

POOL OF DSE
Palaeoanthropology

DISCIPLINE SPECIFIC ELECTIVE COURSE -1 (DSE-1) – Palaeoanthropology

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		
Palaeoanthropology - DSE-1	04	03	Nil	01	Passed 12th with Science	NIL

Learning Objectives

The learning objectives of this course are as follows:

- To understand the fundamentals of palaeoanthropology
- To understand the evolutionary process, assessment of skeletal variability of fossil remains, and modern humans.
- To learn the role of palaeodemography and paleopathology in studying human origins

Learning Outcomes

- Student should understand the fundamental of palaeoanthropology
- Should understand the evolutionary journey of early to modern humans
- Student should learn the role of palaeodemography and paleopathology in studying human origins

Syllabus of

DSE-1 Unit 1

(08 Hours)

Dating methods, geological time scale, taphonomy and interpretation of the paleontological and archaeological records, taxonomic and chronological problems of fossils records.

Unit 2 (08 Hours)

Primate speciation and extinctions: adaptive primate radiation

Unit 3 (10 Hours)

Evolutionary biology: Human origins: Development, distribution and fossilized evidence of Australopithecines, Paranthropus (Zinjanthropus), Homo habilis, Homo erectus, Archaic H. sapiens.

Unit 4 (07 Hours)

Primate and Non-Primate Models for Early Hominid Behaviour; hominization process- Evolution of hominid-human bipedalism

Unit 5 (06 Hours)

Palaeodemography- reconstruction of population patterns from skeletal analysis, determination of demographic variables in prehistoric populations and post-Neolithic population growth.

Unit 6 (06 Hours)

Palaeopathology- bioarchaeological approach of disease; effects of agriculture, urbanization and slavery on health and disease; colonization and disease with special emphasis on the New World.

Practical (30 Hours)

1. Comparative primate osteology
2. Description and identification of the disarticulated skeleton of non-human primates
3. Identification and description of fossil casts

References

CS Larson (2016). Essentials of Physical Anthropology. W. W. Norton & Company. [Unit-1: Page- 165-190; Unit-2: Page-124-143; Unit-3: Page-223-230, 234-240, 253- 268, 274-291]

Craig Stanford et al. (2013). Biological Anthropology. Pearson, New York. [Unit-4: Page- 197-220; Unit-5: Page-1-11; Unit-6: Page-318-330]

Tattersall I. (2009). The Fossil Trail: How We Know What We Think We Know about Human Evolution. New York: Oxford University Press.

Additional Resources:

Waldron T. (2008): Palaeopathology. Cambridge University Press

Cela-conde CJ and Frisancho J. (2007). Human Evolution: Trails from the past. Ayala Oxford University Press.

Barnes E. Diseases and Human Evolution. (2005). University of New Mexico Press.

Pinhasi R and Mays S (2008). Advances in Human Palaeopathology. Chichester: John Wiley & Sons, Inc. (PM).

Hoppa RD and Vaupel JW. (2002). Paleodemography: Age Distributions from Skeletal Samples. Cambridge University Press.

Lansen CS, Matter RM and Gebo DL. (1998). Human Origin: The fossil Record.

Teaching Learning Process

The process of learning will involve acquisition of subject knowledge and understanding of skills required for a paleoanthropologist. Process will involve lectures, class-room discussion, assignments and practicals.

Keywords

palaeoanthropology, paleopathology, anthropology, and evolution

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