing

Module SCANTH 14: Economic anthropology (with feasible emphasis on Indian Context)

I. **Economic anthropology:** The History; Major approaches and; Small-scale, peasant and (formal and informal) industrial economies; production, mass production, distribution, exchange, consumption, and livelihood systems

II. **Cultural, 'universal' and critical concepts, issues and dimensions**: labour, capital, market, work, leisure, gifts, poverty, fair trade and global mass production, Culture Industries, Sustainability, Theories of Migration; globalisation

Module SCANTH 15: Political and Legal Anthropology (with feasible emphasis on Indian Context)

I. The development of political and legal anthropology and their key approaches and concepts; Cross-cultural study of political organization in stateless and state societies; Changing role of state in developing countries; Social Control, norm and order-approaches and forms; caste, class, tribe and other communities and politics in India; Regionalism, Ethnic Relations and Political Problems in India. Law and Culture

II. Forms of knowledge and power; Responses to colonialism; Civil society; Public Space, Counter-Publics, Secular Forms of nationalism, Religious Nationalism, Ethnicity, Violence and genocide; Legal dimensions of hierarchy and authority; Legal pluralism; Cultural rights and human rights; Social movements- approaches, types and Indian social movements

Module SCANTH 16: Urban Anthropology (Anthropology of City and Anthropology in City)

I. Overview of the Approaches to city; Anthropology of City and Anthropology in City, Employment, and the Informal Economy; Social Networks in the City; Urban Informality, Uneven Development, Inequality and Pathways to Sustainable Development: Alternative Models II. Types of City; Different Classificiations; Urban Neighbourhoods and Community Formation; Space and Institution in city; Globalisation and cities; Tourism, Travel and the Urban Imaginary; Urban Everyday, Spectacle, Right to the City; Crime in Urban Life; Tourism, Travel and the Urban Imaginary

Module SCANTH 17: Applied Anthropology—Its Development, Types and Critique

I. The Early History and Colonial Rule; Major Museums; Boas and Salvage Anthropology, Problems of Racism; Anthropologists in Wartime; Post World War Era – the ups and downs; Working for the Government: The history of experiences of positive and critical services of anthropologists to government²; Anthropologists in Development: Understanding Livelihoods and Social Change; Development Intervention

Meanings, Relationship and Assessments of Other Types of Anthropological Application: Practicing anthropology; Engaged anthropology; Public anthropology; Advocacy Anthropology; Participatory, collaborative, sustainable and ethical dimensions; Disciplinary and Interdisciplinary Developments

Module SCANTH 18: Anthropology and Development, Action Anthropology, Needs Assessment, and Practicing Anthropology

I. Classical, neo-classical and other Alternative understanding of Development; The Varied Relationship between Anthropology and Development; Action Anthropology and Sol Tax; Participatory Research Procedures and Paradigms; Rapid Assessment Procedures

II. Development and Ethics: Aspects and Development of Practicing Anthropology; The development of the AAA, NAPA, and the SfAA ethics statements; Privacy and reputations; Business and Organisational Anthropology;

 $^{^{2}}$ (with focus on: museums, heritage and archive; the International Deals; Wars, Disasters and Insurgencies; Contribution to the policies, etc.)

ANTH 303B: Social and Cultural Anthropology (Project) MODULE: PANTH 6B:

FULL MARKS: 25 CREDIT: 2

FIELDWORK ANYWHERE WITH APPLICATION OF METHODS ABOUT ANY TOPIC AND SUBMISSION OF REPORT OR TERM PAPER WITH REVIEW OF LITERATURE AND SUBMISSION OF REVIEW PAPER (BOTH RELATED TO WHAT IS LEARNT IN THEORIES)

****** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

Group C: Palaeoanthropology-Prehistoric Archaeology

ANTH301C Palaeoanthropology-Prehistoric ArchaeologyI Full Marks 50 (45+5*) CREDIT: 3

Module: ARANTH 5

(25 Marks)

Studying the past of Man – Theories, Methods, and Recent Trends, managing the past (CRM), Analyses and interpretations of prehistoric studies; prehistoric rituals (burials, body modifications, grave goods etc.); Semiotic approach to Archaeology – Linguistics and its applications in Archaeology; Ethnography and Archaeology – Theories, methods and interpretations. **Module: ARANTH 6** (25 Marks) Sciences in Archaeology: Understanding dating in Archaeology, Geological studies – Sediment logy (vertical), landscape studies (horizontal) and study of ecological niche formations, scientific analysis of artifacts, analysis of inorganic materials (Ceramic, Lithic, Metallurgical), Analysis of organic remains(Soil, faunal remains, Human remains, Organic artifacts, Plant fossils, Invertebrates).

