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.