DEPARTMENT OF ANTHROPOLOGY

Category-I
BSc. (Hons.) Environmental Science

DISCIPLINE SPECIFIC CORE COURSE -4 (DSC-4) – : Human Origins and Evolution

Credit distribution, eligibility and pre-requisites of the course:

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Human Origins and Evolution	4	3	0	1	12th Pass	----

Learning Objectives

1. The course will enhance students understanding of human variation in the light of human origins.
2. The course will help students to develop concepts pertaining to the relation of modern humans with living and non-living primates.

Learning Outcomes

Students will learn on evolutionary relationships of different extinct/hominids in the context of emergence of modern human beings. Students will also learn the gradual biological and behavioral processes of becoming human.

Syllabus:

Unit-1 **(12 Hours)**

Primate origins and radiation: phylogenetic relationships of living primates with special reference to Miocene hominoids

Unit-2 **(12 Hours)**

Australopithecines: distribution, features and their phylogenetic relationships. Appearance of genus Homo: Homo habilis

Homo erectus from Asia, Europe and Africa: Distribution, features and their phylogenetic status

Unit-3 **(12 Hours)**

The origin of Homo sapiens: Fossil evidences of Neanderthals.

Origin of modern humans (Homo sapiens sapiens): Archaic and Modern humans, Distribution and features

Unit-4 **(9 Hours)**

Hominization process: Bio-cultural Evolution

Practical – **30 Hours**

Craniometry:

a) Maximum Cranial Length
b) Maximum Cranial Breadth
c) Maximum Bizygomatic Breadth
d) Maximum Frontal Breadth
e) Minimum (Least) Frontal Breadth
f) Nasal Height
g) Nasal Breadth
h) Bi-Mastoid Breadth
i) Greatest Occipital Breadth
j) Upper Facial Height
k) Cranial Index
l) Nasal Index

Osteometry: Measurements of Human long bones (6)

Identification of casts of fossils of family hominidae: Drawing and comparison of cranial characteristics.

References

1. Indera P. Singh and Bhasin, M.K. (1968) Anthropometry. Kamla-Raj Enterprises, Chawri Bazar, Delhi.
2. Buettner-Janusch, J. (1966). Origins of Man: Physical Anthropology. John Wiley & Sons, Inc., New York, London, Sydney.
3. Craig Stanford et al. (2013). Biological Anthropology. Pearson, New York. [Unit-1: Page-261-300; Unit-2: Page-324-335; Unit-3: Page-342-375; Unit-4: Page-382-412; Unit-5 and 6: Page-418-441]
4. Nystrom P. and Ashmore P. (2011). The Life of Primates. PHI Learning Private Limited, New Delhi.
5. Seth P. K. and Seth S. (1986). The Primates. Northern Book Centre, New Delhi, Allahabad.
6. Singh I. P. and Bhasin M.K. (1989). Anthropometry: A Laboratory Manual on Biological Anthropology.
7. Stanford C.; Allen J.S. and Anton S.C. (2012). Biological Anthropology: The Natural History of Mankind.
8. Swindler D. R. (2009). Introduction to the Primates. Overseas Press India Pvt. Ltd., New

Keywords

Human origin, Primates, Australopithecine, Homo erectus and evolution

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE -5 (DSC-5) – : Fieldwork Traditions and Ethnography

Credit distribution, eligibility and pre-requisites of the course:

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Fieldwork Traditions and Ethnography	**4**	**3**	**0**	**1**	**12th Pass**	**----**

Learning Objectives:

- How ethnographers conceptualize, conduct, and analyse their research;
- The types of research practices for generating data
- The ethics of ethnographic research, in relationship to disciplinary history

Learning Outcomes:

- Ability to conduct ethnographic research
- Generate data and write field notes
- Analyse and interpret ethnographic data

Syllabus:

Unit 1 Fieldwork Tradition **(12 Hours)**

The emergence of fieldwork tradition in Anthropology; Ethnography, its Nature, Trajectories, Genres; Ethnography: Process and Product

Unit 2 Idea of Field **(12 Hours)**

Concept of field: Idea of Place and Space, and its changing contours, Multi-sited Ethnography and Virtual Spaces.

Unit 3 Doing ethnography **(12 Hours)**

Doing ethnographic Fieldwork: Fieldwork Identity; Rapport and Relations; Representation and Emotions; Ethical issues.

