Uka Tarsadia University

5 Years Integrated M.C.A.

AECC2 Environmental Studies
(060060210)

2nd Semester

EFFECTIVE FROM JANUARY-2016
UKA TARSADIA UNIVERSITY
5 Years Integrated M.C.A. (2nd Semester) Syllabus, 2015-2016
Course Code: 060060210
Course Title: AECC2 Environmental Studies
Course Credits: 2
[ Lectures: 02, Tutorial: 00, Practical: 00 ]
Prerequisites: Nil
Objectives:
To make students aware about the variation in environment and its impact on business and on the society as a whole.

1. The Multidisciplinary nature of environmental studies [16.66 %]
   1.1. Definition, scope and importance,
   1.2. Need for public awareness.
   1.3. Institutions in Environment

2. Natural Resources [16.67 %]
   2.1. Introduction
   2.2. Renewable and non-renewable resources: types

   3.1. Introduction-Definition: genetics, species and ecosystem diversity.
   3.2. Biodiversity at global, national and local level.
   3.3. Hot-spots of biodiversity.
   3.4. Threats to biodiversity: habitats loss, poaching of wild life, man wildlife conflicts.

4. Environmental Pollution [16.66 %]
   4.1. Definition Causes, effects and control measures of: Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear hazards
   4.2. Role of an individual in prevention of pollution

5. Social issues and the Environment [16.67 %]
   5.1. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust
   5.2. Consumerism and waste products
   5.3. Environmental ethics: Issues and possible solution
   5.4. The Environment Protection Act
   5.5. The Air (prevention and control of pollution) Act
   5.6. The Water (prevention and control of pollution) Act
   5.7. The Forest Conservation Act

6. Human population and the environment [16.67 %]
   6.1. Environment and human health
   6.2. Women and child welfare
   6.3. Ill-effects of fire works
   6.4. Role of information technology in environment and human health Case studies
   6.5. Solid waste management: Causes, effects and control measure of urban and industrial waste

Course Outcomes:

CO1: Identify the multidisciplinary nature of environment.
CO2: Describe the concepts of natural resources along with categories.
CO3: Discuss biodiversity and identify current threats and techniques to avoid it.
CO4: Analyse role of an individual in prevention of environment pollution.
CO5: Discuss social issues and possible solution affected to environment.
CO6: Describe causes, effect and control measure of urban and industrial waste to save human health.
Course Objectives and Course Outcomes Mapping:
To aware about the environment :CO1,CO2,CO3,CO6
Analyse impact of environment on society :CO4,CO5,CO6

Course Units and Course Outcomes Mapping

<table>
<thead>
<tr>
<th>Unit No.</th>
<th>Unit</th>
<th>Course outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Multidisciplinary nature of environmental studies</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Natural Resources</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Biodiversity and it's Conservation</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Environmental Pollution</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>5</td>
<td>Social issues and the Environment</td>
<td>✓</td>
</tr>
<tr>
<td>6</td>
<td>Human population and the environment</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>

Modes of Transaction (Delivery):
- Lecture method shall be used but along with it, as and when required, discussion method would be fruitful. It may be supplemented with various appropriate audio-visual aids.
- Assignment activity should be designed and given to group of student for solution.

Activities/Practicum:

- Students may be form a group under the guidance of teacher and covering various concepts using videos along with field projects.
- Faculty members shall explain in a class room using black board and multimedia projector through PowerPoint presentation.

Text Books:
1. Textbook of Environmental studies, ErachBharucha, UGC
2. Fundamental concepts in Environmental Studies, D D Mishra, S Chand & Co Ltd

References:
2. Bharucha Erach, (2003), The Biodiversity of India, Mapin Publishing Pvt. Ltd,

Concept Map:
It is a hierarchical / tree based representation of all topics covered under the course. This gives direct / indirect relationship /association among topics as well as subtopics.
Unit-1: The Multidisciplinary nature of environmental studies

Unit-2: Natural Resources

Unit-3: Biodiversity and it's Conservation
Unit-4: Environmental Pollution

Environmental Pollution
- Definition
- Causes, effects and control measures of
- Air pollution, Water pollution, Soil pollution, Marine pollution
- Noise pollution, Thermal pollution, Nuclear hazards
- Role of an individual in prevention of pollution

Unit-5: Social issues and the Environment

Social issues and the Environment
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust
- Consumerism and waste products
- Forest Conservation Act
- Environmental ethics: Issues and possible solutions
- The Environment Protection Act

Unit-6: Human population and the environment
Assessment:

- The weightage of CIE and University examination shall be as per the University regulations.
- At the institute level the structure of CIE for a course may comprise of Quizzes, Unit Test, Assignments, Mini Projects, and Self-Creation Parameters applicable to both theory and practical courses.
- The frequency and weightage of each assessment parameter may vary from time to time to satisfy courses objectives and outcomes so as to achieve programme educational objectives and its outcomes.
- The courses teacher is free to decide the number of assessment parameters for a course subject to prior approval of the authority.
- The assessment policy document should be uploaded on the web before the commencement of the semester.
- Syllabus for each CIE parameter shall be covered by the date of the corresponding test.
- No make-up work shall be accepted for missed or failed tests.

Question Bank:

Question Bank shall consist of Multiple Choice Questions

Academic Honesty:

Coursework is assumed to be accomplished individually (otherwise stated). Any portion of submission taken directly from anywhere (like statements in assignment/report etc.) without modification must be accompanied with the properly formatted reference giving credit to the author and to the source.

UFM:

- If two or more submitted papers are too similar for coincidence, a penalty shall be imposed that shall usually be the same for the student who did the original as for the one copying from it.
- Any ascertained fact of breaking institute policy shall be associated with one or all of the
following: (i) zero marks for the work; (ii) report to the programme coordinator; (iii) report to the Director.

Discussion Group:

Students are welcome to post on the Course Discussion Board available on SRIMCA View Course Webpage. It is responsibility of the concern Course teacher to maintain Discussion Board.

Attendance:

- Attendance means being present for the entire class session. Those arriving significant late or leaving significantly early without prior permission shall be counted as ABSENT for the entire class session.
- Concern teacher must clearly state his/her attendance policies at the first class meeting.