ANTH302C: Palaeoanthropology-Prehistoric Archaeology II Marks 50 (45+5*) CREDIT: 3

Module: ARANTH 7

Ecology, Culture and Society; Archaeological and Fossil Evidences; Prehistoric subsistence pattern and economic system in the perspective of human ecology; sources of food, natural and domestic food, storage, preservation, sharing and distribution, subsistence cycle; Economic revolutions of prehistory and their historical consequences.

Module: ARANTH 8

History of Technology: Impact and invention of new techniques, basic rock types used in the stone age for manufacturing tools, sources of raw materials, properties, form and fracture pattern, selectivity of man; Bone tool technology; wood work; invention of wheel; fire making; chemicals; building; domestication of plants and animals; pottery; water supply and irrigation; utilization of metal; conch cell work; water transport; weight and measure; ancient mathematics and astronomy.

ANTH303C:Palaeoanthropology-Prehistoric Archaeology (Practical) Marks 50 (40+10*) CREDIT: 2

Morphometric analysis of stone tools of prehistoric period Identification of Rocks Study of Ceramics

****** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

4th Semester 250 Marks (16 credits)

ANTH401: Research Methodology and Methods

Full marks: 50 (40+10**) CREDIT: 2

Module: GANTH 7: Introduction to the Philosophy and Research Methodology

After a brief introduction on getting started in research (from topic to question; from question to design), broad view of 'methodology' including the clarification of modes of explanation and understanding and the nature of abstraction as well as the more familiar subjects of research design and methods of analysis; Focus on comparison of methodological approaches to empirical social-science research, with a particular emphasis on the problem of conceptualization; The basic concepts of Epistemology, Ontology, Sources, Theoretical perspective, Types of Research, Methodology, Methods, Research Design, Data, Writing Research, etc.

Module: GANTH 8 : Methodological Issues in Science and Social Science

Selective introduction to (a) Classical and Symbolic Logic, (b) Metaphysics and Ontology; Philosophy of the Life Sciences; Philosophy of the Social Sciences (c) The Theories and the Theorists³, (d) Theory and Observation ; Popper's falsificationism, underdetermination of theory by evidence, the positive instance account, (e) Theories and Laws, (f) Explanation: introduction, statistical explanation, causal explanation, unification, (g) Reductionism : reductionism and pluralism, (h) Realism versus Antirealism⁴. (i) Other Approaches to science: Social Constructivism, Feminism, etc.

Module: GANTH 9

Research Methodology: Methods of Archaeological Research; Research Hypotheses; Basic research opportunities; Planning and Managing time; Recording evidence; Writing Up; Research Design: Exploratory, Descriptive and Diagnostic, Hypothesis testing research. Exploration and Excavation methods.

Module : GANTH 10 : Elements of Quantitative Research: Selective from among

I. Methods, Design & Analysis : (a) Scientific techniques for collecting and analyzing data including research paradigms, measurement, design, etc.; (b) The understanding of empirical techniques and the ability to manage software and databases. (c) Emphasis on theory and application of survey research, including sampling, measurement, scaling, questionnaire construction, validity and reliability, data reduction and *analysis*.

II. Concepts, Principles and Methods

Part 1: Basic statistical methods and concepts in the social sciences. Topics include: nonparametric statistics, frequency distributions, probability theory, random variables and probability distributions, sample statistics and sampling distributions, estimation, and inference; Methods for descriptive statistics and the theoretical foundations of inference; Types of reliability and validity; univariate and bi-variate data analysis; appreciation of multiple regression; Central tendencies and proportions; Correlation and the least squares regression model with one or more predictor variables.