Unit 4 Field Methods and Writing **(09 Hours)**

Observation, Interview, Case Study, Life History, Genealogy, Sensory Ethnography, Reflexivity and Ethnographic Writing

Practical – **30 Hours**

Designing Ethnographic Research: Identifying a problem, Defining the universe, Literature Review, selecting appropriate methods; doing Fieldwork: field diaries and field notes; Analysis and Writings.

1. Students are required to visit different field sites and come up with observational and experiential learnings
2. Presentations based on a Research Project

References

1. Clifford, J., & Marcus, G. E. (2011). *Writing culture: The poetics and politics of ethnography*. Berkeley, California: University of California Press.
2. O'Reilly, K. (2009). *Key Concepts in Ethnography (SAGE key concepts)*. Sage Publications.
3. Narayan, K. (2012). *Alive in the writing: Crafting ethnography in the company of Chekhov*. Chicago: University of Chicago Press.
4. Robben, C.G.M. and Jeffrey A. Sluka. (2012). Ethnographic Fieldwork: An Anthropological Reader. Oxford: Wiley-Blackwell.
5. Srinivasa, M. N., Shah, A. M., & Ramaswamy, E. A. (2008). *The fieldworker and the field*. New Delhi: Oxford University Press.
6. Srivastava, V. K. (2005). *Methodology and fieldwork*. New Delhi: Oxford University Press.

Keywords: Fieldwork, Ethnography, Ethics, Writing, Reflexivity

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE -6 (DSC-6) – : Human ecology and biological adaptation

Credit distribution, eligibility and pre-requisites of the course:

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Human ecology and biological adaptation	**4**	**3**	**0**	**1**	**12th Pass**	**----**

Learning Objectives

1. To introduce human ecology through biological perspectives where impetus will be laid on building a sense of awareness, empathy and understanding of existing environmental problems at various subsistence levels.
2. The course focuses on environmental matters that need attention on imperative basis.

Learning Outcomes

1. The students will be trained to identify biological adaptation strategies that can throw light on the resilient measures in different environmental stresses.
2. The students can be better equipped to understand the impact of various environments on everyday human life and can critically reflect on adoption of a healthy and sustainable environment.
3. The students can be encouraged to come up with innovative strategies to reduce the environmental menace created by humankind and aim towards a sustainable future.

Syllabus:

Unit I: Fundamentals of Human ecology **(12 Hours)**

- Human ecology and its interdisciplinary approaches
- Complexity and diversity of human population with respect to environment
- Concepts of human ecology and adaptation with special emphasis on biological dimensions

Unit II: Tools to understand human ecology **(12 Hours)**

- Methods of studying human ecology
- Indigenous knowledge for sustainability in various environments

Unit III: Human adaptation: Population and environment **(12 Hours)**

- Adaptation to various ecological stresses
- Ecological rules and their applicability to human populations

Unit IV: Human health and environment (09 Hours)

- Impact of various environments on human health
- Impact of urbanization and industrialization on humans

Practical – 30 Hours

A. *Size and Shape Measurements*:

1. Stature
2. Sitting Height
3. Body Weight
4. Total Upper Extremity Length
5. Total Lower Extremity Length
6. Nasal Breadth
7. Nasal Height

B. *Size and Shape Indices:*

1. Body Mass Index
2. Relative Sitting Height
3. Relative Upper Extremity Length
4. Relative Total Lower Extremity Length
5. Nasal Index

C. 1-2 public talks/workshops/project over the academic semester on research topics on human ecology and biological adaptation. These talks would bring students with brainstorming discussion on current issues.

References

1. H. Schutkowski. (2006) Human Ecology: Biocultural adaptations in Human communities, Springer Verlag, Germany (Unit 1).
2. Wilk. Richard and Haenn Nora (2006). The environment in Anthropology. New York University Press. NY. (Unit 2).
3. Ember and Ember (2014) Anthropology, Pearson publication, Hudson Avenue, New Jersey. (Unit 3)
4. Wilk. Richard and Haenn Nora (2006): The environment in Anthropology. New York University Press. NY. (Unit 4)

Teaching Learning Process

1. Classroom teachings
2. Seminars and presentations
3. Practical classes
4. Workshop

Keywords: adaptation, human ecology, ecological stresses, health

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.