



SAVITRIBAI PHULE PUNE UNIVERSITY

DEPARTMENT OF ANTHROPOLOGY

SYLLABUS

M.A./M.Sc. Anthropology

Semesters I and II

Based on National Education Policy 2020

Effective from July 2023

Structure of the MA/MSc (Anthropology) course

- The MA/MSc Anthropology degree will be awarded to students who complete a total of 88 credits in a minimum of two years as per the structure of this degree.
- A Student may elect up to four credits from any other departments per semester.
- In case a student wishes to take all courses from the parent department, they may also do so.
- Mandatory as well as Elective courses are open to all students from outside the department. Eligibility for registering for each course will be decided by the departmental committee.
- Students who have successfully completed the first two semesters have an option of exiting the course with a PG Diploma in Anthropology.

Evaluation

- Each course will have 50% marks as semester end examination and 50% marks for continuous assessment.
- The evaluation would be based on the following:
 - Mid Semester exam
 - A combination of Term papers, tutorials, assignments, Seminars, viva voce, presentations, laboratory practical and journal etc as decided by the Department
 - Semester end exam
- The student has to pass in the combined total of internal assessment and semester end examination.
- In order to pass a student shall have to get minimum 40% marks (E and above on grade point scale) in each course. Any student getting less than 16 marks in each component will be declared as failed, even if the combined total is over 40%.
- If a student misses an internal assessment examination, they will have a second chance in the same semester with the permission of the teacher concerned. Students who have failed for the entire course may reappear for the semester-end exam. Their internal marks will not change.
- They can also reappear for courses during 5th and 6th semester whichever is applicable
- The grading pattern is as follows:

Marks Obtained	Grade	Grade Point	Description for the grades
80-100	O: Outstanding	10	Excellent analysis of the topic, (80% and above) Accurate knowledge of the primary material, wide range of reading, logical development of ideas, originality in approaching the subject, Neat and systematic organization of content, elegant and lucid style.
70-79	A+: Excellent	9	Excellent analysis of the topic (70 to 79%) Accurate knowledge of the primary material, acquaintance with seminal publications, logical development of ideas, Neat and systematic organization of content, effective and clear expression
60-69	A: Very Good	8	Good analysis and treatment of the topic (60 to 69%) Almost accurate knowledge of the primary material, acquaintance with seminal publications, logical development of ideas, Fair and systematic organization of content, effective and clear expression
55-59	B+: Good	7	Good analysis and treatment of the topic (55 to 59%) Basic knowledge of the primary material, logical development of ideas, Neat and systematic organization of content, effective and clear expression
50-54	B: Above Average	6	Some important points covered (50 to 54%) Basic knowledge of the primary material, logical development of ideas, Neat and systematic organization of content, good language or expression
45-49	C: Average	5	Some points discussed (45 to 49%) Basic knowledge of the primary material, some organization, acceptable language or expression
40-44	P: Pass	4	Any two of the above (40 to 44%)
0-39	F: Fail	0	None of the above (0 to 39%)
0	Ab: Absent	0	Absent

Courses in MA/MSc Anthropology

		Semester I		
		Courses	Credits	
Level 6	Major	Mandatory 6 Theory courses of 2 Credits each + 1 Practical of 2 Credits	AN-SC-M-101: Social and Cultural Anthropology	2
			AN-SC-M-102: Indian Anthropology	2
			AN-SC-M-103: Indian Social Institutions	2
			AN-SC-M-104: Ethnography	2
			AN-BIO-M-105: Biological Anthropology	2
			AN-BIO-M-106: Archaeological Anthropology	2
			AN-BIO-M-107: Biological Anthropology Practical - I (Osteology, Craniometry and Osteometry)	2
		Electives Students can choose any TWO of the courses	AN-SC-E-108: Anthropological Demography	2
			AN-SC-E-109: Anthropology of Food and Food Culture	2
			AN-SC-E-110: Folk Culture of Maharashtra	2
			AN-BIO-E-111: Practical in Archaeological Anthropology	2
			AN-BIO-E-112: Sports Anthropology	2
		RM	AN-RM-M-113: Social Research Methods	4
OJT/Internship/FP		0		
RP		0		
	Total Credits	22		

		Semester II		
		Courses	Credits	
Level 6	Major	Mandatory 6 Theory courses of 2 Credits each + 1 Practical of 2 Credits	AN-SC-M-201: Anthropological Thought	2
			AN-SC-M-202: Indian Anthropologists	2
			AN-SC-M-203: Social Cultural Change	2
			AN-BIO-M-204: Primatology and Primate Behaviour	2
			AN-BIO-M-205: Comparative Anatomy	2
			AN-BIO-M-206: Human Evolution: Paleoanthropological Perspectives	2
			AN-BIO-M-207: Biological Anthropology Practical - II (Somatometry, Somatoscopy and Serology)	2
		Electives Students can choose any TWO of the courses	AN-SC-E-208: Recent Trends in Anthropology	2
			AN-SC-E-209: Digital Anthropology	2
			AN-SC-E-210: Dr Ambedkar and Nation Building	2
			AN-SC-E-211: Anthropology of Denotified and Nomadic Tribes	2
			AN-BIO-E-212: Bioarchaeology and Paleopathology	2
			AN-BIO-E-213: Ergonomics, Design and Kinanthropometry	2
RM		0		
OJT/Internship/FP	AN-FP-M-214: Ethnographic Field-work	4		
RP		0		
	Total Credits	22		

SEMESTER I

AN-SC-M-101: Social and Cultural Anthropology

Mandatory Paper, 2 Credits

Course Description

An in-depth understanding about anthropology, the concept of culture, related theories, Terms, configuration of culture, organization of culture and society constitute the frame of the course. This course aims at understanding the linkages of the subject with other subject areas within and outside anthropology.

At the end of the course, the students are expected to be able to understand –

- The disciplinary identity, scope and limitations of Social and Cultural Anthropology;
- Major concepts and related terms;
- The concept of culture and various approaches applied in the study of culture;
- The organization of culture in different spheres;
- Inter-linkages between different spheres; maintenance of comprehensive pattern of Culture.

Syllabus

Unit 1: Introduction

Anthropology: Nature of the subject.

Historical development of the discipline.

Sub-disciplines within Anthropology.

Scientific and Humanistic perspectives.

Features of Cultural Anthropology.

Holistic approach in Anthropology

Unit 2: Culture, Society and Civilization

Definitions of Culture, Society and Civilization.

Concept of Culture

Relation between individual, society, culture and civilization

Introduction to key concepts: Cultural Relativism, Ethnocentrism,

'Etic' and 'Emic', Worldview,

Enculturation, Acculturation,

Cultural Diffusion, Ethnography, Ethnology.

Unit 3: Configuration of Culture

Fundamentals of culture; Culture Trait, Culture Complex, Socialization, Culture Contact,

Culture Shock, Culture Change, Cross Cultural Relativity,

Contra-acculturation and Transculturation.

Descriptive and Explanatory models of culture;

Attributes and Paradoxes of culture;

Culture as a Process and Pattern;

Material and Non-Material Culture.

Unit 4- Society and Social Organization

Concept of organization of society; Concept of Tribe

Forms of social organization: Family, Lineage, Clan, Moiety, Phratry, Tribe.

- A) Family
- B) Marriage
- C) Kinship

Social Organizations:

- A. Economic Organization
- B. Political Organization
- C. Religious Organization

Text books

Prichard, E. E. (1990). Social Anthropology. New Delhi: Universal Book Stall.

Marvin, H. (1983), Cultural Anthropology. New York: Harper and Row Publication.

Haviland, W. A. (1993), Cultural Anthropology. London: Harcourt Brace College Publication.

Honigman, J. (1997), Handbook of Social and Cultural Anthropology. New Delhi: Rawat Publication.

Rosman and Rubel. (1989). The Tapestry of Culture. New York: Random House.

Recommended Books

Barrett, R.. 1984, Culture and Conduct. Wadsworth Publishing.

Duranti Alessandra (1997), Linguistic Anthropology. Cambridge: Cambridge University Press.

Robin, F. (1967). Kinship and Marriage. Penguin Book.

Lewellen T.(1983). Political Anthropology: An Introduction. Massachusetts: Bergin and Gravey Publishers.

Sahlins and Service. (1970). Evolution and Culture. Ann Arbor: University of Michigan Press.

Reference Books

Ember and Ember. (1995). Anthropology. New Delhi: Prentice Hall of India Private Limited.

Ember and Ember. (2008) Anthropology. New Delhi: Pearson Prentice Hall of India Private Limited.

Hicks and Gwynne. (1994). Cultural Anthropology. Harper Collins College Publishers.

Holy Ladislov (1996). Anthropological Perspectives on Kinship. London: Pluto Press.

Mair, L. (1998). An Introduction to Social Anthropology. Oxford University Press.

Vidyarthi, L. P. and Rai, B. K. (1985), Tribal Cultures in India. New Delhi: Concept Publishing House.

Kottak, C. P. (2002). Anthropology: The Exploration of Human Diversity. New York: McGraw-Hill, Inc.

Harris, M. (1927) (1985). Culture, People, Nature: An Introduction to General Anthropology. New York: Harper and Row Publishers, Inc.

Doshi, S.L. and Jain, P. C. (-----) Introduction to social anthropology

AN-SC-M-102: Indian Anthropology

Mandatory Paper, 2 Credits

Course Description

The course aims at introduction of India – in perspective. It gives an insight into the features of the Orthodox Pattern, the Heterodox Challenge and the Hindu Synthesis. In addition to this, major concepts in Indian Anthropology will be introduced. At the end of the course, the students are expected to understand –geographical, demographic and cultural profile of India; the orthodox pattern of the Indian Society and Hindu Synthesis; the heterodox challenge from other religion; major concepts in Indian anthropology.

Syllabus

Unit 1: India in perspective

Personal Characteristics.
Races of India. (Risley's classification)
Language families and dialects
Indus Valley Civilization

Unit 2: The Orthodox Pattern

The Vedic paradigm.
The ritual paradigm of Brahmins
The heterodox challenge of Jainism, Buddhism, and Charvaka philosophies.

Unit 3: The Hindu synthesis

The six systems of philosophy
Karma, Rin and rebirth
Four stages of life: Four ashrams
Purushartha: Dharma, Artha, Kama, Moksha

Unit 4: Introduction to major concepts in Indian Anthropology

Little tradition and Great tradition;
Mc Kim Marriott: Universalisation, Parochialisation;
Sacred Complex, Nature-Man-Spirit complex;
Dominant caste, Tribe-Caste continuum; detribalization;
Sanskritisation, Westernisation;
Village studies.

List of books

Text Books:

Karve, I (1961), *Hindu Society- An Interpretation*. Deccan College, Pune
Majumdar, DN (1990). *Races and Cultures of India*. Kalyani Publishers.
Tylor, S (1973). *India: An Anthropological Perspective*. Waveland press, Inc.
Brigadier SJ (1998). *Hindus Of India*. Gyan Publishing House, New Delhi.

- Majumdar, R.C. (1951). *The Vedic Age, Vol.I of The history and culture of the Indian people*. London: Allen Unwin.
- Karve, I (1953). *Kinship Organization in India*. Deccan Collage, Pune.
- Mandalbaum, D. (1972). *Society in India*. Popular Prakashan, Bombay.
- Ghurye, GS. (1961), *Caste, Class, and Occupation*. Popular Book Depot, Bombay
- Anjali, K. (1998), *Ethnic Identity and Social Mobility*. Rawat Publications.
- Kothari, R (1970), *Caste in Indian Politics*. Orient Longman, New Delhi.

Recommended Books:

- Sing, K (1992), *People of India: An Introduction*. Anthropological Survey of India, Calcutta.
- Wheeler, MR. (1953), *The Indus Civilization*.
- Bashain, AL. (1977). *The Wonder that was India*. Rupaand Co., New Delhi.
- Farquhar, JN. (1911), *A primer of Hinduism*. London: Christian Literature Society for India
- Majumdar, RC. (1951), *History and Culture of the Indian People*. Bharatiya Vidya Bhavan.
- Milton, S. (1975), *Traditional India Structure and Change*. Rawat Publications
- Betealle, A. (1965), *Caste, Class, and Power*. California University, Berkley.
- Gupta, D. (1992), *Social Stratification*. Oxford University Press, Bombay.
- Srinivas, MN. (1962) *Caste in Modern India and Other Essays*. Media Promoters and Publishers, Bombay.
- Schermerhorn, RA. (1978), *Ethnic Plurality in India*, Tucson. Arizona: University Arizona press.

