Revised
SYLLABUS FOR
Bachelor of Science (Honours)

ABILITY ENHANCEMENT COMPULSARY COURSE

THREE YEAR DEGREE COURSE
SEMESTER SYSTEM

(Under New UGC CBCS Guidelines)

ABILITY ENHANCEMENT COMPULSORY COURSE

AECC (ECA 1.11)
ENGLISH COMMUNICATION

Theory Credits: 2

UNIT I **Introduction**
Theory of Communication, Types and Modes of Communication

UNIT II **Language of Communication**
Verbal and Non-verbal (Spoken and Written)
Personal, Social and Business
Barriers and Strategies
Intra-personal, Inter-personal and Group Communication

UNIT III **Speaking Skills**
Monologue
Dialogue
Group Discussion
Effective Communication/Miscommunication
Interview
Public Speech

UNIT IV **Reading and Understanding**
Close Reading
Comprehension
Summary Paraphrasing
Analysis and Interpretation

UNIT V **Writing Skills**
Documenting (Including Working Bibliography, Footnotes)
Letter Writing (Job application with CV)

Recommended Books and References:

1. *Fluency in English part II, OUP, 2006.*
2. *Business English,* Pearson,2008
3. *Language, Literature and Creativity,* Orient Blackswan,2013.
4. *Language Through Literature*. Ed. Dr Gauri Mishra, Dr Ranjan Kaul, Dr Brati Biswas
5. *MLA Handbook for Writers of Research Papers (*5th Edn) Joseph Gibaldi, EWP,2000.

AECC (TEA 1.11)
TENYIDIE

Theory Credits: 2

Kemerü Mhirü: *Kepethamia kehoupuorei shüphrüchie chiekeshüko nu puo kemevi kicüpuo puo se parlie vi shi le menuo di kephrünuomia ki pushülie.*

ZATSE I **Keriekimia teikijü lisi** – thuo 14 (Pethakecü tei – bavüdo 9) Pede Ketsokecü yopuo la thuo 10 mu petse ketsokecü la thuo 4.
1. Kerheimvü - Shürhozelie Liezietsu

ZATSE II **Tenyimia Kelhouzho Dze** – thuo 14 (Pethakecü tei – bavüdo 9) Pede Ketsokecü yopuo la thuo 10 mu petse ketsokecü la thuo 4.
1. Tenyimia Kelhou dze - Neichüriazo Chücha

ZATSE III **Noudo Dze** – thuo 14 (Pethakecü tei – bavüdo 9) Pede Ketsokecü yopuo la thuo 10 mu petse ketsokecü la thuo 4.
1. Kedietho Capi - Kekhrievo-ü Yhome

ZATSE IV **Geizo** – thuo 14 (Pethakecü tei – bavüdo 9) Pede ketsokecü yopuo la thuo 10 mu petse ketsokecü la thuo 4.
1. Tso-o mu Terhuopudiü
2. Tsuse
3. Thenu nie we
4. Tehoubo (Haigwang)
5. Shüphrü tei kevi (Medo)
6. U tsiepfumia (D. Kuolie)

ZATSE V **Tenyidie khuthu dze** – thuo 14 (Pethakecü tei – bavüdo 9) Pede Ketsokecü yo puo la thuo 10. Mu petse ketsokecü la thuo 4.
1. Tenyidie Khuthuzho - D. Kuolie

Kephrüdako:

1. Shürhozelie Liezietsu : *Kerheimvü* - UAP, Kohima 2006
2. Neichüriazo : *Tenyimia Kelhou dze* - UAP, Kohima 2008
3. Kekhrievoü Yhome : *Kedietho Capi* - UAP, Kohima 2002
4. Shürhozelie Liezietsu : *Üca 53* - UAP, Kohima 2006
5. Shürhozelie Liezietsu : *U Teiki Geizo* - UAP, Kohima 1989
6. D. Kuolie : *Tenyidie Khuthuzho* - UAP, Kohima 2006

AECC (ESA 2.11)
ENVIRONMENTAL SCIENCE

Credits: 2

UNIT I **Introduction to environmental studies *(2 lectures)***

- Multidisciplinary nature of environmental studies;
- Scope and importance; Concept of sustainability and sustainable development.

UNIT II **Ecosystems *(6 lectures)***

- What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems:
  a) Forest ecosystem
  b) Grassland ecosystem
  c) Desert ecosystem
  d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

UNIT III **Natural Resources: Renewable and Non-renewable Resources *(8 lectures)***

- Land resources and land use change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.
- Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state).
- Energy resources: Renewable and nonrenewable energy sources, use of alternate energy sources, growing energy needs, case studies.

UNIT IV **Biodiversity and Conservation *(8 lectures)***

- Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

UNIT V **Environmental Pollution *(8 lectures)***

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste.
- Pollution case studies.

UNIT VI **Environmental Policies & Practices *(7 lectures)***

- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture
- Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).

- Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

UNIT VII Human Communities and the Environment *(6 lectures)*

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management: floods, earthquake, cyclones and landslides.
- Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

UNIT VIII Field work *(Equal to 5 lectures)*

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems-pond, river, Delhi Ridge, etc.

Recommended Books and References:

1. Carson, R. 2002. *Silent Spring*. Houghton Mifflin Harcourt.
2. Gadgil, M., & Guha, R. 1993. *This Fissured Land: An Ecological History of India*. Univ. of California Press.
3. Gleeson, B. and Low, N. (eds.) 1999. *Global Ethics and Environment*, London, Routledge.
4. Gleick, P. H. 1993. *Water in Crisis*. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. *Principles of Conservation Biology*. Sunderland: Sinauer Associates, 2006.
6. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. *Science,* 339: 36-37.
7. McCully, P. 1996. *Rivers no more: the environmental effects of dams* (pp. 29-64). Zed Books.
8. McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.
9. Odum, E.P., Odum, H.T. & Andrews, J. 1971. *Fundamentals of Ecology*. Philadelphia: Saunders.
10. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.
11. Rao, M.N. & Datta, A.K. 1987. *Waste Water Treatment*. Oxford and IBH Publishing Co. Pvt. Ltd.
12. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. *Environment*. 8th edition. John Wiley & Sons.
13. Rosencranz, A., Divan, S., & Noble, M. L. 2001. *Environmental law and policy in India. Tripathi 1992*.
14. Sengupta, R. 2003. *Ecology and economics*: An approach to sustainable development. OUP.
15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. *Ecology, Environmental Science and Conservation*. S. Chand Publishing, New Delhi.
16. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. *Conservation Biology*: *Voices from the Tropics*. John Wiley & Sons.
17. Thapar, V. 1998. *Land of the Tiger*: *A Natural History of the Indian Subcontinent*.
18. Warren, C. E. 1971. *Biology and Water Pollution Control*. WB Saunders.
19. Wilson, E. O. 2006. *The Creation: An appeal to save life on earth*. New York: Norton.
20. World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University Press.