³ (Positivism and Logical positivism, logical empiricism, Realism and Nominalism, Rationalism and Empiricism, Skepticism, Idealism, Scholasticism, Utilitarianism, Dialectical Materialism, Pragmatism, Phenomenology, Dualism, Kantianism, Existentialism, Critical realism, Post-empiricism, Neo-Kantism, Popper, Duhem-Quine, Kuhns , Lakatos, Feyerabend, Kant, Hegel, Ricardo, Marx, Nietzsche, Wittegenstein, Rorty, Foucault and others)

⁴ (Scientific realism and the no miracles argument, inference to the best explanation, antirealism and the pessimistic metainduction, reductive empiricism, constructive empiricism, the natural ontological attitude, entity realism, structural realism, Kuhn and scientific revolutions)

Part 2 : Statistical techniques and various applications including the use of t -tests for comparing means and proportions, simple and multiple regression techniques; Probability theory; Random variables, instance of random variable, discrete and continuous distributions;⁵ Exploratory data analysis; sampling theory, traditional hypothesis testing; Introduction to more advanced topics: regression, multivariate distributions.

III. Multivariate Methods/ Dynamic Modeling ⁶

Module : GANTH 11 : Student's seminar/presentation based on suggested readings and / or Project proposal and / or Group discussion on any theme/ topic of Research methodology (optionally on the basis of hypothetical / actual data) and preparation of the materials for examination. (Student's own and clear understanding with common examples is the target)

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

GROUP A: BIOLOGICAL ANTHROPOLOGY

ANTH402A: BIOLOGICAL ANTHROPOLOGY: I Full Marks 50 (40+10**) CREDIT: 4

Module BIOANTH 19: Reproductive Systems

- I. Reproductive systems: Evolution of male and female gonads, Embryological development of gonads, gonadal ducts and external genitalia; Wolffian duct structural organisation and function; Mullerian duct structural organisation and function; evolution of Mullerian duct and adaptations for pregnancy
- **II.** Reproductive endocrinology
- III.Infertility: Concept, prevalence, issues and challenges; outline on assisted reproductive technologies

Module BIOANTH 20. Factors affecting reproductive functions

Genetic and non-genetic factors

Module BIOANTH 21. Human Reproductive Ecology and Energetics

Definition, Concept, variation in fertility, menstrual characteristics, menopause in the human species as a whole, and on assessing the roles of physiological, behavioral, and environmental factors in regulating reproductive output. Special attention will be given to the design of field studies of reproductive ecology. Homeostatic imbalance.

⁵ It may also include :conditional distributions, expectation, variance, covariance, correlation and dependence; Sampling distributions, estimation and hypothesis testing, properties of statistics (sufficiency, bias, efficiency);

⁶ It may include selectively from among : Multiple regression analysis to handle data collected on the same subjects over time; Principal components analysis, factor analysis, latent variable models; Correlation and Regression Methods; Analysis of Variance, Discrete Multivariate Models, Multivariate normal distribution, and Structural Equations Models (SEM).

Module BIOANTH 22. Aging and health: Concept, measures and management

Module BIOANTH 23: Global prevalence and secular trend in obesity

Regulation of body weight, physical performance and environmental stress

Module: BIOANTH 24: Biostatistics

- **I.** Nature and types of statistical distribution: Binomial distribution and Normal distribution.
- **II.** Concept of skewness and Kurtosis population and sample, parameter and statistic, sampling distribution of statistics and its standard error.
- **III.** Bivariate and multivariate statistics (parametric and non-parametric tests)

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

ANTH 403A: BIOLOGICAL ANTHROPOLOGY (Practical) Full Marks: 50 CREDIT: 4

Module: PANTH 7A

- I. Human cytogenetics: Identification of sex chromatin and human chromosomes.
- II. Blood group: techniques, titration, family study
- **III.** Dematoglyphics: Fingerprints (qualitative: Pattern types, Dankmeijer's index, Furuhata Index, Pattern Intensity index; quantitative: TFRC, AFRC); Palm prints: main line formula, mainline index and ab and cd ridge count, atd angle, palm flexion crease. Relationship of dermatoglyphics with medical disorders. Family study.
- **IV.** DNA isolation and amplification of DNA with PCR technique.
- **IV.** Electrophoresis of Genetic Markers (Hemoglobin, Serum Protein, Molecular Markers)
- **V.** Estimation of triglyceride and cholesterol
- **VI.** Measurement of carrying angle of elbow and identification of tennis elbow
- **VII.** CVD risk score- corbin method

ANTH 404A: Biological Anthropology III (Dissertation) Full Marks: 100 (90+10**) CREDIT: 6