Reference Books:

- Dr. Babasahed Ambedkar Writings and Speeches*, Education Deptt. Govt. Of Maharashtra Bombay, Vol. III, 1987.
- Dr. Babasaheb Ambedkar: Writings and Speeches*, Education Department, Government of Maharashtra, Bombay, Vol. VII. 2013.
- Dr. Babasaheb Ambedkar: Writings and Speeches*, Education Department, Government of Maharashtra, Bombay, Vol. 1. 1979
- Gordon, DH. (1958), *The Prehistoric Background of Indian Culture*. Bombay: Popular Book Depot
- Guha, BS. (1938), *Racial Elements in the Indian Population*. Bombay: Oxford University Press.
- De B, Willam, (1958) *Sources of Indian Tradition*. New York: Columbia University .Press.
- Conze, E. (1951), *Buddhism: Its Essence and Development*. New York: Philosophical Library.

AN-SC-M-103: Indian Social Institutions

Mandatory Paper, 2 Credits

Course Description

This course would provide a comprehensive understanding of the Indian Social Organizations/Institutions such as caste system, Indian family, marriage and kinship. Social Stratification and issues related to weaker sections in India Society have been focused upon in this course. At the end of the course, the students are expected to understand – social stratification and weaker sections in Indian society; the caste as a unit, as a system and as a structural and cultural phenomenon; the basic pattern and ideal of family in Indian society; the concept and the Indo-logical and Anthropological significance of marriage.

Syllabus

Unit I- Caste system

Varna system and jati
Theories of origin of caste/varna, Dr B.R. Ambedkar: 'Caste in India...'
Irawati Karve: Caste, caste cluster.
Ritual purity, ritual pollution and logic of hierarchy
Caste and village society — Jajmani and Balutedari system
Caste and its relationship with family, marriage and kinship
Principle of reciprocity, based on the caste system
Caste groups - as cultural and occupational categories
Caste groups - as political and voluntary associations
Indian society as a closed system
Changing structure of caste and its future
Inter-caste and intra caste relationship and caste conflicts

Unit II - Indian Family, Marriage and Kinship

Structure and nature of Joint family, Extended family
Emerging trends, change, functional and dysfunctional aspects of change,
Change - in intra-family relations, Forces of change.
Extended kin groups: Affinal and Consanguineous.
Marriage- social, ritualistic, and symbolic aspects of Hindu marriage, dowry.
Changing patterns of marriage alliance, divorce, inter-caste marriage.
Changing kinship relations.

Unit III- Social Stratification in India

Meaning and approaches to the study of social stratification
Social stratification and weaker sections in the society
Exploitation and deprivation of SCs/STs/OBCs
Constitutional safeguards for SCs and STs

LIST OF BOOKS

Text Books:

- Karve, I (1953). *Kinship Organization in India*. Deccan Collage, Pune.
Mandalbaum, D. (1972). *Society in India*. Popular Prakashan, Bombay.
Ghurye, GS. (1961). *Caste, Class, and Occupation*. Popular Book Depot, Bombay
Anjali, K. (1998). *Ethnic Identity and Social Mobility*. Rawat Publications.
Kothari, R (1970). *Caste in Indian Politics*. Orient Longman, New Delhi.
Brigadier SJ (1998). *Hindus Of India*. Gyan Publishing House, New Delhi.

Recommended Books:

- Bashain, AL. (1977). *The Wonder that was India*. Rupaand Co., New Delhi.
Farquhar, JN. (1911). *A primer of Hinduism*. London: Christian Literature Society for India
Majumdar, RC. (1951). *History and Culture of the Indian People*. Bharatiya Vidya Bhavan.
Milton, S. (1975). *Traditional India Structure and Change*. Rawat Publications
Betealle, A. (1965). *Caste, Class, and Power*. California University, Berkley.

Reference Books:

- Dr. Babasahed Ambedkar Writings and Speeches*, Education Deptt. Govt. Of Maharashtra Bombay, Vol. III, 1987.
Dr. Babasaheb Ambedkar: Writings and Speeches, Education Department, Government of Maharashtra, Bombay, Vol. VII. 2013.
Dr. Babasaheb Ambedkar: Writings and Speeches, Education Department, Government of Maharashtra, Bombay, Vol. 1. 1979
Khare, R. (1991). *Cultural Diversity and Social Discontent: Anthropological Studies on Contemporary India*. New Delhi: Sage.
Rush, BW. (1985). *Ethnic Diversity in India*, New Delhi: Anmol Publication.
Srinivas, M.N. (1966). *Social Change In India*, Bombay: Allied Publication.
Rao, M.S.A. (1970). *Urbanization and Social Change*, Delhi: Orient Longman.
Sahay, V. S. (1998). *Indian Anthropology*. Allahabad: K. K. Publications.
Husnain, N (1996). *Indian Anthropology*. Allahabad: PalkaPrakashan.
Mishra, U. S, Husnain, N. (1998). *Unifying Anthropology*. New Delhi: Vivek Prakasahan

AN-SC-M-104: Ethnography

Mandatory Paper, 2 Credits

Course Description

The course aims to provide an understanding of the ethnographic method of field investigations in social and cultural anthropology. It discusses the field-work tradition in anthropology, the peculiarities of an ethnographic research design, and the tools and techniques of field documentation. It also takes a brief review of Sample survey as quantitative research method. It introduces the students to the ethnographic documentation of the tribes all over the world.

At the end of the course the students are expected to be able to:

1. Distinguish between the ethnographic method and the other methods of social research with reference to the basic approach, field setting, tools and techniques of documentation, analysis, etc.
2. Prepare an ethnographic research design.
3. Get insight into the rapport establishment techniques.
4. Acquire the approach of participant enquiry.

Syllabus

Unit 1: Ethnographic Approach in Anthropology

Field work tradition in Anthropology
Contribution of Malinowski, Boas and other pioneers;
Cultural relativism, ethnocentrism, etic and emic perspectives;
Concept of participant enquiry; Role of key informants
Ethnography as a holistic documentation of culture;

Unit 2: Ethnographic Research Design

Ethnography as qualitative research;
Choice of tools and techniques of data collection,
Interview - Structured and unstructured; Free flowing, open ended; in-depth interviews,
Group interviews, 'key informant'-interview, Informal interviews, interview guide, Focussed
Group Discussions,
Observation - Participant and non-participant
Genealogy - technique and application;
Social census, Life History, Case Study, resource mapping

Unit 3: Collection of Ethnographic Data

Academic, psychological and practical preparation for ethnographic fieldwork;
Techniques of rapport establishment;
Identification of representative categories of informants;
Recording of data journal, field diary and logbook; Organization and contextual interpretation
of data;

Unit 4: Analysis and Writing of Ethnographic Data

Approach to qualitative data analysis
Different ways of analysis,
Framework analysis, thematic content, grounded theory
Coding data: codes (priori/emerging/descriptive/analytical),
Code-categories-theme-theory
Writing memos
Introduction to packages for qualitative data analysis
Writing as research practice, Writing styles
Presentation of an ethnographic report

List of books

- Bernard, H. R. (2005). *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (Fourth Edition edition). Lanham, MD: Altamira Press.
- Crang, M. (2007). *Doing Ethnographies*. Los Angeles: SAGE Publications Ltd.
- Danda, A. K. (1992). *Research methodology in anthropology*. New Delhi, India: Inter-India Publications.
- Ember, C. R. (2009). *Cross-Cultural Research Methods*. Altamira Press, USA.
- Fetterman, D. M. (2009). *Ethnography: Step-by-Step* (3rd edition). Los Angeles: SAGE Publications, Inc.
- Frankfort-Nachmias, C., Nachmias, D., and De Waard, J. (2014). *Research Methods in the Social Sciences* (Eighth edition). New York, NY: Worth Publishers.
- Garson, J. G. (2017). *Notes and Queries on Anthropology (Classic Reprint)*. Routledge and Kegan Paul Ltd. London.
- Gopal, M. H. (1965). *Research Reporting in Social Sciences*. S. S. Wodeyar, Registrar, Karnataka University
- Handwerker, P. W. (2001). *Quick Ethnography: A Guide to Rapid Multi-Method Research*. Walnut Creek, CA: Alta Mira Press, U.S.
- Hammersley, M., and Atkinson, P. (1983). *Ethnography: Principles in Practice*. Tavistock Publications.
- Pertti, P. (1979). *Anthropological Research, the Structure of Inquiry*. Cambridge University Press, London.
- P. L. Bhandarkar, and T. S. Wilkinson. (2010). *Methodology And Techniques Of Social Research*. Bhandarkar. Himalaya Publishing House.
- Ritchie, J., and Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. SAGE
- Neuman, W. L. (1997). *Social Research Methods: Qualitative and Quantitative Approaches*. Allyn and Bacon

Recommended Books

- Bailey, K. D. (1982). *Methods of Social Research*. The Free Press, New York.
- Bernard, H. R., and Gravlee, C. C. (Eds.). (2014). *Handbook of Methods in Cultural Anthropology* (Second edition). Lanham: Rowman and Littlefield Publishers.
- Fischer, M. (2003). *Applications in Computing for Social Anthropologists*. Routledge. London.
- Goode, W. J., and Hatt, P. K. (1952). *Methods in social research*. McGraw Hill International Japan.
- Langness, L. L. (1965). *Life History in Anthropological Science* (1st. Edition edition). New York; Chicago: Holt, Rinhart and Winston.
- Lareau, A. (2018). *Journeys Through Ethnography: Realistic Accounts Of Fieldwork*.

West View Press, Oxford.

Madrigal, L. (2012). *Statistics for Anthropology* (2 edition). Cambridge University Press.

Reference Books

Atkinson, P. (1990). *The Ethnographic Imagination: Textual Constructions of Reality*. London ; New York: Routledge.

Clifford, J., and Marcus, G. E. (Eds.). (1986). *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.

Kerlinger, F. N. (1973). *Foundations of behavioral research*. Bolt Rinehart and Winston Inc., New York.

Hastrup, K., and Hervik, P. (1994). *Social Experience and Anthropological Knowledge*. Taylor and Francis

James, A., Hockey, J. L., Dawson, A. H., and Conference, A. of S. A. (1997). *After Writing Culture: Epistemology and Praxis in Contemporary Anthropology*. Routledge.

Kaplan, A. (1964). *The Conduct of Inquiry: Methodology for Behavioral Science*. Chandler Publication Company, Pennsylvania.

Maanen, J. V. (1988). *Tales of the Field: On Writing Ethnography*. Chicago: University Of Chicago Press.

Mueller, J. H., (1970). *Statistical Reasoning in Sociology*. Houghton Mifflin Company

Smelser, N. J. (2013). *Comparative Methods in the Social Sciences*. Prentice Hall Inc., New Jersey.

Young, P. V., and Schmid, C. F. (2012). *Scientific Social Surveys and Research: An Introduction to the Background, Content, Methods and Analysis of Social Studies* (H. Blumer, Ed.). Literary Licensing, LLC.

AN-BIO-M-105: Biological Anthropology

Mandatory Paper, 2 Credits

Course Description

This course aims at introducing the students to the basics of biological anthropology, its historical background, how it evolved as a science, its important branches, scope and applications to the welfare of mankind. It provides a background canvas in understanding the story of human evolution focusing mainly on the basic principles and processes involved in human evolution. Historical development of evolutionary thought and the existing theories on human evolution will be dealt with in detail.

At the end of the course,

1. Know Biological Anthropology, its branches and related disciplines
2. understand the basics of biological basis of life
3. understand, and critically evaluate concepts of Evolution
4. delineate trends in human evolution
5. highlight human biological variation in contemporary evolutionary perspective
6. outline fallacy of race

Syllabus

Unit 1: Introduction to Biological Anthropology

Introduction, Nature and Scope
Branches of Biological Anthropology
Bio-cultural Perspective
Applied aspects of Biological Anthropology

Unit 2: Biological Basis of Life

Cell, Cell structure, Chromosomes, DNA: Structure, Replication, Protein Synthesis
Cell Divisions: Mitosis and Meiosis, Evolutionary significance of Meiosis
Mendel's Laws of inheritance: Segregation, Dominant and Recessive traits, Independent Assortment Importance of Genetics in Evolution and Biological Anthropology

Unit 3: Theories of Evolution and Dimensions of Evolution

Theories of evolution: Lamarckism, Darwinism, Neo – Darwinism, Modern Synthesis
Evidences of Evolution: Morphological, Embryological, Paleontological, geological, histological evidences
Evolution as a two-stage process: Production of and redistribution of Variation
Microevolution: Factors that produce and distribute variation: Mutation, Recombination, Migration, Drift and Natural Selection
Macroevolution: Adaptation, Adaptive radiation, Convergence and Parallelism, Generalised and Specialized traits, Modes of Evolutionary changes: Gradualism Vs. Punctuated Equilibrium, Mosaic Evolution.

