Term-II (2018-19)

Faculty Profile

Course title- SDGS and Built Environment

Dr. Preeti Shroff

Dr. Preeti Shroff has an extensive experience of over 25 years in the field of international management and development, democratic governance, public and private sector leadership, and civil society capacity development. Her experience includes varied international projects involving programme management and trainings in leadership across Africa, Asia, Middle East, Europe and North America. She has worked with various organizations such as USAID, US State Department's Bureau of Human Rights (DRL), Middle Eastern Peace Initiative (MEPI), World Bank, Institute for Inclusive Security, Peace Corps, Atlas Corps, Ford Foundation, The Zonta Foundation, Canadian Ministry for Economic Development, OXFAM, Social and Health Ministry of Government of Finland, Misereor of Germany, UNICEF and Government of India.

Her areas of interests include emphasis on next generation leadership and designing solutions through innovative organizational enterprise, youth education and partnerships, cross-sector resource sharing, technology platform leveraging and engaging communities for social innovations. She has taught at Johns Hopkins University School for Advanced International Studies (SAIS), State University of New York, School for International Training (SIT) and World Learning, Washington DC.

Course Outline: *SDGs and built environment*

Professor's Name: Preeti Shroff - Mehta

Number of credits:

1) Course brief / Abstract: *(what is the course looking at doing / exploring?)*

The United Nations in 2015, set 17 Sustainable Development Goals (SDGs). These goals are largely interdependent, yet each of them has separate targets and in total there are 169 targets that need to be achieved to achieve all the 17 goals. The SDGs cover social and economic development issues including poverty, hunger, health, education, climate change, gender equality, among others. It also seeks to strengthen universal peace in larger freedom. The course will introduce the need for and the development of SDGs and its application in both the macro and the micro contexts and will help students understand the SDGs better, with focus on operationalising of the SDGs in various country contexts, breaking it down all the way to individual contribution to the SDGs and sustainable development.

We are now living within the Anthropocene age: an age when human activity has dominant impact on the Earth's ecosystems. Our built environment sector is both the cause for and provider of solutions to the climate change problems we face today. Yet, our sustainability performance indicators are worsening. Moving towards a sustainable future is not a luxury, but an imperative.

New sustainability schools of thought and standards for built environment are emerging. These new schools of thought, labelled - deep green, net-positive, restorative and regenerative, are challenging the way we think about sustainability, encouraging us to create a new normal. They represent a vision of new sustainability – one that gives back more than it takes, rather than merely a 'less bad' version of what we already practice. This course will delve into all these various emerging schools of thought, helping redefine what real sustainability looks like for the built environment.

For students of architecture and design, this course will explore SDGs, the role of the built environment in achieving the SDGs, concepts and theories around sustainable built environment and tools to measure impact. The course will look facilitate a different thinking that will enable new solutions for sustainability in the built environment.

2) **Course Objectives:** *(Why is the course necessary? What does it hope to achieve?)*

- Introduction to SDGs - Need and development of the SD's - Understanding 17 Goals and 169 targets, its applications and operationalisation.
- Understanding the current world context, challenges, micro and macro contexts and where we are through relevant case studies and group work.
- Understanding of a sustainable built environments role in achieving the SDGs.
- New standards for built environment – deep green, net-positive, restorative & regenerative.
- Measuring impact.
- Applying new standards of built environment into your own project.
- Challenges in operationalisation and finding new solutions.

3) **Prerequisites:** Must be a student of Anant University

4) **Learning Outcomes:**

a) Develop empathy in the students by teaching them the need for and the development of the SDGs. Help them understand the role of the individual and collective in achieving the SDGs.
b) Students will be able to see the role of the built environment on SDGs.
c) Moving from 'being less bad' to 'regenerative'.
d) Develop team work through group problem solving, to help students understand the value of diversity.
e) Apply theories of sustainability into a real project. Operationalising and its challenges.
f) To create a prototype/ plan, that can be actualised in the future.

Schedule:

Date & Day	*9:30 AM – 1 PM*
12 November Monday	*Expectation setting; Understanding sustainability; Introduction to SDGs; Current Challenges*
13 November Tuesday	*Built environment's role in achieving SDGs; Country case studies; Current challenges*
14 November Wednesday	*From being 'less bad' to 'reversal' to 'regenerative' – A new approach to sustainability and the built environment*

15 November Thursday	*Restorative approaches- theories & case studies – Understanding Nature, Earth, Light & Air in the built environment - Concepts Biomimicry, Re-wilding buildings, Net positive construction*
	9:30 AM – 3PM
26 November Friday	*Understanding the role of energy, water, materials and carbon emissions in the built environment – Net positive energy, water as a biophillic enabler, Red list of materials & chemicals, 'Healthy' vs 'less harmful'*
27 November Saturday	*New standards of sustainability – Moving towards a net-positive zone;The Living Building Challenge; The WELL Building Standard; Natural Step framework for Sustainability*
28 November	*Talk by Mr. Kartikeya Sarabhai, Founder & Director, Centre for Environmental Education; Field trip to CEE*
29 November	*Applying sustainability theories and standards into a live project – dream built environment project – presentations by students. Venue - MICA*
3 December	*Presentations by the groups on their dream built environment projects; Reflections on challenges of operationalisation. Venue – MICA*

g) Assignment Brief and Evaluation criteria *:

Class Participation	*Weightage*	*Individual/Group*	*Brief*	*Form of output:*
Class participation	15%	Individual		
Assignment 1	30%	Group presentation	Groups will work on – 'dream building project' with new standards of sustainability and present to the class; discuss challenges of operationalization	Presentation
Assignment 2	55%	Individual	Individual paper on given subject	Paper

** Please refer to grading criteria and sheet*

h) Samples of expected work:

1) Individual paper
2) Group presentation

i) Reading list and references:

- Chapters from the book 'Futurestorative' by M. Brown
- Green building: Improving the lives of billions by helping to achieve the UN Sustainable Development Goals

  http://www.worldgbc.org/news-media/green-building-improving-lives-billions-helping- achieve-un-sustainable-development-goals

- Sustainable Built environment's role in attaining the SDGs

  https://www.researchgate.net/publication/307906714_SDG2030_A_SUSTAINABLE_BUILT_ENVIRONMENT%27S_ROLE_IN_ACHIEVING_THE_POST-2015_UNITED_NATIONS_SUSTAINABLE_DEVELOPMENT_GOALS

- An ethical framework for a sustainable world – Kartikeya Sarabhai
- Other readings will be handed out in class