Dissertation

****** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

GROUP B: SOCIAL CULTURAL ANTHROPOLOGY

ANTH402B: Social Cultural Anthropology I

Full Marks: 50 (40+10*) CREDIT: 4

Application of Anthropology in Public Policy and Practice

Joining research with theory, policy and practice; Principal Research Paradigms⁷; The Approaches to Policy and Programmes; The relationships among policy, Information and Implementation;

⁷ Emphasis may be given on Positivism, Interpretative approaches, Critical approaches, Ecological approaches, Network approaches;

Challenges to policy and practice; Structure, Actors and Agencies: Participants, GOs, NGOs, CBOs, bilateral, and multilateral donors; Basic Research Methods in Applied Anthropology8;

Module SCANTH 20: Applied Anthropology--Policy, Planning, Programmes, Administration, and **Development in India:**

History, Organisation, Functions, Taskforce, Committees; Five-Year Plans, Annual Plans, State Plans; Assessments, Reports and Recommendations; Constitutional Provisions and Safeguards for S.C., S. T, OBCs, Dalits, Women, Physically Challenged/ Disabled, and other sections; Selective Study of Regions, Communities/Groups, Population and Different Sectors-with emphasis on Communities, Groups, Gender, Poverty eradication, Land, Labour-employment, Micro-finance and Eastern, Central And North-eastern India

Module SCANTH 21: Applied Anthropology—Other Extensions

I. Core concepts in Medical and Nutritional Anthropology: Biomedical and ethnomedical perspectives; Clinical medical anthropology, Fundamental concepts in international health; Health Services and role of anthropology; 'Substance' use, HIV/AIDS, TB, other communicable, and other non-communicable diseases⁹; HIV/AIDS, STD, STI : Sexual and Reproductive Health; Roles of International, National Health Organisations, NGOs and CBOs;

II. Anthropology and Social Work: Crime, Trafficking, 'Sex Work', Women, Gender, Labour, Refugee, Environment; Gerontology and Anthropology; Dis/ability and Anthropology; Anthropology and Human Rights;

ANTH 403B: Social Cultural Anthropology II

Full Marks: 50 (40+10**) CREDIT: 4

•	opie/ Themes/ Tippiouenes (at Least Ten each Tear)	
1. Anthropology & Activism	18. Humor and Anthropology	
2. Anthropology & Counseling	19. Fear and Anthropology	
3. Anthropology & Education	20. Media Anthropology and Popular Culture	
4. Anthropology and Masculinity	21. Mythology & The Movies	
5. Anthropology of Childhood	22. Political Economy	
6. Anthropology of Food And Cuisine	23. Subjectivity and Anthropology	
7. Anthropology of Gender And	24. 'Terrorism' And Anthropology	
Sexuality	25. Tourism, Culture and Anthropology	
8. Anthropology of Islam	26. Motherhood	
9. Performance and Performativity	27. Anthropology of Dream	
10. The Body	28. Digital Anthropology	
11. Creativity And Art	29. Pharmaceutical Anthropology	
12. Death and Dying	30. Anthropology and Film	
13. Diaspora: Narratives and Memories	31. Visual Production Skills	
14. Ethnographic Writing	32. Digital Ethnography	
15. Ethnomusicology	33. Security and Anthropology	
16. Global Society And Global Culture	34. Cyborg Anthropology	
17. Human Rights And Culture		
-		

Module SCANTH 22: Selective Study of the Topic/ Themes/ Approaches (at Least Ten each Year)

⁸ (e.g. The relationship between theory and practice; Working in teams, collaborative and participatory research; focused group; Evaluation methodology; Assessment; Quantitative and qualitative approaches and comparative methods, etc.)

Emphasis may be given on Policies, Plans and Anthropological Actions to care, to cure and to combat Stigma and Exclusion

Module SCANTH 23: Applied Anthropology--Anthropology of Development (with feasible emphasis on India)

I. Modernization, development, underdevelopment and the North-South divide; people in local communities and the state; civil society and community; participation and empowerment; social capital; poverty and basic needs; justice and human rights; the place of indigeneity; views of sustainability and appropriate technology in development.