Unit 4: Human Evolution and Variation

Overview of Human Evolution, trends in Human evolution: Terrestriality, Bipedalism, Changes in dentition, Encephalisation, Culture

Modern Human origins, Bio-cultural Evolution of Humans

Phenotypic and Genotypic variation, Distribution of Human Variation

Historical overview of concept of Race, Criteria of Racial Classification, Genetic aspects of race mixture. Racism, UNESCO Statements on Race, AAPA statement on Race and Racism

Textbooks

- American Association of Physical Anthropology. (n.d.). AAPA Statement on Race and Racism (2019). Retrieved May 2, 2019, from <http://physanth.org/about/position-statements/aapa-statement-race-and-racism-2019/>
- Fleagle, J. G. (2013). *Primate Adaptation and Evolution* (3 edition). Amsterdam ; Boston: Academic Press.
- Futuyma, D. J., and Kirkpatrick, M. (2017). *Evolution* (4 edition). Sunderland, Massachusetts: Sinauer Associates is an imprint of Oxford University Press.
- Henke, W., and Tattersall, I. (Eds.). (2015). *Handbook of Paleoanthropology* (2nd ed. 2015 edition). New York: Springer.
- Herron, J. C., and Freeman, S. (2013). *Evolutionary Analysis* (5 edition). San Francisco, CA: Pearson.
- Hiernaux, Jean, and Banton, Michael. (1969). *Four statements on the race question*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000122962>
- Korf, B. R., and Irons, M. B. (2013). *Human Genetics and Genomics, Includes Wiley E-Text* (4 edition). Chichester, West Sussex, UK: Wiley-Blackwell.
- Larsen, C. S. (Ed.). (2010). *A Companion to Biological Anthropology* (1 edition). Malden, Mass: Wiley-Blackwell.
- Lewis, R. (2014). *Human Genetics* (11 edition). New York: McGraw-Hill Education.
- Losos, Jonathan B., Baum, D. A., Futuyma, D. J., Hoekstra, H. E., Lenski, R. E., Moore, A. J., ... Whitlock, M. C. (Eds.). (2017). *The Princeton Guide to Evolution* (Reprint edition). Princeton: Princeton University Press.
- Mayr, E. (2002). *What Evolution Is* (Reprint edition). New York: Basic Books.
- Stanford, C., Allen, J. S., and Antón, S. C. (2016). *Exploring Biological Anthropology: The Essentials* (4 edition). Boston: Pearson.
- Stanford, C., Allen, J. S., and Antón, S. C. (2019). *Biological Anthropology: The Natural History of Humankind* (4 edition). Boston: Pearson.
- Wood, B. (2013). *Wiley-Blackwell Encyclopedia of Human Evolution* (1 edition). Hoboken, NJ: Wiley-Blackwell.

AN-BIO-M-106: Archaeological Anthropology

Mandatory Paper, 2 Credits

Course Description

The course aims to provide knowledge of the archaeological basis of anthropology and understanding of Prehistoric and Proto-historic human cultures. The course is helpful to acquaint the students with foundations in archaeological anthropology, Archaeology its relation with other subjects and its interdisciplinary approach in studying human evolution as well as the culture of ancient man. The course also covers stone tool typology and technology and also dating of the past, archaeological evidence and their interpretations. On the basis of the foundation course in Archaeological anthropology, this course briefly deals with Palaeolithic, Mesolithic and Neolithic Cultures from Europe, Africa and mainly from the Indian subcontinent.

At the end of the course, students are expected to be able to:

1. Be conversant with the basic terminologies, branches, and sub-fields of archaeological anthropology and their interrelationship, scope and historical development.
2. Recall the geological time scale, environment, stratigraphy and their characteristics
3. Detail the types of available dating methods, their advantages, disadvantages and their implications to archaeological data
4. Describe the tool making technology, raw materials used, tool types and functions in an evolutionary perspective survey the cultural chronology of Palaeolithic, Mesolithic, Neolithic, Chalcolithic, Megalithic and Iron age periods and their special features recognize the early food producers and their varied activities
5. Place the archaeological evidences in the context of human migration
6. Identify the salient features of Indus valley period, its people and activities.

Syllabus

Unit 1: Introduction to Archaeology

Archaeology, Relation of Archaeology with Sciences, Social Sciences and Anthropology

Major Branches, Prehistory, Proto-history and Ethno-Archaeology

Geological and Archaeological Time scales and their relevance in interpreting human evolution

Ice Ages: Pleistocene, Glacial and Interglacial Periods,

Pluvial and Inter-pluvial periods, Causes of Ice Ages, Sea level changes.

Unit 2: Dating Methods, Tool Typology and Technology

Relative and Absolute Dating, River terraces, Stratigraphic dating, Palynology, Radiocarbon dating, Potassium - Argon dating, Thermo-luminescence, Dendro-chronology, Archaeomagnetism etc.

Stone tool typology: Pebble tools – Chopper, chopping tools, Bi-faces – Hand-axe, Cleaver; Scrapers, Blades, Microliths, Grinding stones, Ring stones

Techniques: Percussion, Block on Block, Stone hammer, Cylinder Hammer, Clactonian,

Levalloisian, Blade, Grinding and Polishing Artefacts Typology/ Pottery and Other Evidence,

Identification and Interpretation of stone tools and fossils.

Unit 3: Palaeolithic, Mesolithic and Neolithic Cultures

Lower, Middle and Upper Palaeolithic Culture: Europe, Africa and India
Cultural and Biological evidences of Palaeolithic, Mesolithic and Neolithic cultures in Europe, Africa and India.

Unit 4: Indus valley civilization, Chalcolithic and Megalithic Cultures

Distribution, Period, Characteristics, causes of decline, people and culture of Indus Valley Civilization.

Chalcolithic culture and the characters

Megalithic Iron Age cultures.

Textbooks:

- Agrawal, D. P. (1974). Prehistoric Chronology and Radiocarbon Dating in India. Munshiram Manoharlal Publishers.
- Agrawal, D. P. (1984). The archaeology of India. Retrieved from <https://trove.nla.gov.au/version/22066538>
- Allchin, B., and Allchin, R. (1982). The Rise of Civilization in India and Pakistan. Cambridge University Press.
- Chakrabarti, D. K. (2009). India - An Archaeological History: Paleolithic Beginnings to Early History Foundation (2 edition). New Delhi: Oxford University Press.
- Chakrabarti, D. K. (2006). The Oxford Companion to Indian Archaeology: The Archaeological Foundations of Ancient India. New Delhi: Oxford University Press.
- Chakrabarti, D. K. (2009). India: An Archaeological History : Palaeolithic Beginnings to Early Historic Foundations. Oxford University Press.
- Kenoyer, J. M. (1998). Ancient Cities of the Indus Valley Civilization. Karachi: OUP Pakistan.
- Pappu, R. (2002). Acheulian Culture in Peninsular India: An Ecological Perspective (1 edition). New Delhi: D.K. Print World Ltd.
- Reddy, R. V. (1987). Elements of Prehistory. Mittal Publications.
- Sali, S. A. (1990). Stone Age India: A Text Book Written for Post-graduate Students Under the University Grants Commission's Scheme of Writing University Level Books. Shankar Publishers.
- Sankalia, H. D. (1990). Prehistory and Protohistory in India and Pakistan. Bombay University Press.
- Sankalia, Hasmukhlal Dhirajlal. (1982). Stone Age Tools, Their Techniques, Names, and Probable Functions. Deccan College Postgraduate and Research Institute.
- Settar, S., Korisetar, R., and Research, I. C. of H. (2002). Indian Archaeology in Retrospect: Prehistory, archaeology of South Asia. Indian Council of Historical Research.

AN-BIO-M-107: Biological Anthropology Practical – I (Osteology, Craniometry and Osteometry)

Mandatory Paper, 2 Credits

Course Description

The aim of this practical course is to provide knowledge of Human Anatomy, Skeleton and Dental system; including important landmarks on bones. Students are taught about the scientific methods and techniques of measurements on skeleton and dentition. This knowledge is helpful to understand evolutionary changes in skeleton system as well as occupational stress, sex-wise differences, community differences on the skeleton and on human dentition. The course covers Osteology, Osteometry and Odontometry

At the end of the course, students are expected to understand

1. To describe the human skeletal anatomy
2. Define and locate various landmarks
3. Describe tools techniques and procedure for taking craniometric and osteometric measurements
4. Take craniometric and osteometric measurements

Syllabus

Unit 1: Osteology

Importance of studying human skeletal system in anthropology

Anatomical terminology: Planes of reference and directional terms, general bone features, Structure and function of the skeletal system

Classification: Axial and appendicular skeleton

Skull (Different Normae) and mandible, individual bones of skull, understanding concepts of skull, cranium, calvarium

Long, short and flat bones and side Identification

Vertebral column and girdles (Pelvis, Scapula and Clavicle)

Unit 2: Craniometry

Craniometry and Osteometry: Use and Importance.

Introduction to the Instruments

Selected measurements on skull - Cranial length, Cranial breadth, Minimum frontal breadth, Cranial circumference, Upper facial height, External bi-orbital diameter, Nasal height, Nasal breadth, Bi-maxillary breadth, Bi-zygomatic breadth, Bi-mastoid breadth, Bi-gonial breadth, Mandibular height, Calculation of Indices based on the above measurements: Cranial Index, Nasal Index, Kollmann's Upper facial index.

Unit 3: Osteometry

Selected measurements on Humerus, Radius and Ulna

Humerus: Maximum length, Breadth of distal epiphysis, Circumference in the middle, Least girth of shaft

Radius: Maximum length, Transverse diameter of the shaft

Ulna: Maximum length, Maximum breadth of olecranon, Height of olecranon

Selected Measurements on Femur, Tibia and Fibula

Femur: Maximum length, Physiological length, Transverse diameter of middle of shaft,

Sagittal Diameter of the middle of the Shaft

Tibia: Maximum length, Lateral condylar malleolar length

Fibula: Maximum length, circumference in the middle of the shaft

Unit 4: Selected Measurements on Scapula, Clavicle and Pelvis

Scapula: Maximum length or anatomical breadth, Maximum breadth or Anatomical length, Length of the cranial border, Length of axillary border

Clavicle: Maximum length, Girth in the middle

Pelvis: Maximum length of innominate, maximum breadth, Length of ischium, Length of pubic symphysis

Textbooks:

Bass, W. M. (1995). *Human Osteology: A Laboratory and Field Manual*. Missouri Archaeological Society.

Hrdlicka, A. (1971). *Practical Anthropometry* (2 edition). New York: AmsPr Inc.

Kieser, J. A., and Julius, K. (1990). *Human Adult Odontometrics: The Study of Variation in Adult Tooth Size*. Cambridge University Press.

Mukherji, D., Mukherjee, D., and Bharati, P. (2009). *Laboratory Manual For Biological Anthropology*. Asian Books Private Limited.

Singh, I. P., and Bhasin, M. K. (1968). *Anthropometry*. Bharti Bhawan.

Singh, I. P., and Bhasin, M. K. (2004). *A Manual Of Biological Anthropology*. Kamla-Raj Enterprises.

Singh, S. P., and Promila, M. (2009). *Human Body Measurements: Concepts And Applications*. PHI Learning Pvt. Ltd.

Sudha Rastogi, and Shukla B R K. (2017). *Laboratory manual of physical anthropology*. 23

Ubelaker, D. H. (1994). *Standards for Data Collection from Human Skeletal Remains* Proceedings of a Seminar at the Field Museum of Natural History (Spi edition; J. E. Buikstra, Ed.). Fayetteville: Arkansas Archeological Survey.

Walimbe, S. R., and Kulkarni, S. S. (1993). *Biological Adaptations in Human Dentition: An Odontometric Study on Living and Archaeological Populations in India*. Deccan College Post Graduate and Research Institute.

White, T. D., and Folkens, P. A. (2005). *The Human Bone Manual*. Elsevier.

AN-SC-E-108: Anthropological Demography

Elective Paper, 2 Credits

Course Description

Anthropological demography is a new discipline that deals with the anthropological perspective to understand demography. It is specially emphasizing on explaining the socio-cultural aspects of demography in terms of its' major phenomena of fertility (birth), mortality (death) and mobility (migration). It is further try to understand the population process with holistic methods. Ethnographic fieldwork and participant observation are often central to this approach reflecting the main thrust of cultural anthropology. It requires further the use of quantitative and qualitative methods to understand the patterns of culture in the modern and traditional societies.

At the end of this course, the students are expected to understand:

1. the definition and the scope of anthropological demography,
2. Composition and Data related to demography and population studies.
3. Component of demography-fertility, mortality, migration and marriage
4. Population control, population policies and the ageing issues

Syllabus

Unit 1: Review of Definitions and scope

Anthropological demography – Definition, Scope and History. Relationship of anthropology and demography through - Population genetics, medical anthropology, Human evolution, Gerontology, and applied anthropology.

Unit 2: Sources of Demographic Data and Population studies

Methods of demographic data collection

Sources of data, Population Census, Census, Vital Statistics,

National Sample Survey, Special Surveys

National Health and Family Survey.

