a. Course Code:

DVST- 806

b. <u>Title</u>:

Global Development Agenda and Sustainability

c. Prerequisite:

Nil (Optional course in the Climate Change Stream of Specialisation)

d. Credit Hours:

3.0

e. Learning Objectives:

- Critically examine seventeen global goals: macro to micro.
- Analyse and understand the rationale behind the development of global goals and their local interpretation
- Articulate all the major issues that are affecting the global goals and find applicable solutions.
- Connect science knowledge/evidences and technology with economy, society, politics and environment for sustainability.
- Comprehend the implications of overuse of resources under population explosion and economic development.
- Explore the challenges faced by societies in mitigation and adaptation to climate change.
- Analyze the pro and contra arguments, similarities, and disagreements in the sustainability debate.
- Develop skills to communicate the change in attitudes and behavior for sustained development solutions. It is fueled by developing critical thinking skills to evaluate the quality, credibility and limitations of an argument/solution, backed by the scientific evidence.
- Use measurement tools for sustainable development to suggest policy change.

f. Outcomes:

 Analyze arguments, similarities, and disagreements in the sustainability debate and economic growth.

- Develop skills that will enable students to understand attitudes toward individuals, society, and their role regarding causes and solutions in the field of sustainable development.
- Apply critical thinking skills to evaluate the quality, credibility, and limitations of an argument or a solution using appropriate evidence or resources.
- Understand the methods of measuring progress on the SDGs.
- Use the SDG Index and Dashboards as a tool for understanding SDG progress in your country, region, or city.
- Differentiate between data sources and select the most appropriate source for different types of data.
- Identify the steps necessary to construct an SDG Index.

g. Contents with suggested contact hours:

Format for a weekly breakdown of lectures is presented in the following table:

Wee	Lecture Topics
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1	 The SDG framework and Agenda 2030: Scale and Scope.
	 A Brief History of the SDGs (from MDGs).
	- Transformation Challenges: What is sustainable development
	then?
	 Local & Global initiative for fight rising Poverty.
2	 Sustainability indicators: Concepts & Measurement.
2	 (Under-)nourishment, food (in-)security and (zero) hunger.
	 Human and Bio-diversity health and well-Being.
3	 Population Dynamics & Healthcare system: Pre-/post-pandemic
	World.
	 Education for Development and Growth.
	 Gender Equality for inclusive global growth: Access and
4	affordability to (quality) education.
	 Learning for Advancement under COIL.
5	– Water sources: Pollution and Depletion.

	 Safe sanitation measures to address health issues.
6	 Fossil fuels vs. green energy (e.g., CFPPs under CPEC).
	 Affordable and clean energy: a global paradigm shift.
7	 Sustained, inclusive and sustainable economic growth.
	 Pre/Post Industrialization era.
8	- Industry, Innovation and Infrastructure development in the
	global South.
	 The Triple-P (Population, Participation and Productivity) for
	economic development and progress.
9	Mid Term Exam (MTE)
	- Global inequalities across wages, gender etc.: Scenarios and
10	possible solutions?
	– Disparities between North and South: Way forward?
	 Sustainable cities and communities.
11	 Urban development, Urban Green Spaces and Green
	infrastructure: challenges and solutions
	 Geographic perspective and differences for SDGs achievement.
	 Responsible Consumption and Production.
12	- Resources and Energy efficiency for a better quality of life for
	all.
	 Climate Change and Climate Action.
13	 Climate crisis: Options of Mitigation and Adaptation.
	 Climate Protocols, treaties and COP meetings.
	 Sustained life below water and on land.
14	 Strategies to protect, restore and promote sustainable use of
	terrestrial ecosystems, sustainably manage forests, combat
	desertification, and halt and reverse land degradation and halt
	biodiversity loss
15	 Peace building through justice system and strong institutions.
	 Stability and security measures to sustain development.
16	 Building partnerships for the global goal.
	 Green financing as a source for sustainable development.

17	 Term-Papers presentations.
	 Course Recap: Q&A
18	Final Term Exam (FTE)

 h. <u>Details of lab work, workshops practice</u>: No lab is required. Industrial visit(s) will be arranged to orientate students with the working of the concerned national/intl. bodies.

i. Recommended Reading:

Core:

- Kakar, N., Popovski, V., & Robinson, N. A. (Eds.). (2021). Fulfilling the Sustainable Development Goals: Law, ethics and governance. Routledge.
- Gabay, C., & Ilcan, S. (Eds.). (2018). The Politics of Destination in the 2030 Sustainable Development Goals: Leaving No-one Behind? (Vol. 1). Routledge.
- Robinson M. (2018). Climate Justice, Resilience, and the Fight for a Sustainable Future. Bloomsbury Publishing, London, UK.
- Sachs, Jeffrey D. (2015). The age of sustainable development.
 Columbia University Press.
- Kellogg W.W. and Schware R. (2018). Climate Change and Society. Routledge

j. Extra/Case Studies:

- NUST SDGs reports 2020-2022.
- Alaimo, L. S., & Maggino, F. (2020). Sustainable development goals indicators at territorial level: Conceptual and methodological issues—The Italian perspective. Social Indicators Research, 147(2), 383-419.
- Rasoolimanesh, S. M., Ramakrishna, S., Hall, C. M., Esfandiar, K., & Seyfi, S. (2020). A systematic scoping review of sustainable tourism indicators in relation to the sustainable development goals. Journal of Sustainable Tourism, 1-21.

- Barbier, E. B., & Burgess, J. C. (2019). Sustainable development goal indicators: Analyzing trade-offs and complementarities. World development, 122, 295-305.
- Coscieme, L., Mortensen, L. F., Anderson, S., Ward, J., Donohue, I., & Sutton, P. C. (2020). Going beyond Gross Domestic Product as an indicator to bring coherence to the Sustainable Development Goals. Journal of Cleaner Production, 248, 119232.
- Zeng, Y., Maxwell, S., Runting, R. K., Venter, O., Watson, J. E., & Carrasco, L. R. (2020). Environmental destruction not avoided with the Sustainable Development Goals. Nature Sustainability, 3(10), 795-798.
- Crespo Cuaresma, J., Fengler, W., Kharas, H., Bekhtiar, K., Brottrager, M., & Hofer, M. (2018). Will the Sustainable Development Goals be fulfilled? Assessing present and future global poverty. Palgrave Communications, 4(1), 1-8.
- Fukuda-Parr, S. (2016). From the Millennium Development Goals to the Sustainable Development Goals: shifts in purpose, concept, and politics of global goal setting for development. Gender & Development, 24(1), 43-52.

(more new literature will be added time-to-time, based on the progress towards 2030)