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##  (Established under section 3 of the UGC Act 1956, by notification No.F.9-12/2001-U3 Government of India)Accredited by NAAC with ‘A’ Grade­­­­­Founder: Prof. Dr. S. B. Mujumdar, M.Sc.,Ph.D. *(Awarded Padma Bhushan and Padma Shri by President of India)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

## *Faculty of Humanities and Social Sciences (Political Science)*

## Sub Committee - Specialization for Curriculum Development

**Post Graduate/ Under Graduate**

**Course Title: Sustainability for the Post-2015 World**

**Course Code: T6564**

**Number of Credits: 4 (60 hr)**

**Level: 2**

**Introduction**

The year 2015 was a watershed year for the concept of sustainability. The world saw culmination of the international efforts under the Millennium Development Goals, and framing of the Sustainable Development Goals. An international agreement on climate change mitigation and adaptation was also achieved after prolonged negotiations that had been going on for more than 5 years. The year also saw an escalation of terrorist activities across the world, leading to an international refugee crisis, which too is and will continue to have impacts on local sustainability across the world.

The course is aimed at understanding the implications of these events from the perspective of a sustainable future for humanity. The broad focus of the course will be on global issues of food-water-energy security, green business processes, urbanization, etc. Specific challenges faced in the Indian and local (Pune) context will also be addressed.

**Learning Objective/Outcome (s):** ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­

1. To explain the interlinkages between population, consumption, and local and global environmental changes, and their implications for sustainability in the post-2015 world.
2. To infer the sustainability potential of a path of development in the local, national or global context.
3. To recognize and outline the sustainability potential for business processes.
4. To review plans/policies for urban development in India through the sustainability lens.

**Pre-learning:**

None beyond mathematics and sciences upto 10th grade level

**Course Outline**

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| **Sr.No.** | **Topic** | **Hours** |
| 1. | **Basics of Sustainability*** + Understanding sustainability in the context of ecological footprint and the stresses experienced by the earth
	+ The population-lifestyle matrix
	+ Impact of local and global environmental changes on sustainability – case studies
	+ Measures of sustainability
	+ International response to sustainability challenge – Millennium Development Goals and Sustainable Development Goals
 | **20**  |
| 2.  | **Food-Water-Energy nexus post-2015** * + Interlinkages between the three resources
	+ Challenges in food, water, and energy security post-2015
	+ India-specific challenges and case studies
	+ Hands-on activity/Field visit
 | **15** |
|  3. | **The “story of stuff” for post-2015*** + Green manufacturing – case studies
	+ Green services – case studies
	+ Environment friendly waste management – case studies
	+ Basic concept of sustainability reporting
 | **15** |
| 4. |  **Post-2015 Urbanisation Challenge*** + Urbanisation in the developed world Vs developing world
	+ Urbanisation challenge for India - Smart or Sensible?
	+ Case study: Development challenge of Pune city
 | **10** |
|  | **Total** | **60** |

**Pedagogy**

1. The interactive and discussion mode of teaching is aimed at a thorough comprehension and application of the concepts within the course
2. Audio-visual aids are incorporated to reinforce concepts
3. Self study based on relevant literature forms a part of the teaching pedagogy
4. Either hands on activities or a field visit will be carried out to develop a deeper understanding of the course contents.

**Books Recommended**

1. Collapse: How Societies Choose to Fail or Succeed by Jared Diamond, Penguin Books, 2011
2. This Fissured Land – An Ecological History of India by MadhavGadgil, RamchandraGuha, Oxford University Press, 2013 ed.
3. Climate Change and India: A 4 x 4 Assessment by Indian Network for Climate Change Assessment 2010 (downloadable from internet)
4. ‘Regenerative Cities’, Herbert Gerardet, World Future Council, 2010 (downloadable from internet)
5. Various development plan related documents from Pune Municipality website
6. Various video films
7. Websites of UNFCCC, UNEP, UNDP, etc.

**Suggested Assessment/ Evaluation Methods**

As per SIU Rules on Pg no. 20 – 5.1 e) III.

**Benchmarked against similar courses in other national/ international universities /organizations**

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| **S. No.** | **Name of the Course** | **Name of University where it is offered** |
| 01 | ENVR E-117 Sustainability Leadership for the Twenty-First Century | Harvard University, USA (Harvard Extension School, course offered for Bachelor of Liberal Arts degree) |
| 02 | SDEV W2300 Challenges of Sustainable Development | Columbia University, USA (course offered as a part of an undergraduate program on Sustainable Development at Columbia College, in collaboration with the Earth Institute) |

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| **Name of Members** | Sulakshana Sen | Khaliq Parkar | Alok Oak | Dr. Sukalpa Chakravarti |  |
| **Designation** | Asst.Professor | Asst.Professor | Ph.D Student | Deputy Director |  |
| **Org. / Inst.** | SSLA | SSLA | SSLA | SSIS |  |
| **Signature** |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Name of Experts** | Sulakshana Sen |  |
| **Designation** | Asst.Professor |  |
| **Org. / Inst.** | SSLA |  |
| **Signature** |  |  |

 **Signature of Dean:**

**Date:**