Unit 3: Anthropology and Determinants of Population Growth

Fertility, Mortality, Migration, Marriage

Population Composition, Population Distribution,

Population Structure (Pyramid), Population Growth, Population Bulge and Dependency in the context of India and the world.

Unit 4: Population Scenario – India and World

Population and Sustainable Development, Population, Anthropogenic activities and Environment, Growth of Indian population, Population Situation and Projections, National Population Policy of India, Role of Culture in Population Control, Importance of Population Education.

Books

Basu, A. M., and Aaby, P. (1998). *The Methods and Uses of Anthropological Demography*. Clarendon Press.

Bhende, A. A., and Kanitkar, T. (1997). *Principles of Population Studies*. Himalaya Publishing House.

- Bogue, D. J. (1969). *Principles of demography*. Wiley.
- Cox, P. R. (1976). *Demography* (5 edition). Cambridge University Press.
- Desai, P. B. (1987). *Population in the Context of India's Development: With Special Reference to Population Education*. UGC-UNFPA Project, Task Force on Curriculum Development, Population Education Resource Centre, Department of Adult and Continuing Education and Extension Work, Gujarat Vidyapith.
- Economic, U. N. D. of, and Division, S. A. P. (2007). *World Population Prospects: Comprehensive Tables*. UN.
- Foundation for Research in Health Systems (Ahmadābād, I. (2003). *Health Monitor*. Foundation for Research in Health Systems.
- Greenhalgh, S., and Susan, G. (1995). *Situating Fertility: Anthropology and Demographic Inquiry*. Cambridge University Press.
- Howell, N. (1986). Demographic Anthropology. *Annual Review of Anthropology*, 15(1), 219–246. <https://doi.org/10.1146/annurev.an.15.100186.001251>
- Kertzer, D. I., Fricke, T. E., Fricke, T., and University), C. on A. D. (1994 B. (1997). *Anthropological Demography: Toward a New Synthesis*. University of Chicago Press.
- Mead, M. (1975). *Male and female: a study of the sexes in a changing world*. W. Morrow.
- Nag, M. (1973). *Anthropology and population: Problems and perspectives*. Program Development and Evaluation, International Institute for the Study of Human Reproduction.
- Pathak, K. B., and Ram, F. (1992). *Techniques of Demographic Analysis*. Himalya Publishing House.
- Roth, E. A. (2004). *Culture, Biology, and Anthropological Demography*. Cambridge University Press.
- Sciences, I. I. for P. (2007). *India National Family Health Survey (NFHS-3), 2005-06*. International Institute for Population Sciences.
- Singh, S.N., Premi, M.K., Bhatia, P.S. and Bose, A. (1989). *Population Transition in India*. B.R. Publishing House, Delhi.
- Sharma, A. K. (2012). *Population and Society*. Concept Publishing Company.
- Srinivasan, K. (1998). *Basic Demographic Techniques and Applications*. Sage Publications.
- Weeks, J. R. (2011). *Population: An Introduction to Concepts and Issues* (11 edition). Australia; Belmont, CA: Wadsworth Publishing.

Important Websites:

- Census of India Website: Office of the Registrar General and Census Commissioner, India. (n.d.). Retrieved May 11, 2019, from <http://censusindia.gov.in/>
- Population Reference Bureau – Inform, Empower, Advance. (n.d.). Retrieved May 11, 2019, from <https://www.prb.org/>
- The DHS Program - Quality information to plan, monitor and improve population, health, and nutrition programs. (n.d.). Retrieved May 11, 2019, from <https://dhsprogram.com/>
- UNFPA - United Nations Population Fund. (n.d.). Retrieved May 11, 2019, from <https://www.unfpa.org/>
- United Nations Population Division | Department of Economic and Social Affairs. (n.d.). Retrieved May 11, 2019, from <https://www.un.org/en/development/desa/population/index.asp>

AN-SC-E-109: Anthropology of Food and Food Culture

Elective Paper, 2 Credits

Course Description

This course examines the anthropology of food and food culture and explores the intricate interconnections between humanity, nourishment, and culture in the Anthropology of Food and Food Culture. Through this course, students will be able to analyse the roles of food in identity, power dynamics, and social structures. The course also addresses sustainability, food security, and ethical considerations, fostering critical thinking about our relationship with food.

By the end of this course, students will be able to:

1. Understand the cultural dimensions of food
2. Analyse the role of food in society
3. Evaluate the ways in which food is used to express identity, communicate meaning, and create community
4. Significance of food around human life cycle events

Syllabus

Unit 1: Introduction to the Anthropology of Food

Introduction to the anthropology of food
Rituals, Taboos, and Symbolism
Food rituals and their cultural significance
Taboos and food avoidance practices
Symbolism and meaning in food

Unit 2: Food culture and Life Cycle events

Food culture- Birth Marriage and Death
Food Culture- Other Social events
Significance of food based on life cycle events
Festivals and food culture

Unit 3: The Cultural and Social Dimensions of Food

Food and culture
Food and identity
Food and economics
Food and politics- gastropolitics
Food and religion

Unit 4: Globalization and Food Systems

Colonialism and its impact on food culture
The impact of globalization on food production and consumption
Migration and the transnational flow of food cultures
Fast food culture and global homogenization.

Textbooks

- Counihan, C. M., and Van Esterik, P. (Eds.). (2013). "Food and Culture: A Reader" (3rd ed.). Routledge.
- Goody, J. (1982). "Cooking, Cuisine and Class: A Study in Comparative Sociology." Cambridge University Press.
- Mintz, S. W. (1996). "Tasting Food, Tasting Freedom: Excursions into Eating, Culture, and the Past." Beacon Press.
- Sutton, D. E. (Ed.). (2001). "Remembrance of Repasts: An Anthropology of Food and Memory." Berg.
- Harris, M. (1985). "Good to Eat: Riddles of Food and Culture." Waveland Press.

Readings:

- Levi-Strauss, C. (1969). "The Culinary Triangle." "From Honey to Ashes: Introduction to a Science of Mythology," Vol. 2. Harper and Row.
- Appadurai, A. (1988). "How to Make a National Cuisine: Cookbooks in Contemporary India." "Comparative Studies in Society and History," 30(1), 3-24.
- Lévi-Strauss, C. (1966). "The Culinary Triangle." "The Savage Mind." University of Chicago Press.
- Fischler, C. (1988). "Food, Self, and Identity." "Social Science Information," 27(2), 275-292.
- Sutton, D. E. (2001). "Feeding the Buddha: A Ritual Feast in Taiwan." "Remembrance of Repasts: An Anthropology of Food and Memory." Berg.
- Wilson, C. M. (2001). "Eating in the Dark: A Maasai Way of Knowing." "Remembrance of Repasts: An Anthropology of Food and Memory." Berg.
- Korsmeyer, C. (2005). "Making Sense of Taste: Food and Philosophy." Cornell University Press.
- Anand, N. (2007). "Battles over Bovines: Beef Ban in Maharashtra." Economic and Political Weekly, 52(47), 40-48.

AN-SC-E-110: Folk Culture of Maharashtra

Elective Paper, 2 Credits

Course Description

The course aims at providing a basic understanding of the various folk cultures of Maharashtra. It discusses the origin, history and evolution of the folk cultures.

At the end of the semester students will understand the anthropological significance of folk traditions and cultures of Maharashtra.

Syllabus

Unit 1: Introduction, definitions and scope

Folk Culture– Definitions and scope, folklore genres (verbal and non-verbal) and folk lifestyles and native knowledge system, diverse aspects of folk expressive behaviour, culture in relation to different aspects of human creativity (art, literature, religion, science and technology).

Unit 2: Origin, History and Development of Tamasha/Lawani

Tamasha the folk art and cultural heritage of Maharashtra, Entertainment and education through Gan, Gawlan, Rangbaji, Batawani; Dimensions of Lawani, Tamasha Kalavant (artists)- Social economic status; Impact of TV shows and social media on Lawani/Tamasha

Unit 3: Origin, History and Development of Powada and Bharud

Povada a form of ballad, Important composers (Shahir) of Powada, Powada as tool to spread awareness on social issues and glorify heroes of past;

Bharud as poetic form with deeper spiritual meaning, Bhajans (devotional songs), performances inspired by day to day lives of people; Bharud as tool to educate and enlighten the masses, Important Saints who preached through Bharud

Unit 4: Other folk arts, issues and government policies

Jagran, Gondhal, Dhashvtar, Dhangari Gaja, Koli Dance, etc;

Folk instruments: Daf, Tarpa, Ghangli, Pawra

Government recognised folk arts, Government aid and beneficiaries; Challenges to conserve and promote folk arts

References -

Traditions of Indian Folk Dances Dr. Kapila Vatsyayan Indian Book Company, New Delhi, 1976

Celebration of Life: Indian Folk Jiwan Pani, Publication Division, Ministry of Information And Broadcasting, Govt.of India, New Delhi. 2000.

Folk Dances Traditions of India Shovana Narayan Shubhi Publications, Gurgaon, 2004.

Folk Dance: Tribal, Ritual and Ashish Mohan Khokar Rupa Co, New Delhi, 2003.

The Folk Dance of India Marg Lalit Kala Akademi Art Publications, New Delhi, December 1959

Achalkhamb, Rustum (2006), Tamasha Lokrangbhumii: Sankalp, Swaroop Ani Prayogeekta, Pune, Sugava Prakshan, Marathi.

Ahiwale, Pandurang (2013), Shahiranche Shahir : Bhado Fakkad, Pune, Snehvardhan Prakashan, Marathi.

Bhandarkar, P. L. and Wilkinson T. L. (2013), Methodology and Techniques of Social Research, Mumbai, Himalaya Publishing House.

Bhandarkar, P. L. (1999), Samajik Sanshodhan Paddhati, Aurangabad, Maharashtra Vidyapeeth Granth Nirmiti Mandalasathi Vidya Books, Marathi.

Bhandare, Sandesh (2006), Tamasha Ek Rangdi Gammat, Mumbai, Lokwangmay Griha, Marathi.

Burde, Sadhna (2011), Tamashatil Stree Kalawant, Jeevan Aani Samasya, Nanded, Nirmal Prakashan, Marathi.

Chandanshive, Sunil (2011), Tamasha Kala Aani Jeevan, Pune, Snehavardhan, Marathi.

Dr., Nanjunda D. C., Dr. Anjali Kurane, Dr. Steven Wind, Dr. Annapurana M., Jyotshi Laxmi S. (Ed.), (2008), Ignored Claims Focus on Tribal Education in India, Delhi, Kalpaz Publication. .

Gaikwad, Dinkar (2014), Pune, Yashodeep Publication. Marathi.

Tamasha ek rangda khel by Dr. Ganesh Chandanshive, published by Dimple Prakashan Grja Maharashtra edited by Dr. Prakash Khandge

Lokleni edited by Dr. Prakash Khandge

Lokparikrama edited by Dr. Prakash Khandge

Bhandarbuka by Dr. Prakash Khandge

Khandobache jagaran by Dr. Prakash Khandge

Maharashtrachya prayogatm lokakala: navta ani pampara 1850-2016- Published by Govt. of Maharashtra

AN-BIO-E-111: Practical in Archaeological Anthropology

Elective Paper, 2 Credits

Course Description

The course introduces the basics of practical skills and experiences in the field of Archaeological Anthropology. It focuses on the Identification, drawing and description of various prehistoric stone tools and artefacts. Through hands-on activities and discussions, students will gain a deep understanding of how material culture and archaeological evidence provide valuable insights into human history, behaviour, and cultural development.

At the end of the course, students are expected to

1. Understand the Name and identify various prehistoric stone tools and techniques.
2. Students will be able to learn about Identification, drawing, metric analysis, and calculation of Indices of lithic /bone tools.
3. The students will understand the identification, preservation and conservation of antiquities and museum specimens.

Syllabus

Unit-1: Morphometric study of stone tools of Prehistoric period

Prehistory: Identification, drawing and description of the prescribed representative tool types and techniques: Palaeolithic, Mesolithic and Neolithic Periods.

Unit-2 : Drawing & Descriptions of various forms of Pottery, Bone and Iron tools.

Sketches and Descriptions of various forms of Pottery wares, Bone tools and Iron tools are available in the Department.

Unit-3: Identification, Drawing and Metric Analysis

Identification, drawing, metric analysis, and calculation of Indices of lithic /bone tools.
Drawing, measurement and reconstruction of ceramic/metal objects.

Unit-4: Preservation of Museum Specimen and Photography

Identification, preservation and conservation of antiquities and museum specimens (bone/horn/ivory/food grains/terracotta/wood and bamboo and metal objects).
Toposheet reading and GPS-based analysis on Satellite Imagery. Photography of artefacts and computer-based analysis.

