



KARNATAK UNIVERSITY, DHARWAD
ACADEMIC (S&T) SECTION
ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ
ವಿದ್ಯಾಮಂಡಳ (ಎಸ್&ಟಿ) ವಿಭಾಗ



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NAAC Accredited
'A' Grade 2014

website: kud.ac.in

No. KU/Aca(S&T)/SVB-08/BOS /Geography (UG) /20-21 999

Date: 16 OCT 2020

NOTIFICATION

Sub: Regarding introduction of the syllabus of Environmental Science (AECC) UG under C.B.C.S. w.e.f. the academic year 2020-21 & onwards.

- Ref: 1. UGC Letter DO No. 1-1/2016(SECY), dt. 10.08.2016.
2. Special Faculty Res. No. 07, dt. 11.08.2020.
3. Special Academic Council Res. No. 41, dt. 21.08.2020.
4. Vice-Chancellor's order dated - 07-10-2020

Adverting to the above, it is hereby notified to the Principals of all constituent and affiliated degree colleges coming under the jurisdiction of Karnatak University, Dharwad that the Environmental Science (AECC) syllabus for I Semester which is annexed herewith in Annexure-A is introduced under C.B.C.S. from the academic year 2020-21 & onwards.

Hence, the contents of this notification may please be brought to the notice of the students and all the concerned. The prescribed C.B.C.S. syllabus may also be obtained through K.U.website (www.kud.ac.in).

Handwritten: 15/10/2020
(Dr. Hanumantappa K.T)
REGISTRAR

To,

1. The Chairman, BOS Geography (UG), Dept. of Geography , K.U.Dharwad.
2. The Chairman, Dept. of Geography , K.U.Dharwad.
3. The Principals of all the constituted and affiliated degree colleges under the jurisdiction of Karnatak University, Dharwad. (The same may be sent through e-mail)
4. The Registrar (Evaluation), K.U.Dharwad.

Copy fwcs to:

1. Dr. Ch.Ramesh, Dean, Faculty of Science & Tech., Dept. of Botany, K.U.Dharwad.
2. The Director, IT Section, Examination Section, K.U.Dharwad for information and to upload on K.U.Website (www.kud.ac.in).

Copy to:

1. PS to Vice-Chancellor, K.U.Dharwad.
2. S.A. to Registrar, K.U.Dharwad.
3. O.S., Exam UG / Confl / QP / GAD Section, K.U.Dharwad.
4. The System Analyst, Computer Unit Exam Section, K.U.Dharwad.

Annexure “A”

**Karnatak University, Dharwad
All Under Graduate Programmes
Semester -I**

**Ability Enhancement Compulsory Course (AECC)
Environment Studies: ES-A**

Total Credit: 2

Lecture/semester: 30 hrs

Two Hours Lecture in a week.

Total Number of marks: 50 (10 IA + 40 Sem. end exam)

Duration of exam: 1.5 hrs.

Unit 1: Introduction to environmental studies

- Multidisciplinary nature of environmental studies;
- Scope and importance; Concept of sustainability and Sustainable development. (2 lectures)

Unit 2: Ecosystems

- 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)(6 lectures)

Unit 3: Natural Resources: Renewable and Non-renewable Resources

- 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 non renewable energy sources, use of alternate energy sources, growing energy needs, case studies. (8 lectures)

Unit 4: Biodiversity and Conservation

- Levels of biological diversity : genetic, species and ecosystem diversity; Bio-geographic zones of India; Biodiversity patterns and global biodiversity hot spots
- India as a mega-biodiversity nation; Endangered and endemic species of India
- Threats to bio-diversity: 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. (8 lectures)

Unit 5: Environmental Pollution

- 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. (6 lectures)

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