



ಬಿಜಯನಗರ ಶ್ರೀಕೃಷ್ಣದೇವರಾಯ ವಿಶ್ವವಿದ್ಯಾಲಯ

"ಜ್ಞಾನ ಸಾಗರ" ಆವರಣ, ವಿನಾಯಕ ನಗರ, ಕಂಟೋನ್ಮೆಂಟ್, ಬಳ್ಳಾರಿ - 583 105

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY

"Jnana Sagara" Campus, Vinayaka Nagara, Cantonment, Ballari - 583 105



ಕುಲಸಚಿವರು

08392-242703

08392-242097

ಸಂಖ್ಯೆ:ವಿಶ್ರೀಕೃವಿಬ/ವಿಮವಿ/ಅಮವ/2021-22/1374

ದಿನಾಂಕ: 09.11.2021

ಆದೇಶ

ವಿಷಯ: ಸ್ನಾತಕ ಮಹಾವಿದ್ಯಾಲಯದ ಪ್ರಥಮ ಹಾಗೂ ದ್ವಿತೀಯ ಸೆಮಿಸ್ಟರ್ ವಿದ್ಯಾರ್ಥಿಗಳು **Ability Enhancement Compulsory Course (AECC)**, ಮತ್ತು **Skill Enhancement Course (SEC)** ಅಧ್ಯಯನದ ವಿಷಯಗಳನ್ನು ಗುಂಪುಗಳನ್ನಾಗಿ ವಿಂಗಡಿಸುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: 1. ದಿನಾಂಕ: 09.11.2021 ನಡೆದ ಪ್ರಾಂಶುಪಾಲರ ಆನ್‌ಲೈನ್ ಸಭೆ.

2. ಮಾನ್ಯ ಕುಲಪತಿಗಳ ಅನುಮೋದನೆ ದಿನಾಂಕ: 09.11.2021.

ಮೇಲ್ಕಂಡ ವಿಷಯ ಹಾಗೂ ಉಲ್ಲೇಖದನ್ವಯ, ವಿಶ್ವವಿದ್ಯಾಲಯದ ಅಧೀನದಲ್ಲಿ ಬರುವ ಎಲ್ಲಾ ಸ್ನಾತಕ ಮಹಾವಿದ್ಯಾಲಯದ ಪ್ರಥಮ ಹಾಗೂ ದ್ವಿತೀಯ ಸೆಮಿಸ್ಟರ್ ವಿದ್ಯಾರ್ಥಿಗಳು ಪ್ರಸಕ್ತ ಶೈಕ್ಷಣಿಕ ಸಾಲಿನ 2021-22 ರಿಂದ **Ability Enhancement Compulsory Course (AECC)**, ಮತ್ತು **Skill Enhancement Course (SEC)** ವಿಷಯಗಳನ್ನು ಅಭ್ಯಾಸ ಮಾಡುವ ನಿಟ್ಟಿನಲ್ಲಿ ಈ ಕೆಳಗಿನಂತೆ ಗುಂಪುಗಳಾಗಿ ವಿಂಗಡಿಸಿದೆ.

ಮುಂದುವರೆದು, ಪ್ರಾಂಶುಪಾಲರು ಕಡ್ಡಾಯವಾಗಿ ಈ ಕೆಳಕಂಡ ಕೋರ್ಸುಗಳಲ್ಲಿ ವಿಂಗಡಿಸಿದ ಗುಂಪಿಗನುಗುಣವಾಗಿ ವಿದ್ಯಾರ್ಥಿಗಳನ್ನು ಆಯಾ ವಿಷಯಕ್ಕೆ ನೋಂದಾಯಿಸಿಕೊಳ್ಳಲು ಸೂಚಿಸಿದೆ.

Sl No.	Semester	Groups	Course	Ability Enhancement Compulsory Course (AECC) / Skill Enhancement Course (SEC)
01	First Semester UG Courses	Group 01	BA, BBA, BSW	Environmental Studies
		Group 02	B.Com, B.Sc, BCA	Digital Fluency
02	Second Semester UG Courses	Group 01	BA, BBA, BSW	Digital Fluency
		Group 02	B.Com, B.Sc, BCA	Environmental Studies

ಕುಲಸಚಿವರು

ಬಿಜಯನಗರ ಶ್ರೀ ಕೃಷ್ಣದೇವರಾಯ ವಿಶ್ವವಿದ್ಯಾಲಯ
ಬಳ್ಳಾರಿ

ಗೆ,

ಪ್ರಾಂಶುಪಾಠ,

ವಿಶ್ವವಿದ್ಯಾಲಯದ ಅಧೀನದಲ್ಲಿ ಬರುವ ಎಲ್ಲಾ ಸ್ನಾತಕ ಮಹಾವಿದ್ಯಾಲಯಗಳು,
ವಿಶ್ವೀಕೃತ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಂಗಳೂರು.

ಪ್ರತಿಗಳು:

1. ಮಾನ್ಯ ಕುಲಪತಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಶ್ವೀಕೃತ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಂಗಳೂರು.
2. ಕುಲಸಚಿವರು (ಮೌಲ್ಯಮಾಪನ), ವಿಶ್ವೀಕೃತ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಂಗಳೂರು.
3. ಕಛೇರಿ ಪ್ರತಿ.

**VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY,
BALLARI**



ENVIRONMENTAL STUDIES SYLLABUS

**FOR THE UNDER GRADUATE COURSE
B.A/B.Sc/B.Com/B.C.A/B.B.A/B.S.W COMMON PAPER
(COMPULSORY) (CBCS)**

With effect from Academic year 2021-22

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY

Jnanasagara campus, Vinayakanagara, Cantonment, Ballari.-583105

Ability Enhancement Compulsory Course

**SYLLABUS of ENVIRONMENTAL STUDIES (CBCS) for
B.A/B.Sc/B.Com/B.C.A/B.B.A/B.S.W/BHM
COMMON PAPER (COMPULSORY) EFFECTIVE FROM 2021-22**

ENVIRONMENTAL STUDIES (CBCS) (AECC)

COURSE CODE: 21AECCE1

Semester: I/II

Internal Assessment: 20

End semester Examination: 30

30 Hrs

Total Marks: 50

Course Content

Subject	Environmental studies Ability Enhancement Compulsory Courses(AECC)	Semester
Course	BA, BBA,BSW(Group I)	I
	B.Com, BSc and BCA (Group II)	II

The scheme of Examination and the question paper pattern for AECC – Environmental Studies will be multiple choice questions (MCQ) for 30 marks and 20 marks for internal assessment with 2 hours of teaching per week with 2 credits.

Number of Theory/Credits	Number of lecture hours
2	30

Content of AECC – ENVIRONMENTAL STUDIES

	Environmental Studies and Ecosystems	30 hours
Unit 1	Environmental Studies and Ecosystems	8hrs
	<p>Introduction to Environmental Studies Multidisciplinary nature of environmental studies Scope and importance; Concept of sustainability and sustainable development.</p> <p>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: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</p>	
Unit 2	Natural Resources and Biodiversity & Conservation	14hrs
	<p>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.</p> <p>Biodiversity & Conservation Levels of biological diversity: Genetic, species and ecosystem diversity; Biogeographic zones of India;</p>	

	<p>Biodiversity patterns and global biodiversity hot spots.</p> <p>India as a mega-biodiversity nation; Endangered and endemic species of India.</p> <p>Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.</p> <p>Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.</p>	
Unit 3	Environmental Pollution	8hrs
	<p>Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution,</p> <p>Nuclear hazards and human health risks</p> <p>Solid waste management, Control measures of urban and industrial waste</p> <p>Pollution case studies.</p>	

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2. Develop holistically by learning essential skills such as effective communication, problem-solving, design thinking, and teamwork															
3. Build his/her personal brand as an agile and expansive learner – one who is interested in horizontal and vertical growth															

Course Articulation Matrix relates course outcomes of course with the corresponding program outcomes whose attainment is attempted in this course. Mark 'X' in the intersection cell if a course outcome addresses a particular program outcome.

Course Content (Digital 101)

	Details of topic	Duration
Module 1: Emerging Technologies	Overview of Emerging Technologies: <i>i.</i> Artificial Intelligence, Machine Learning, Deep Learning, <i>ii.</i> Database Management for Data Science, BigData Analytics, <i>iii.</i> Internet of Things (IoT) and Industrial Internet of Things (IIoT) <i>iv.</i> Cloud computing and its service models <i>v.</i> Cyber Security and Types of cyber attack	05 hours
Module 2: Applications of Emerging Technologies	Applications of emerging technologies: <i>i.</i> Artificial Intelligence <i>ii.</i> Big Data Analytics <i>iii.</i> Internet of Things <i>iv.</i> Cloud Computing <i>v.</i> Cyber Security	05 hours
Module 3: Building Essential Skills Beyond Technology	Importance of the following: <i>i.</i> Effective Communication Skills <i>ii.</i> Creative Problem Solving & Critical Thinking <i>iii.</i> Collaboration and Teamwork Skills <i>iv.</i> Innovation & Design Thinking <i>v.</i> Use of tools in enhancing skills	05 hours

References to learning resources:

1. The learning resources made available for the course titled “Digital 101” on Future Skills Prime Platform of NASSCOM

Pedagogy

Flipped classroom pedagogy is recommended for the delivery of this course. For every class:

1. Before coming to the class students are expected to go through the content (both video and other resources) on the related topic and give the quiz on Future Skills Prime Platform of NASSCOM.
2. Class room activities are designed around the topic of the session towards developing better understanding, clearing mis-conceptions and discussions of higher order thinking skills like application, analysis, evaluation and design.
3. Every theory class ends with announcement of exercise for practical activity of the week

Assessment

Formative Assessment	
Assessment Occasion	Weightage in Marks
1. After watching videos of each topic, 05 marks tests are to be given by the students on Future Skills Prime Platform. The total marks earned by students is to be computed.	No weightage
2. Practical Sessions: A total of 05 activities from Module 1 and Module 2 and 03 activities from Module 03 need be completed by students. All the activities are expected to be done in teams of 02 -03 students per team. Each session performance is assessed for 10 marks against announced rubrics for assessment. The total marks earned by students is to be computed.	50%
3. Summative Assessment : After completion of all 3 modules students will be giving Final Assessment with 30 questions (30 min) on Future Skills Prime platform. Students will have two attempts and those who score at least 50% marks will get certificate from NASSCOM-AICTE.	This assessment may be given 50% weight in computing the final grade of the students.