Textbooks:

Agrawal, D. P. (1982). The Archaeology of India, Curzon Press, London.

Agrawal, D.P and D.K. Chakrabarti (1979). Essays in Indian Protohistory, B.R.Publishing Co, Delhi.

Allchin, B. and R. Allchin (1983). The Rise of Civilisation in India and Pakistan, Cambridge University Press, London.

Allchin, B.R.and D.K.Chakrabarti (1979). A Source Book on Indian Archaeology, M.M Publishers Pvt. limited, New Delhi.

Allchin. B, A.Goudie, K.T.M.Hegde (1978). The Prehistory and Paleogeography of the Great Indian Thar Desert, Academic Press, London.

B.K.Thapar (1985). Recent Archaeological Discoveries in India, UNESCO Publication.

Dennell, Robin. (2009). the Palaeolithic Settlement of Asia. Cambridge University Press, Cambridge.

- Dikshit, K.N. (1984)- Archaeological Perspective of India since Independence, Bulletin of the Archaeological Society, (Special Issues) Nos.13-14.
- Erwin Neumayer- Lines on Stone: Prehistoric Rock Art of India, Manohar, New Delhi, 1993.
- Fuller, D. Q. (2007). Neolithic Cultures in Pearsall, D.M., (Ed) Encyclopedia of Archaeology Academic press, New York: 756 – 67
- H.D.Sankalia (1974). Prehistory and Protohistory of India and Pakistan, Deccan College, Pune.
- Misra, V. N. (2007). Indian Prehistory, Ecological perspective, Man and Environment 11
- Paddayya, K (2007). The Palaeolithic cultures in Pearsall, D.M., (Ed) Encyclopedia of Archaeology, Academic pres, New York: 767-78
- Petraglia, D. M., and Ravi Korisettar, (1998). Early Human Behaviour in Global Context
- Sankalia, H.D. (1982). Stone Age Tools: Their Techniques, Names and Probable Functions, Deccan College, Pune.
- Subbarao, B. (1958). The personality of India, Baroda.
- Wheeler, M. (1959). Early India and Pakistan, Thames and Hudson, London.

AN-BIO-E-112: Sports Anthropology

Elective Paper, 2 Credits

Course Description

A course in Sports Anthropology aims to provide students with a comprehensive understanding of the relationship between sports and culture from an anthropological perspective.

1. At the end of the course, students are expected to
2. Understand the use of anthropological knowledge in understanding sports.
3. Understand body proportionality, body composition and sports performance.
4. Demonstrate different methods of studying the human physique

Syllabus

Unit-1: Introduction

Introduction to Sport Anthropology and its relation to anthropology
History and development of sports anthropology, its relevance to the Indian context.
Traditional sports and games in India.

Unit-2: Sports performance

Sports performance: Body proportionality and the age changes,
Body proportionality in relation to sports.
Cardio-vascular fitness, physical work capacity and sports performance.

Unit-3: Human physique and body composition

Human physique and body composition and its role in sports participation and excellence. –
Different methods of studying human physique and assessment of body composition for both sexes.

Unit-4: Physical Fitness

Sports talent selection in young children on the basis of structural, functional and endurance characteristics.
Genetic constitution, physical fitness.
Sports and games for handicapped children and adults. Gender-specific sports and games.

Textbooks:

- Boyd W.C., 1950 Genetics and the Races of Man. Little Brown, Boston
Brownell, S., Besnier, N. and T.F. Cater. 2018. The Anthropology of Sport: Bodies, Borders, Biopolitics. University of California Press, California.
- Das B.M., 1980 Outlines of Physical Anthropology. Kitab Mahal, Allahabad
Eveleth P.B. and Tanner J.M., 1990 Worldwide Variations in Human Growth. Cambridge University Press, Cambridge
Forbes G.B., 1987, Human Body Composition, Springer-Verlag, New York
Garn S.M., 1971 Human Races. Thomas, Springfield, Illinois.
Hooton., 1965 Up From the Ape. Motilal Banarasidas, Delhi.
Jaiswal, A. 2019. Anthropology and Sports. Heritage Publishers, New Delhi.
- Lohman T.G., 1992 Advances in Body Composition Assessment, Human Kinetics, Champaign

- Montagu A., 1960 An Introduction to Physical Anthropology.
- Sheldon W.H., Stevens S.S., Tucker, W.B. 1940. Varieties of Human Physique. Harper Grow, New York
- Singh I.P. and M.K. Bhasin, 1968 Anthropometry, Kamal-Raj Publishers, Delhi
- Singh S.P., Sidhu L.S. and J. Singh, 1992 Skeletal Maturity, HBPS, Patiala
- Sodhi H.S., 1991 Sports Anthropometry, Anova Publishers, Mohali
- Tanner J.M., et al., 1983. Assessment of Skeletal Maturity and Prediction of Adult Height (TW2 method)
- Weiner J.S. and Laurie J.A., 1969. Human Biology - A Guide to Field Methods.

AN-RM-M-113: Social Research Methods

Mandatory Paper, 4 Credits

Course Description

The course aims at providing a basic understanding of the nature and procedure of scientific research as practiced in social sciences. It discusses the qualitative and quantitative methods, various types of research designs, and the tools and techniques of data collection involved in each type.

At the end of the course the students are expected to be able to:

1. Understand the peculiarities and problems associated with scientific social research.
2. Clearly distinguish between various types of research design.
3. Understand various tools of data collection
4. Understand data analysis of quantitative data using software

Syllabus

Unit 1: Science and Scientific Research

Science and social science

Science as an approach and system of knowledge;

Science - essence and characteristics;

Relation between science, theory and fact;

Inductive and deductive aspects of scientific research;

Issues of value, subjectivity and inter-subjective objectivity in social science;

Unit 2: Overview of Quantitative and Qualitative research

Comparison of Quantitative and Qualitative research approaches

Philosophical positions- Positivism vs. constructivism,

Method and Methodology

Varying qualitative approaches – Case Study, Ethnography, life history

Phenomenology, Grounded Theory

Various quantitative methods- Survey method, Census

Unit 3: Research Design and Research Questions

Identifying research problem.

Formulation of research question, hypothesis;

Various Research Designs-Exploratory, Descriptive, Experimental and Evaluative studies;

Steps in research design: Review of literature; conceptual framework; concept mapping

Tools and techniques of data collection

Unit 4: Sampling and Sampling Designs

Concept and significance of sampling;

Concepts: population, sample, sampling unit, finite and infinite populations, sampling frame, sampling designs; Probability and non-probability sampling;

Sample Size Estimation, accuracy, bias and precision; Sampling and saturation,

Data Triangulation, Reflexivity, Validity, Generalization

Unit 5: Tools of Data Collection

Questionnaires and Interview Schedule –
Dos and Don'ts while construction of Questionnaire and Interview Schedule
Preparation of interview schedule
Structured interview Schedule, unstructured interview
Open-ended, Close-ended Questions; Pilot testing; Scale and Measurement
Attitude Scales: Thurston, Likert and Gutman attitude Scales

Unit 6: Introduction to Survey Research Method

Introduction to Survey Research Method
Survey research: Origin and History
Difference between survey and other research methods
Strength and weaknesses of Survey research
Application of surveys in social research

Unit 7: Data analysis and report writing

Data Processing-Coding Schemes, editing, cleaning data
Data coding and preparation of SPSS code sheet
Use of Narratives, Photographs, Graphical forms etc.
Report writing; steps involved and content
Developing outline for a scientific report
Citation styles, bibliography;
Plagiarism, issues and challenges
Dissemination of research, policy inputs, etc.

Reference Books

- Babbie, E. R. (2015). *The Practice of Social Research - Standalone Book* (14 edition). Boston, MA: Wadsworth Publishing.
- Bernard, H. R. (2005). *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (Fourth Edition edition). Lanham, MD: AltaMira Press.
- Ember, C. R. (2009). *Cross-Cultural Research Methods*. Altamira Press, USA.
- Fetterman, D. M. (2009). *Ethnography: Step-by-Step* (3rd edition). Los Angeles: SAGE Publications, Inc.
- Green, J., and Browne, J. (2005). *Principles of Social Research* (1 edition). Maidenhead: Open University Press.
- Hammersley, M., and Atkinson, P. (1983). *Ethnography: Principles in Practice*. Tavistock Publications
- Moser, C. A., and Kalton, G. (1985). *Survey Methods in Social Investigation* (1 edition). Routledge.
- Neuman, W. L. (1997). *Social Research Methods: Qualitative and Quantitative Approaches*. Allyn and Bacon
- Thomas, S. J. (1999). *Designing Surveys That Work!: A Step-by-Step Guide* (1 edition). Thousand Oaks, Calif: Corwin.
- Young, P. V., and Schmid, C. F. (2012). *Scientific Social Surveys and Research: An Introduction to the Background, Content, Methods and Analysis of Social Studies* (H. Blumer, Ed.). Literary Licensing, LLC.

SEMESTER II

AN-SC-M-201: Anthropological Thought

Mandatory Paper, 2 Credits

Course Description

This course reviews historical development of anthropological theories from its beginning to the present. The students will be introduced to different schools of thoughts in Social and Cultural Anthropology. This course summarizes and critically examines the evolution of anthropological thought.

At the end of the course, the students are expected to understand -

1. the basic theories proposed by different schools;
2. the historical development of anthropologic theories from its beginning to the present;
3. Relative merits and criticism about various theories.

Syllabus

Unit 1: Historical Processes of Culture

Attributes of culture by Tylor, Malinowski, Kroeber and Leslie White

Evolutionism

Julian Huxley biological evolution

The evolutionary perspective in ethnology and its sources;

Uni-linear evolutionism;

Multi-linear evolutionism;

Neo-evolutionism;

Merits and weaknesses of evolutionary school of thought.

Diffusionism

Diffusion of cultural traits;

British school of diffusion and the Pan-Egyptian theory;

German school of diffusion and concept of 'trait complexes';

American school of diffusion: Concepts of 'culture-area' and 'age-area'; Merits and weaknesses of diffusionism.

Historical Particularism

Historical Particularism as a methodological approach

Theoretical implications of Historical Particularism

Contribution by Franz Boas;

Contributions and limitations of Historical Particularism;

Unit 2: Materialist Perspective on Culture

Cultural Materialism

The approach of Cultural Materialism;

Contributions of Marvin Harris and Leslie White; Relation of Materialism with Evolutionism

Critique on Cultural Materialism

Unit 3 - Structure-Functionalism and Structuralism

Structure-functionalism as a reaction to the doctrines of 'Evolution-Diffusion' and 'Historical Particularism';

Functionalism of Malinowski, Merton and Parsons;

Structure-functionalism of Radcliffe Brown;
Structuralism as a perspective;
Place of structuralism in the anthropological theory;
Contributions of Claude Levi-Strauss and Edmund Leach;

Unit 4: Culture and Personality School

Margaret Mead
Ruth Benedict`
Abram Kardiner
Alice Cora-Du-Bois
Ralph Linton

Unit 5 - Other Classical Theoretical Approaches

Social Anthropology as an approach: Evans-Prichard;
Post-structuralism; Derrida and Foucault
Robert Redfield and his contribution

LIST OF BOOKS

Text Books

Prichard, E.E. (1981). *A History of Anthropological Thought*. London/ Boston: Faber and Faber.
Harris, M. (1968). *Rise of Anthropological Theory*. London: Routledge and Kegan Paul.
Honnigman, J. (1997). *Handbook of Social and Cultural Anthropology*. New Delhi: Rawat Publication.
Jha, M. (1983). *An Introduction to Anthropological Thought*. New Delhi: Vikas Publishing House, Private Limited.
Layton, Robert (1997). *Introduction to Theory in Anthropology*. Cambridge University Press.

Recommended Books

Bidney, D. (1953). *Theoretical Anthropology*. Columbia University Press. New York.
Collins, R. (1997). *Theoretical Sociology*. New Delhi: Rawat Publication.
Douglas, M. (1994). *Risk and Balance: Essays in Cultural Theory*. London: Routledge.
Prichard, E. E. (1981). *A History of Anthropological Thought*. London/ Boston: Faber and Faber.
Harris, M. (1968). *Rise of Anthropological Theory*. London: Ruttand Kegan Paul.
Ingold, T. (ed.) (1996). *Key Debates in Anthropology*. London/ Boston: Routledge.

AN-SC-M-202: Indian Anthropologists

Mandatory Paper, 2 Credits

Course Description

This course would focus upon the contribution by Indian Anthropologists; the contribution of Social Reformers and Thinkers, to the Indian Society and Culture. Development of Indian Anthropology

At the end of the course, the students are expected to understand about -

1. The contribution by Indian Anthropologists,
2. The contribution by Social Reformers and Thinkers.
3. The development of Indian Anthropology.

