Teaching Lesson Plan

MDC-2

Sustainable Development (3 Credits)

Lecture hours: 45

OBJECTIVES: To design sustainability performance metric to assess the impact on community's sustainable development

SN	Subject and Objectives	Lectures Hrs	Methodology	Evaluation Mode
Unit-I	**INTRODUCTION TO SUSTAINABLE DEVELOPMENT**	**9Hrs**		
	1. Broad introduction to SD - its importance, need, impact and implications; 2. definition coined; evolution of SD perspectives (MDGs AND SDGs) over the years; 3. recent debates; 4. 1987 Brundtland Commission and outcome; 5. later UN summits (Rio summit, etc.) and outcome.	9	PPT, Illustrations	Q & A, Assignments
Unit-II	**ECOSYSTEM AND SUSTAINABILITY**	**6Hrs**		
	1. Fundamentals of ecology - types of ecosystems & interrelationships, factors influencing sustainability of ecosystems, ecosystem restoration -developmental needs. 2. Introduction to sustainability & its factors, requirements for sustainability: 3. food security and agriculture, renewable resources - water and energy, non-renewable resources, factors and trade-offs, 4. sustainability conflicts, 5. a conceptual framework for linking sustainability and sustainable development	6	PPT, Illustrations	CIA
Unit-III	**DIMENSIONS TO SUSTAINABLE DEVELOPMENTS**	**6Hrs**		
	1. society, environment, culture and economy; 2. current challenges - natural, political, socio-economic imbalance; 3. sustainable development initiatives and policies of various countries: global, regional, national, local; 4. needs of present and future generations - political, economic, environmental.	6	PPT, Illustrations	Q & A, Assignments
Unit-IV	**FRAMEWORKS OF SUSTAINABILITY**	**6Hrs**		
	1. Analytical frameworks in sustainability studies,	6	PPT, Illustrations	Q & A, Assignments

	2. Sustainability metrics: criteria and indicators; the significance of quantitative and qualitative assessments of sustainability; 3. Current metrics and limitations; metrics for mapping and measuring sustainable development; 4. Application of the metrics in real scenarios			
Unit-V	**CRITICAL PERSPECTIVES ON SUSTAINABLE DEVELOPMENT**	**6Hrs**		
	1. Resource management and implications on sustainable development - implications for valuation, risk assessment; 2. Integrated decision-making processes: requirements of information, information flow, data analytics, learning from historical data, multi-criteria decisions, multi-level decisions, participatory decisions; 3. Translating impact chains to information flows- impact of governance and policies	6	PPT, Illustrations	Q & A, Assignments
Unit-VII	**CASE STUDIES & PROJECTS ON RURAL SUSTAINABLE DEVELOPMENT (INDIAN VILLAGE PERSPECTIVES**	**6Hrs**		
	1. Village resources (broad perspectives); 2. Current challenges and thematic areas; 3. Village social hierarchy; 4. Village economy; 5. Needs of present and future generation; conflicts - sustainability and rural culture & tradition; 6. Road to achieving sustainable development goals - bridging conflicts and way forward	6		

Reference Books:

1. Franco, I.B. and Tracey, J. (2019), "Community capacity-building for sustainable development: Effectively striving towards achieving local community sustainability targets", International Journal of Sustainability in Higher Education, Vol. 20 No. 4, pp. 691-725
2. Our Common Journey: A Transition Toward Sustainability. National Academy Press, Washington D.C. Soubbotina, T. P. 2004.
3. Elliott, Jennifer. 2012. An Introduction to Sustainable Development. 4th Ed. Routledge, London.
4. Rogers, Peter P., Kazi F. Jalal, and John A. Boyd. "An introduction to sustainable development." (2012).
5. Sachs, J. D. 2015. The Age of Sustainable Development. Columbia University Press, New York.

Prepared by: Department