II. Gender and Development; Social mapping; Local Knowledge and Community Politics; Law, Order, and Conflict; Critically assessing contemporary development practices; Health Care, Agriculture, Education, Panchayat, Information-Communication in Rural and Urban Contexts of India: Development for Inclusive, Gendered and Sustainable growth through Inclusive Governance with the Capacity Building

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

ANTH404B: Social Cultural Anthropology (Dissertation) Full Marks : 100 (90+10**) CREDIT: 6

Dissertation

Dissertation is preferably based on data collected from works in rural and urban areas (Minimum of one month's fieldwork)

Five Research Proposals, Seminar, language Training and Examination Marks: 25

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce) Group C: Palaeoanthropology-Prehistoric Archaeology

ANTH402C: Archaeological Anthropology I

Full Marks 100 (90+10**) CREDIT: 8

Module: ARANTH 13

Cultural development of hominids from first tool users up to the present to be studies with respect to time and space.

Module:ARANTH14 Archaeology of Near East, South East Asia, Mesomerica, Study of earliest civilizations- Mesomerica, Egypt, Mesopotemia,China

Module:ARANTH15

Regional Archaeological Anthropology; From hominoid to hominid evolution and culture history in South Asia with special emphasis on regional cultures of Eastern India and West Bengal.

Module:ARANTH16

Demography in Archaeology: Determination of Prehistoric population size, Number and houses; size of settlement; number of burials; Ceramic inventories; Ecological consideration; Fertility and Mortality; Demographic changes with the Introduction of agriculture; Religious practices in Archaeology.

ANTH403C: Archaeological Anthropology II (Dissertation) Full Marks 100 (90+10**) Credit 6 CREDIT: 6

Dissertation

** Marks of Internal assessment (Seminar/group discussion/attendance/Class test/Viva-voce)

The list of references and other course materials will be provided after the coursework begins

CBCC offered by Department of Anthropology

Anthropology: Concepts and Applications Full Marks 50 Credit 4

- 1. Human Biological Variations: Morphological, Quantitative and Polymorphic
- 2. Evolutionary trends in Primates; human evolution: Morphological, Structures and Polymorphic
- 3. Human growth: Prenatal and Post natal
- 4. Public health; ethnicity and disease: Communicable and Non-communicable disease
- 5. Application of Biological Anthropology: forensic anthropology and genetic counseling
- 6. Concept of diversity of human society and culture
- 7. Ethnography
- 8. Engaged and public anthropology
- 9. Medical Anthropology: Historical Background, popular Medicine, Applied Medical anthropological approaches, career in medical anthropology
- 10. Crime and deviance
- 11. Ethnoarchaeology and indigenous knowledge: Theory and Methods
- 12. Heritage management: Legislations, Problems and Policies, Conservation and Preservation, Museum documentation

Suggested readings

- 1 . Turnock B. (2011). Public health. Jones & Bartlett Publishers.
- 2. Lee LM. (2010). Principles and Practice of Public Health Surveillance. Oxford University Press
- 3. Bogin B. (1999) Patterns of human growth. Cambridge University Press.

4. Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.

Conroy G C. (1997). Reconstructing Human Origins : A Modern Synthesis.Norton, NY, USA.
 J. R. Napier J. R. and Napier P. H. (1994). The Natural History of primates. The MIT Press.

- Foster M George & Anderson B G (1978): Medical Anthropology, New York, John Wiley & Sons; PP51 -79
- 8. Cummins, H., & Midlo, C. (1961). Finger prints, palms and soles: An introduction to dermatoglyphics (Vol. 319). New York: Dover Publications.
- 9. Black S. and Ferguson E. (2011). Forensic Anthropology 2000 to 2010. CRC Press, London.
- 10. Barnard Alan and Jonathan Spencer. 2002. Encyclopedia of Social and Cultural. Anthropology, edited by, London and New York: Routledge,
- 11. Keesing, Roger M. and Andrew J. Strathern. 1998. Cultural Anthropology: A Contemporary Perspective, 3rd ed. Fort Worth: Harcourt Brace College Publishers
- 12. Susan. Wright, 2005., Anthropology Of Organization, Routledge, London and New York.
- 13. David, Nicholas and Carol Kramer (2001) Ethno archeology in Action. Cambridge World Archeology
- 14. Keene, S. (1990) Managing Conservation. London.
- 15. UNESCO (2015) The World Heritage: A Complete guide to the Most Extraordinary Places.
- 16. UNESCO (2013) Managing Cultural Heritage.