Syllabus

Unit 1 Contribution by Indian Anthropologists

M.N. Srinivas,
G.S. Ghurye,
N. K. Bose,
D. N. Majumdar,
S. C. Dube,
L. P. Vidyarthi,
Gopala Sarana

Unit 2 Contribution by Indian Anthropologists - (continued)

Iravati Karve,
S. S. Sarkar,
B. S. Guha,
S. C. Roy,
Verrier Elvin.

Unit 3 Contribution of Social Reformers and Thinkers, to Indian Society and Culture

Mahatma Jotiba Phule,
Dr. B. R. Ambedkar,
Savitribai Phule,
Shahu Maharaj,
Raja Ram Mohan Roy.

Unit 4 - Development of Anthropology in India

Phases of development: from establishment of Asiatic Society to Modern phase.
Development of Biological Anthropology in India.

Reference Books

Bose, N. Elwin, V. (1943). *The Aborigines*. H. Milford, Oxford University Press.
Bose N. K. (1967). *Culture and Society in India*. Bombay: Asia Publishing House.
Kroeber A. (1929). *Cultural Anthropology*. Arya Sahitya Bhaban.

- Dube S. C. (1958). *Power and Conflict in Village India*. London: Cornell University Press.
- Dube, S. C. (1955). *Indian Village*. Psychology Press.
- Dube, S. C. (1958). *India's changing villages: human factors in community development*. Routledge and Paul.
- Elwin, V. (1936). *The Baiga*. Gyan Publishing House.
- Elwin, V. (1942). *The Agaria*. H. Milford, Oxford University Press.
- Elwin, V. (1943). *The Aborigines*. H. Milford, Oxford University Press.
- Elwin, V. (1947). *The Muria and their ghotul*. Oxford Univ. Press.
- Elwin, V. (1963). *A new deal for tribal India*. Ministry of Home Affairs.
- Elwin, V. (1964). *The Tribal World of Verrier Elwin: An Autobiography*. Oxford University Press.
- Elwin, V., and Hivale, S. (1944). *Folk-songs of the Maikal Hills*. Man in India.
- Guha, B. S. (1935). "Racial Affinities of the Peoples of India" in *Census of India*. Government of India.
- Guha, B. S. (1944). *Racial Elements in the Population*. H. Milford.
- Government of Maharashtra, 'Speeches and Writings of Dr. Babasaheb Ambedkar' – (20 Volumes).
- Government of Maharashtra, 'Mahatma Phule – Samagra Vangmay'.
- Government of Maharashtra, 'Shahu Maharaj – Samagra Vangmay'.
- Karve, I. (1968). *Kinship Organisation in India*. Asia Publishing House.
- Karve, I. (1969). *Yuganta: The End of an Epoch*. Deshmukh Publications.
- Kennedy, K. A. R. (2000). *God-apes and Fossil Men: Paleoanthropology of South Asia*. University of Michigan Press.
- Majumdar, D. N. (1937). *A tribe in transition: a study in culture pattern*. Longmans, Green and co., ltd.
- Majumdar, D. N. (1944). *Races and Cultures of India*. Universal Publishers.
- Majumdar, D. N. (1962). *Caste and Communication in an Indian Village*. Asia Publishing House.
- Richards, F. J. (1925). The Birhors: a Little-known Jungle Tribe of Chota Nagpur. *Nature*, 116(2916), 421–422. <https://doi.org/10.1038/116421a0>
- Roy, S. C. (1912). *The Mundas and Their Country*. Jogendra Nath Sarkar at the City book society.
- Roy, S. C. (1915). *The Orāons of ChōtāNāgpur: their history, economic life, and social organization*. Pub. by the author, at the Bar Library.
- Roy, S. C. (1935). *The Hill Bhūiyās of Ōrissā*. "Man in India" Office.
- Sarkar, S. S. (1964). *Ancient races of Baluchistan, Panjab, and Sind*. Bookland. 28
- Srinivas, M. N. (1942). *Marriage and Family in Mysore*. New Book Company.
- Srinivas, M. N. (1966). *Social Change in Modern India*. University of California Press.
- Srinivas, M. N. (1976). *Nation-building in Independent India*. Oxford University Press.
- Vidyarthi, L. P. (1961). *The Sacred Complex in Hindu Gaya* (First Edition). Asia Publishing.
- Vidyarthi, L. P., and Rai, B. K. (1977). *The Tribal Culture of India*. Concept Publishing Company.
- Vidyarthi, L. P. (1978). *Rise of Anthropology in India: A Social Science Orientation*. Concept Publishing Company.
- Vidyarthi, L. P. (1963). *The Maler: a study in nature-man-spirit complex of a hill tribe in Bihar*. Calcutta: Bookland Private.

AN-SC-M-203: Social Cultural Change

Mandatory Paper, 2 Credits

Course Description

This course aims at discussion of various processes leading to change in the existing configuration of any socio-cultural system. This course would introduce the students to the analysis of various factors and processes which contribute to the phenomena of sociocultural change.

At the end of the course, the students are expected to understand about -

1. The processes responsible for socio-cultural changes
2. The analysis of factors contributing to socio-cultural changes
3. Theoretical understanding of social cultural change
4. Social Cultural Change in India

Syllabus

Unit 1 Dynamics of Culture

Culture and Social dynamics

Importance of Studying culture and social change

Distinction between Social Change and Cultural Change

Factors of Social Cultural Change,

Concept of- Innovation; Diffusion,

Acculturation, Assimilation, Accommodation,

Reinterpretation and Integration

Concept of Cultural lag; Stability and Change

Unit 2 Nature and dynamics of Change

Evolutionary and Diffusionist Perspective of Change

Dialectical and Conflict Model of Change

Equilibrium Models of Change: Structure – Functionalism

Parsonian Differentiation Model

Unit 3 Cyclic Theories of Change

Contributions of Oswald Spengler,

Contributions of Arnold Toynbee,

Contributions of Pitirim Sorokin,

Contributions of Alfred Kroeber

Unit 4 Social Cultural Changes in India

Urbanization, Industrialization,

Sanskritization, Modernization,

Westernization, Globalization.

References

Barnet H.G. (1953). *Innovation, The basis of culture change*. McGraw Hill, New York.

Galt A. and Smith L. (1976). *Models and Study of social change*. Wiley and Sons.

Moore W.E. (1965). *Social Change, Foundation of Modern Sociology Series*. Prentice Hall of India, Delhi.

- Punekar U.B. (1974). *Assimilation*. Asia Publishing, Bombay.
- Ponson J.A.(1969). *The Analysis of social change reconsidered*. Mouton and Company, The Hague.
- Rao M.S.A. (1970). *Urbanization And Social Change* Orient Longman, Delhi.
- Rogers E.M.and Shoemaker (1962). *Communication of Innovation*. The Free Press, New York.
- Singer, M. (1972). *When a Great Tradition Modernizes*. Vikas Publications, New Delhi.
- Smith A. (1973). *The Concept of Social change*. Routledge and Kegan Paul, London.
- Srinivas M.N. (1966). *Social Change in Modern India*. Allied Publication, Bombay.
- Strasser and Randall (1981). *An Introduction to theories of Social Change*, Routledge and Kegan Paul.
- SundarRajan (1986). *Innovative Competence and Social Change* . IPQ Publications.
- Zaltzman G. (1973). *Process and Phenomenon of Social change*. New York, Wiley, Inter Science.
- Zamara D.M. (1993). *Perspectives on cultural change and development*, Reliance Publishing House, Delhi.

AN-BIO-M-204: Primatology and Primate Behaviour

Mandatory Paper, 2 Credits

Course Description

The course introduces the basics of Primatology, its methods, history and important achievements in relation to human evolution. It also introduces evolution of order primata, the current primates with specific emphasis on their behaviour.

At the end of the course is expected to

1. Understand the discipline of primatology
2. Delineate the importance of primatology for anthropology
3. Understand primates as a taxonomic group
4. Describe primate diversity
5. Understand basics of Primate behaviour and its relationships to human behaviour

Unit 1: Primates

Introduction to Primatology, its history, scope and importance

Methods of studying Primates: in Wild, In captivity

Emergence, Distribution and classification of Primates, Characteristic features of Order Primata,

Extant Primates and their geographical Distribution

Traditional and revised classification of Hominidae

Unit 2: Primate Evolution

Overview of mammalian evolution

Evolution of Primates, Plesiadapiformes, Aegyptopithecus, Proconsul, Dryopithecines,

Phylogenetic position of Dryopithecines; Ramapithecus and Shivapithecus

Phylogeny of primates: current knowledge and debates,

Unit 3: Prosimians, Anthropoids and Apes

Lemurs, Lorises, Tarsiers,

Old world and New world Monkeys

Gibbons,

Orang Utans

Gorillas

Chimpanzees,

Bonobos

Unit 4: Primate Behaviour

Feeding behaviour, Reproductive Behaviour, Social Behaviour, Cognition, Primate communication, Tool Use

Use of nonhuman primates in biomedical research

Threat of extinction and conservation of nonhuman primates

Textbooks

Dunbar, R. I. M. (2013). *Primate Social Systems*. Springer.

Fleagle, J. G. (2013). *Primate Adaptation and Evolution* (3 edition). Amsterdam ; Boston: Academic Press.

- Rowe, N., and Mittermeier, R. A. (1996). *The Pictorial Guide to the Living Primates* (1 edition). East Hampton, N.Y: Pogonias Pr.
- Sanz, C., Call, J., and Boesch, C. (Eds.). (2013). *Tool Use in Animals: Cognition and Ecology* (1 edition). Cambridge University Press.
- Srivastava, R. P. (2009). *Morphology of the Primates and Human Evolution*. Place of publication not identified: Prentice Hall India Learning Private Limited.
- Stanford, C., Allen, J. S., and Antón, S. C. (2016). *Exploring Biological Anthropology: The Essentials* (4 edition). Boston: Pearson.
- Stanford, C., Allen, J. S., and Antón, S. C. (2019). *Biological Anthropology: The Natural History of Humankind* (4 edition). Boston: Pearson.
- Strier, K. B. (2016). *Primate Behavioral Ecology* (5 edition). Routledge.
- Wood, B. (2013). *Wiley-Blackwell Encyclopedia of Human Evolution* (1 edition). Hoboken, NJ: Wiley-Blackwell.

AN-BIO-M-205: Comparative Anatomy

Mandatory Paper, 2 Credits

Course Description

Evolution as a process had also brought about series of anatomical changes on all forms of life. Human beings are but a product of this process. Paleoanthropologists attempts in piecing together his past has yielded useful sequences in explaining hominid evolution. This course introduces basics of comparative anatomy which serves as basis for evolutionary analyses.

At the end of the course, students are expected to

1. Understand skeletal anatomy of primates
2. Delineate comparative skeletal differences among primates
3. Describe skeletal features of primates as an adaptation to their ecological setting
4. Describe man s place in mammalian and primate taxonomic tree

Unit 1: Place of human beings among the Primates

Nomenclature, Taxonomic position of humans

Introduction to comparative anatomy, comparative anatomy as evidence for evolution

Major Anatomical changes in human body

Unit 2: Skull, Mandible and Dentition

Comparative anatomy of skull, mandible and dentition among primates

Major Anatomical changes in Skull, Mandible and Dentition; Evolution of chin

Unit 3: Post Cranial skeleton

Comparative anatomy of Post Cranial skeleton among primates

Major Anatomical changes in Vertebral Column, Pelvis, Hands, Legs and feet

Unit 4: Evolution of other Systems

Evidence from the Brain and Sense Organs

Erect posture and Bipedalism

Textbooks

Clark, W. E. L. G. (1978). *Antecedents of Man: An Introduction to the Evolution of Primates*. Chicago: Quadrangle Books.

Fleagle, J. G. (2013). *Primate Adaptation and Evolution* (3 edition). Amsterdam ; Boston: Academic Press.

Foley, R. A., and Lewin, R. (2003). *Principles of Human Evolution* (2 edition). Malden, MA: Wiley-Blackwell.

Srivastava, R. P. (2009). *Morphology of the Primates and Human Evolution*. Place of publication not identified: Prentice Hall India Learning Private Limited.

Stanford, C., Allen, J. S., and Antón, S. C. (2016). *Exploring Biological Anthropology: The Essentials* (4 edition). Boston: Pearson.

Stanford, C., Allen, J. S., and Antón, S. C. (2019). *Biological Anthropology: The Natural History of Humankind* (4 edition). Boston: Pearson.

Wood, B. (2013). *Wiley-Blackwell Encyclopedia of Human Evolution* (1 edition). Hoboken, NJ: Wiley-Blackwell.

AN-BIO-M-206: Human Evolution: Paleoanthropological Perspectives

Mandatory Paper, 2 Credits

Course Description

This course introduces Palaeoanthropology as an important field of Biological anthropology, as well as the fossil evidence of Human evolution. While introducing the extinct hominins, it will place emphasis on Salient Features, geological time, ecological behaviour and associations with tools, conserved and derived features, Phylogenetic position, geographical spread, important specimens and discoverers.

At the end of the course, students are expected to

1. Describe trends in human evolution
2. Delineate the evolutionary changes as evidenced by fossil record
3. compare hominin fossils and their adaptations

Syllabus

Unit 1: Introduction to Theory and Methods of Palaeoanthropology

Principles of Taxonomy and Classification, Species Concepts and Speciation, Technomic Diagenetic Processes, Paleoclimatic Record and Paleoenvironmental Reconstruction, Geological Background

Unit 2: Hominid Precursors and Early Hominids

Sahelanthropus tchadensis, *Orrorintugensis*,
Ardipithecus ramidus, *Australopithecus baharelgazali*, *Australopithecus anamensis*,
Australopithecus africanus, *Australopithecus garhi*, *Australopithecus afarensis*,
Australopithecus robustus, *Australopithecus boisei*; *Australopithecus sediba*

Unit 3: Genus Homo

Early Homo

Homo habilis; *Kenyanthropus platyops*, *Homo erectus*, *Homo ergaster*,
variants of *Homo erectus*: African, European and Asian, global evidences

Later Homo

Homo heidelbergensis, *Homo naledi*, *Homo floresiensis*, Narmada man, *Homo neanderthalensis*, Denisovans: fossil evidences and ancient DNA
African, European and Asian fossil evidences and its bearing on theory of human evolution

Unit 4: Homo sapiens: Early modern humans

Cro-Magnon; Grimaldi; Chancelade, Emerging fossil evidences: Evolution of Modern humans
Jebel irhoud, *Homo sapiens idaltu*, worldwide variation in modern human skeletons, trend from robusticity to gracility

Note:

Each taxonomic family and fossils are to be understood in terms of its evidence, Salient Features, geological time, ecological behaviour and associations with tools, conserved and derived features, Phylogenetic position, geographical spread, important specimens and discoverers.

Textbooks

- American Association of Physical Anthropology. (n.d.). AAPA Statement on Race and Racism (2019). Retrieved May 2, 2019, from <http://physanth.org/about/position-statements/aapa-statement-race-and-racism-2019/>
- Buettner-Janusch, J. (1966). *Origins of Man: Physical Anthropology* (First Edition edition). New York: John Wiley and Sons.
- Fleagle, J. G. (2013). *Primate Adaptation and Evolution* (3 edition). Amsterdam ; Boston: Academic Press.
- Futuyma, D. J., and Kirkpatrick, M. (2017). *Evolution* (4 edition). Sunderland, Massachusetts: Sinauer Associates is an imprint of Oxford University Press.
- Henke, W., and Tattersall, I. (Eds.). (2015). *Handbook of Paleoanthropology* (2nd ed. 2015 edition). New York: Springer.
- Herron, J. C., and Freeman, S. (2013). *Evolutionary Analysis* (5 edition). San Francisco, CA: Pearson.
- Hiernaux, Jean, and Banton, Michael. (1969). *Four statements on the race question*. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000122962>
- Jurmain, R., Kilgore, L., Trevathan, W., Ciochon, R. L., and Bartelink, E. (2017). *Introduction to Physical Anthropology* (15 edition). Boston: Wadsworth Publishing.
- Korf, B. R., and Irons, M. B. (2013). *Human Genetics and Genomics, Includes Wiley E-Text* (4 edition). Chichester, West Sussex, UK: Wiley-Blackwell.
- Larsen, C. S. (Ed.). (2010). *A Companion to Biological Anthropology* (1 edition). Malden, Mass: Wiley-Blackwell.
- Lewis, R. (2014). *Human Genetics* (11 edition). New York: McGraw-Hill Education.
- Losos, Jonathan B., Baum, D. A., Futuyma, D. J., Hoekstra, H. E., Lenski, R. E., Moore, A. J., ... Whitlock, M. C. (Eds.). (2017). *The Princeton Guide to Evolution* (Reprint edition). Princeton: Princeton University Press.
- Mayr, E. (2002). *What Evolution Is* (Reprint edition). New York: Basic Books.
- Stanford, C., Allen, J. S., and Antón, S. C. (2016). *Exploring Biological Anthropology: The Essentials* (4 edition). Boston: Pearson.
- Stanford, C., Allen, J. S., and Antón, S. C. (2019). *Biological Anthropology: The Natural History of Humankind* (4 edition). Boston: Pearson.
- Wood, B. (2013). *Wiley-Blackwell Encyclopedia of Human Evolution* (1 edition). Hoboken, NJ: Wiley-Blackwell.

AN-BIO-M-207: Biological Anthropology Practical - II (Somatometry, Somatoscopy and Serology)

Mandatory Paper, 2 Credits

Course Description

This practical course provides knowledge of Scientific methods and Techniques of Measurements on living individuals through measurements which are useful to get an idea of age, sex and comparative community differences as well as the Nutritional status of Individuals. Somatometric measurements, Dermatoglyphics, Somatoscopy traits and basic serology are included to provide a historical perspective and as classical tools to study Population Variation and their Inheritance. Applications of Anthropometry such as Growth, Ergonomics, Forensic Anthropology etc will also be touched upon in the course.

At the end of the course, students are expected to understand

1. the importance and use of Somatometry, somatoscopy and dermatoglyphics for - Biometric variation and Medico-legal aspects
2. Master the techniques of Somatometry, fingerprints and serology
3. the importance of measurements and classical markers in anthropological studies as well as their limitations

Syllabus

Unit 1: Somatometry and Somatoscopy

Somatometry Use, Scope and Importance

Introduction to the Instruments

Different landmarks and their locations.

General Introduction, Use and Scope of Somatoscopy: Hair colour, eye colour, skin colour.

Hair type and pattern. Hair whorl: number and direction, Historical view and limitations

Ear-lobe: attached, non-attached, Tongue rolling and folding. Handedness, Hand clasping.

Digital formula. In-bite, over-bite, bite to bite

Unit 2: Selected measurements on Head and rest of the body

Maximum head length, Head breadth, Head circumference, Morphological upper facial height, Physiognomic upper facial height, Nasal height, Nasal breadth, Mouth breadth, Bigonial breadth.

Height vertex, Sitting height, Height acromion, Height illiocristale, Bi-Illiocrystal diameter, total arm length, total leg length, Biacromial diameter. Calculation of Indices based on the above measurements.

Unit 3: Dermatoglyphics

Relevance in Anthropological studies.

Techniques: printing and finger, palm, and pattern identification.

Basic Classificatory Systems: Galton, Henry.

Indices –Pattern intensity index, Furuhata's index, Dankmeijer's Index, Main Line Formula.

Unit 4: Classical Markers

Blood groups:

Anthropological importance, techniques, collection of samples

Identification of ABO and Rh system. Colour Blindness. PTC taste sensitivity

Textbooks

Bhasin, I. P. S. and M. K. (1989). Anthropometry. Delhi.

Bhasin, M. K., and Chahal, S. M. S. (1996). A Laboratory Manual for Human Blood Analysis. Kamla-Raj Enterprises.

Cummins, H., and Midlo, C. (1976). Fingerprints, Palms and Soles. South Berlin, Mass: Dover Publications Inc.

Frazer, J. E. S. (1965). Frazer's Anatomy of the Human Skeleton. Churchill.

Juvekar, S., Shrivastava, A., Patil, R., Lubree, H., and Kulkarni, S. (2019). Beginner's Manual of Anthropometry (1st ed.).

Race, R. R., and Sanger, R. (1968). Blood groups in man. F. A. Davis Co.

Singh, I. P., and Bhasin, M. K. (2004). A Manual Of Biological Anthropology. Kamla-Raj Enterprises.

Sudha Rastogi, and Shukla B R K. (2017). Laboratory manual of physical anthropology.

AN-SC-E-208: Recent Trends in Anthropology

Elective Paper, 2 Credits

Course Description

The course focuses on the recent trends in anthropological thinking. The course also takes view of the emerging interdisciplinary Developments in the field of anthropological sciences, combining Anthropological perspectives with that of the biology, psychology, ecology, etc.

Syllabus

Unit 1: Dialectical Anthropology

Dialectics anthropology as a perspective;
Dialectics – Classical tradition;
Dialectics – Hegel and Marx;
Contributions and criticism

Unit 2: Symbolic Anthropology

The paradigm of symbolic anthropology;
Contributions of Clifford Geertz, V. Turner and Mary Douglas;
Methodological approach within symbolic anthropology;
Contributions and criticism

Unit 3: Systems Theory

Society as a dynamic system;
Equilibrium and social integration;
Contributions of Talcott Parsons;
Contributions and criticism

Unit 4: Post Modernism

Post-modernism as a theoretical perspective;
Post-modernism as a reaction to modernism;
Post-modernism as a methodological paradigm;
Post-modernism and anthropology;
Contributions and criticism

References

- Hubinger, Vaclav 1996 Grasping the Changing World: Anthropological Concepts in the Post-Modern Era, Routledge, London
- Parsons, Talcott 1951 The Social System. American Publishing Company Pvt. Ltd., New Delhi.
- Schneider and others 1977 Symbolic Anthropology: A Reader in the study of Symbols and Meanings. Columbia, University Press.
- Douglas, Mary 1978 Cultural Bias. Royal Anthropological Institute, Great Britain and Ireland.
- Geertz, Clifford 1973 The Interpretation of Culture: Selected Essays. Basic Books Inc. Publishers, New York.
- Tax, S. and Freeman, L. 1977 Horizons of Anthropology. Aldine Publishing Company, Chicago.
- Ingham, John 1996 Psychological Anthropology Reconsidered. Cambridge University Press.

Manganaro, Marc 1990 *Modernist Anthropologist: From Fieldwork to Text*.
Princeton University Press, New Jersey.
Sperber, Dan. 1975 *Rethinking Symbolism*. Cambridge University Press

AN-SC-E-209: Digital Anthropology

Elective Paper, 2 Credits

Course Description:

This course examines the intersection of anthropology and digital technologies. This course explores the dynamic interplay between digital technologies and human culture through the lens of Digital Anthropology. Drawing on anthropological methodologies, course examines the multifaceted ways in which digital tools, platforms, and networks shape and are shaped by human behaviour, communication, identity, and society. By critically engaging with topics such as online communities, virtual identities, surveillance, and digital activism, students will gain insights into the transformative impact of the digital age on global cultures.

By the end of this course, students will be able to:

1. Understand the ways in which digital technologies are used to create and transmit culture and understand key concepts and theories in Digital Anthropology.
2. Analyse the impact of digital technologies on social relationships, cultural practices and in shaping identity and social interactions.
3. Explore the ethical challenges of digital ethnography and data privacy.
4. Investigate digital inequalities and their impact on societies.
5. Apply anthropological perspectives to analyse real-world digital phenomena.

Syllabus:

Unit 1: Introduction to Digital Anthropology

Introduction to digital anthropology

Defining Digital Anthropology: The intersection of technology and culture

Historical development and Studies in Digital Anthropology

Social networks online and offline

Unit 2. Digital Identity and Online Communities

Construction of identity in virtual spaces

Formation of online communities and subcultures

Case studies: social media, forums, and digital expressions

Digital technologies-social media, social-personal relationships and social networks

Unit 3. The Impact of Digital Technologies

Digital technologies and identity, intimacy, and personality

Global impact of digital technologies on societies

Digital technologies, communication and the transformation of work

Psychological and social implications of digital technologies

Unit 4. Digital technologies and Anthropological Research

Conducting digital ethnography, Digital data collection and analysis

Digital surveillance and its implications on Consent, Privacy, Ownership and Copyright

Digital divides: Access, skills, and disparities

Resources:

Textbooks:

- Miller, D., and Costa, E. (2010). "Digital Anthropology." Berg.
- Hine, C. (2015). "Ethnography for the Internet: Embedded, Embodied and Every day." Bloomsbury Academic.
- Miller, D., and Slater, D. (2000). "The Internet: An Ethnographic Approach." Berg.
- Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., and Tacchi, J. (2016). "Digital Ethnography: Principles and Practice." Sage.
- Farnsworth, J., and Anderson, A. (Eds.). (2017). "Mobile Media Practices, Presence, and Politics: The Challenge of Being Seamlessly Mobile." Routledge.
- Escobar, A. (2018). "Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds." Duke University Press.
- Coleman, G. E., and Golub, A. (Eds.). (2008). "Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous." Verso.
- Irvine, L. (2019). "Feminist Technoscience in the Anthropocene." Duke University Press.
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Readings:

- Pink, S. (2016). "Digital Ethnography: Principles and Practice." Sage.
- Coleman, G. E. (2010). "Ethnographic Approaches to Digital Media." *Annual Review of Anthropology*, 39, 487-505.
- Kelty, C. M. (2008). "Two Bits: The Cultural Significance of Free Software." Duke University Press.
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- Postill, J. (2016). "Media and Social Change: The Modernizing Influences of Mobile Telephony among the Uros of Lake Titicaca." *New Media and Society*, 18(5), 723-739.
- West, S. M. (2012). "Rethinking Cyberactivism: The Case of Anonymous." *Media, Culture and Society*, 34(6), 653-670.
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AN-SC-E-210: Dr Ambedkar and Nation Building

Elective Paper, 2 Credits

Course Description

This course focuses on Ambedkar's ideology for the building a new social order that is exuberant in the dignity of an individual, it also gives emphasis on his vision of nation-building which is based on liberty, equality and fraternity. The course also throws light on Ambedkar's adherence to humanism and rationality, the various roles he played, the movements and prolific writings that led to social transformation in modern India. The students will get insight into the contribution of Dr. B. R. Ambedkar for economic development of contemporary India. At the end students are expected to understand the application of Ambedkar's thoughts for the welfare of India and the nation building.

Syllabus

Unit 1-- Social Movements: Striving for equality

Bahishkrat Hitakarani Sabha, Mahad Satyagraha, Temple Entry Movement, and conversion and making of the Constitution of India.

Unit 2: Economic Development and Reforms

Khoti system, Mahar Watan, Land holdings/reforms, Industry, Agriculture and Insurance, Labour Issues and Movement and Family Planning. Formation of RBI, Working hours, Maternity leave and other policies as labour minister.

Unit 3: Major Developmental Projects

Irrigation Projects, River Valley Authorities, Power Projects and Central Electricity Authority, Rehabilitation and Resettlement and Green Revolution.

Unit 4: Inclusive policies and women's empowerment

Impact of education and inclusive policies in nation-building
Hindu Code Bill, Empowerment of women and Liberalization, Privatization and Globalization.

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- Draft Water Commission, Annual Report of 1999-200
- Central water Commission, Annual Report of 2000-2001/
- Mrs. Dixit M. R. Dr. Babasaheb Ambedkar L His Contribution and Relevance.
- Draft National Water Policy (2001)
- Gulathi N. D. (1972) Development of Inter – State Rivers Laws and Practice in India.
- Heggade O. D. Economic Thought of Dr. B. R. Ambedkar.
- Dhananjay Keer., 1991, "Dr Ambedkar life and Mission", popular Prakashan, Bombay.
- Kamble B. R., 2010, "Mook Nayak (English)", Dr Babasaheb Ambedkar Research Institute in Social Growth Kolhapur.
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Vahil A. K., Gandhi – Ambedkar dispute, Ashish publishing House, New – Delhi, 1992.

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Eleanor Zelliot, From untouchable to Dalit: Essays on the Ambedkar movement, Monohar publication, New –Delhi, 1996, (Life and Buddhism).

Christophe Jaffrelot, Dr. Ambedkar and untouchability: analysing and fighting caste, permanent Black – Delhi, 2005.

Vasant Moon (Ed): Dr. Babasaheb Ambedkar writings and speeches, volumes, Govt. of Maharashtra Publication Mumbai.

Writings and speeches of Dr. B. R. Ambedkar Volume 1-17

AN-SC-E-211: Anthropology of De-notified and Nomadic Tribes

Elective Paper, 2 Credits

Course Description

This course examines the anthropology of de-notified tribes and nomadic tribes in India. This course provides a comprehensive exploration of the lives, cultures, histories, and contemporary challenges faced by de-notified tribes and nomadic tribes. Drawing on anthropological insights, students will engage with the complexities of these marginalized communities, their unique socio-economic practices, and their struggles for recognition and rights. Through a combination of theoretical readings, ethnographic case studies, and fieldwork perspectives, this course aims to foster an understanding of the diverse identities and resilience of these groups.

By the end of this course, students will be able to:

1. Understand the historical context of de-notified and nomadic tribes.
2. Analyse the socio-economic and cultural practices of these communities.
3. Examine the impact of policies and legislations on de-notified and nomadic tribes.
4. Explore the challenges of identity, education, and livelihood faced by these communities.
5. Critically assess the role of ethnography in studying and advocating for marginalized groups.
6. Engage in discussions on contemporary issues and policy implications.

Syllabus

Unit 1: Introduction to De-notified Tribes and Nomadic Tribes

Introduction and Historical background, policies affecting these communities
Socio-Economic Practices and Livelihoods
Economic activities and resource management
Traditional knowledge and sustainable practices

Unit 2: Cultural Identity and Expressions

Cultural diversity among de-notified and nomadic tribes
Language, art, and rituals as expressions of identity
Identity negotiation in urban contexts
Challenges of accessing resources and markets

Unit 3: Rights, Recognition, and Marginalization

Struggles for recognition and inclusion
Legal frameworks and policies impacting these communities
Advocacy and activism for social justice
Studies on de-notified tribes and nomadic tribes in India

Unit 4: Contemporary Issues and Future Prospects

Barriers to education and skill development
Health challenges and access to healthcare
Urbanization and displacement

Environmental concerns and adaptation strategies
Social development initiatives and their effectiveness
Case studies of successful community-driven projects

Textbooks:

- Baxi, P. (Ed.). (2017). "Nomadism in South Asia." Cambridge University Press.
- Shyam, R. (2010). "Begar: A Crime Against Humanity." Aakar Books.
- Shah, G. H. (Ed.). (2015). "Criminal Tribes of India: A Socio-Economic Analysis." Oxford University Press.
- Mehta, N. (Ed.). (2018). "Nomad's Land: Pastoralism and French Environmental Policy in the Nineteenth-Century Mediterranean World." University of California Press.
- Rao, A., and Premchand, A. (Eds.). (2005). "Dalit Phobia: Why Do They Hate Us?" Navayana.
- Bhat, A. (Ed.). (2015). "Nomadic Narratives: A History of Mobility and Identity in the Great Indian Desert." Social Science Press.
- Thorat, S., and Newman, K. S. (Eds.). (2007). "Blocked by Caste: Economic Discrimination in Modern India." Oxford University Press.
- Shah, G. H. (Ed.). (2014). "Caste and Democratic Politics in India." Permanent Black.

Readings:

- Omvedt, G. (1995). "Scheduled Castes and Nomadic Tribes in India: A Historical Perspective." *Economic and Political Weekly*, 30(35), 2304-2313.
- Ratnam, N. (2013). "Politics of Denotified Tribes." *Economic and Political Weekly*, 48(10), 39-42.
- Fernandes, W. (2006). "Cultural Politics in a Global Age: Uncertainty, Solidarity and Innovation." *Critical Asian Studies*, 38(3), 343-366.
- Chakravarty, K. (2004). "Negotiating with Nomads: The Revolt against the Bengal DeReservations Act of 1949." *Indian Economic and Social History Review*, 41(2), 179-201.
- Mander, H. (2012). "Adivasis, Naxalites and Indian Democracy." *Economic and Political Weekly*, 47(1), 49-58.
- Shyam, R. (2015). "Making Nomads Citizens: The Sualkuchi Story." *Economic and Political Weekly*, 50(51), 56-64.
- Bhowmik, S. (2014). "Demolishing Dams, Building Alternatives: The Work of the Narmada Bachao Andolan." *Economic and Political Weekly*, 49(46), 28-31.
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AN-BIO-E-212: Bioarchaeology and Paleopathology

Elective Paper, 2 Credits

Course Description

The course introduces the basics of archaeological and biological anthropological methods and theories for evaluating skeletal remains to reconstruct biocultural adaptations and lifeways. It also introduces the basics health and disease of the people from the past and its complexity, and various methods and approaches to study skeletal remains to answer evolutionary and behavioural aspects of Human beings.

At the end of the course, students are expected to

1. Understand the nature and scope of Bioarchaeology and osteobiography
2. Know various approaches used for bioarchaeological, osteobiographical and palaeopathological analyses and summarise the knowledge gleaned from these approaches
3. Critically evaluate the contemporary issues in biological Anthropology through the lens of bioarchaeology
4. Evaluate the importance of paleopathology in understanding the health and diseases of the past and its implications for the humanity

Syllabus

Unit 1: Bioarchaeology

Introduction to Bioarchaeology, distinguishing feature of the subdiscipline to interpret human behaviour using skeletal material, linkage with biological anthropology and archaeology

Unit 2: Bioarchaeological investigations

Growth, development and adulthood stress and deprivations,

Infections, injury, violence, cultural modifications

Musculoskeletal modifications and articular degeneration, Structural adaptations in bones

Isotopic signatures of diet, nutrition and life history, and mobility

Paleodemography based on age and sex structure in skeletal assemblage

Unit 3: Paleopathology

Introduction to Paleopathology, distinguishing feature of the subdiscipline to interpret human health and disease using skeletal material, palaeoepidemiology, historical development of the field and linkage with broader body of anthropology

Unit 4: approaches and methods to assess Paleopathology

Macroscopic analysis, Bone sections, CT analysis, ancient DNA and other methods

Bone inflammation, and infections, infectious diseases of the past, congenital conditions, metabolic and endocrine disorders, Neoplastic conditions, Pseudopathology

Reference books

Aufderheide, A. C., and Rodriguez-Martin, C. (2011). *The Cambridge Encyclopedia of Human Paleopathology* (Illustrated edition). Cambridge University Press.

- Buikstra, J., and Roberts, C. (Eds.). (2012). *The Global History of Paleopathology: Pioneers and Prospects* (1st edition). Oxford ; New York: Oxford University Press.
- Cohen, M. N., and Armelagos, G. J. (Eds.). (2013). *Paleopathology at the Origins of Agriculture* (2nd Revised ed. edition). Gainesville: University Press of Florida.
- Grauer, A. L. (Ed.). (2016). *A Companion to Paleopathology* (1st edition). Wiley-Blackwell.
- Grauer, A. L. (Ed.). (2022). *The Routledge Handbook of Paleopathology* (1st edition). Abingdon, Oxon ; New York, NY: Routledge.
- Katzenberg, M. A., and Grauer, A. L. (Eds.). (2018). *Biological Anthropology of the Human Skeleton* (3rd edition). Hoboken, New Jersey: Wiley-Blackwell.
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- Rothschild, B. M., Surmik, D., and Bertozzo, F. (2023). *Modern Paleopathology, The Study of Diagnostic Approach to Ancient Diseases, their Pathology and Epidemiology: Let there be light, the light of science and critical thinking*. Springer.
- Weiss, E. (2014). *Paleopathology in Perspective: Bone Health and Disease through Time*. Lanham: Rowman and Littlefield Publishers.

AN-BIO-E-213: AN-BIO-E-213: Ergonomics, Design and Kinanthropometry

Elective Paper, 2 Credits

Course Description:

The course aims to provide an overview of ergonomics principles. The course will help in understanding the design aspects of ergonomics and their applications in real-world problems through case studies. The students will undergo hands-on training on various Kinanthropometry equipment for body composition analysis and somatotype.

At the end of the course, students are expected to

1. The course will assist the students in understanding the basic principles of ergonomics.
2. Demonstrate an understanding of the role and application of ergonomics and anthropometrics in the design of interiors.
3. The course will introduce the students to various Kinanthropometry equipment for body composition analysis and somatotype.

Syllabus

Unit-1: Introduction

Ergonomics - Overview, objective, and application.

Anthropometry - Human body, various postures, movements, measuring techniques; Biomechanics and its applications.

Unit-2: Design and methodology

Occupational safety, workstation design, Ergonomics - design methodology, criteria, and checklists. Disability ageing and inclusive design.

Unit-3: Application of Kinanthropometry

Introduction and Application of Kinanthropometry: Musculoskeletal Anatomy in Kinanthropometry.

Indices and Customization of Kinanthropometry.

Unit-4: Anthropometric Somatotype

Somatotype. Concepts in Physique Development: Role of Physique in Sports; and Selected Clinical Conditions Affecting Physique.

Physique in Different Sports Activities.

Techniques for Assessing Body Composition.

Textbooks:

Bhise, V. D. (2011). Ergonomics in the automotive design process. CRC Press, Boca Raton.

Bridger, R. (2008). Introduction to ergonomics. CRC Press.

Cacha, C. A. (1999). Ergonomics and safety in hand tool design. CRC Press.

Carter JEL, Heath HB (1990). Somatotyping-development and application. Cambridge University Press. Department of Exercise and Nutritional Sciences; San Diego State University, CA. 92182-7251. U.S.A.

Chakrabarti, D. (1997). Indian anthropometric dimensions for ergonomic design practice. National institute of design. ISBN 81-86199-15-0.

- Eston, R., and Reilly (eds.) (2001). *Kinanthropometry and Exercise Physiology Laboratory Manual: Test, procedures and data* (2nd edition), Volume 2: Exercise physiology. Routledge, London and New York.
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