

- Suri, S., & Malhotra, A. (2014). *Food science, nutrition and safety*. Pearson.

Suggested Readings:

- DeMan, J. M., Finley, J. W., Hurst, W. J., & Lee, C. Y. (2018). *Principles of food chemistry* (4th ed.). Springer.
- Frazier, W. C., & Westhoff, D. C. (2004). *Food microbiology*. TMH Publication.
- Johnson, A. H., & Peterson, M. S. (1974). *Encyclopedia of food technology* (Vol. 2).
- Meyer, L. H. (2006). *Food chemistry*. CBS Publishers & Distributors.
- Rao, E. S. (2019). *Fundamentals of food technology and preservation*. Variety Books.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

Bachelors in Arts with Community Science Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-FN 14-HSC: SUSTAINABILITY AND SOCIAL RESPONSIBILITY

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Sustainability and Social Responsibility	4	3	1	0	Class XII	NIL

Learning Objectives

- Introduce students to the fundamental concepts, principles, and evolution of sustainability and sustainable development.
- Familiarize students with the framework of the United Nations Sustainable Development Goals (SDGs) and their global and national relevance.
- Develop an understanding of major environmental, social, and economic challenges affecting sustainable development.
- Examine the role of governments, industries, institutions, and individuals in promoting sustainability and social responsibility.
- Encourage critical thinking about sustainable solutions, responsible consumption, and ethical practices.
- Promote awareness of sustainable technologies, policies, and community-based initiatives that support long-term environmental and social well-being.

Learning Outcomes

The students would be able to:

- Explain key concepts, principles, and historical developments related to sustainability and sustainable development.
- Describe the structure and objectives of the United Nations Sustainable Development Goals and their significance for global development.

- Identify and analyse major environmental, social, and economic sustainability challenges at global and national levels.
- Evaluate the impact of industrial practices, consumption patterns, and corporate activities on sustainability.
- Discuss policy frameworks, corporate social responsibility initiatives, and community actions that contribute to sustainable development.

THEORY **(Credits 3; Hours 45)**

UNIT I: Introduction to Sustainability

10 Hours

This unit introduces the fundamental concepts, evolution, and ethical foundations of sustainability and sustainable development in the global context.

- Concept and evolution of sustainability
- Meaning, definition and principles of sustainable development
- Triple Bottom Line: Environmental, Social, and Economic sustainability
- Historical milestones in sustainability discourse and global environmental movements
- Interrelationship between sustainability, ethics, and social responsibility

UNIT II: Sustainable Development Goals (SDGs)

8 Hours

This unit examines the global framework of the United Nations Sustainable Development Goals and the role of different stakeholders in achieving them.

- Overview of the 17 Sustainable Development Goals (SDGs)
- Global frameworks for sustainable development
- Role of governments, industries, and civil society in achieving SDGs
- SDGs relevant to business, environment, and society
- Localization of SDGs in India

UNIT III: Sustainability Challenges and Problems

14 Hours

This unit analyses the major environmental, social, and economic challenges that threaten sustainable development globally and in India.

- Environmental challenges: climate change, biodiversity loss, pollution, resource depletion
- Global warming: Carbon emissions and carbon footprint
- Social challenges: inequality, poverty, labour exploitation, gender disparity
- Economic challenges: unsustainable production and consumption patterns
- Industrial and corporate impacts on sustainability
- Waste generation, fast fashion, and environmental degradation
- Global and Indian sustainability challenges

UNIT IV: Solutions and Responsible Practices

13 Hours

This unit explores practical solutions, responsible practices, and policy approaches that promote sustainability across societies and industries.

- Circular economy and sustainable production systems
- Net zero- Emission reduction mitigating climate change
- Corporate Social Responsibility (CSR) and ethical business practices

- Sustainable consumption and responsible lifestyle choices
- Green technologies and innovation for sustainability
- Policy frameworks and governance for sustainability
- Role of education, community participation, and youth engagement in sustainability

TUTORIALS (Credit 1; Hours 15)

1. Discussion on how SDGs relate to everyday life and national development priorities.
2. Examine examples of environmental, social, and economic sustainability in everyday life or institutional practices.
3. Sustainability Awareness Survey among students regarding environmental practices and sustainability knowledge.
4. Case studies of organizations or initiatives practicing sustainability like Tata Group, Unilever and other.
5. Documentary Review Activity examining films related to environmental degradation and sustainability challenges.
6. Sustainability Awareness Drives on responsible consumption and environmental protection.
7. Case studies on social responsibility (CSR) initiatives by industry.
8. Presentation on one sustainability initiative implemented by government, or NGOs.

Essential Readings

UNIT I

This unit introduces the fundamental concepts, evolution, and ethical foundations of sustainability and sustainable development in the global context.

- **Bhardwaj, A.** (Ed.). (2024). *Sustainable development in India: Future challenges*. New Delhi: Shandilya Publications.
- **Brinkmann, R., & Bhamoriya, V.** (2024). *Introduction to sustainability: An Indian adaptation* (2nd ed.). New Delhi: Wiley India.
- **Gadgil, M., & Guha, R.** (1992). *This fissured land: An ecological history of India*. New Delhi: Oxford University Press.
- **Surampalli, R. Y., Zhang, T. C., Goyal, M. K., Brar, S. K., & Tyagi, R. D.** (2020). *Sustainability: Fundamentals and applications*. Hoboken, NJ: Wiley.
- **Tayal, P.** (2024). *Sustainable India: Towards 2075 – Roadmap for harmonious living in 150 blue-green cities*. New Delhi: Clever Fox Publishing.

UNIT II

This unit examines the global framework of the United Nations Sustainable Development Goals and the role of different stakeholders in achieving them.

- **Sachs, J. D.** (2015). *The age of sustainable development*. New York, NY: Columbia University Press.
- **Sachs, J. D., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G.** (2022). *Sustainable development report*. Cambridge: Cambridge University Press.
- **McElroy, M. W., & van Engelen, J.** (2011). *Corporate sustainability management: The art and science of managing non-financial performance*. Routledge.

UNIT III

This unit analyses the major environmental, social, and economic challenges that threaten sustainable development globally and in India.

- **Gadgil, M., & Guha, R.** (2000). *The use and abuse of nature: Environmental history of India*. New Delhi: Oxford University Press.
- **Hawken, P.** (2010). *The ecology of commerce: A declaration of sustainability* (Revised ed.). New York, NY: Harper Business.
- **Narain, S.** (2022). *State of India's environment 2022: Down to earth annual report*. New Delhi: Centre for Science and Environment.

UNIT IV

This unit explores practical solutions, responsible practices, and policy approaches that promote sustainability across societies and industries.

- **Rasche, A., Morsing, M., Moon, J., & Kourula, A.** (2023). *Corporate sustainability: Managing responsible business in a globalised world*. Cambridge: Cambridge University Press.
- **Paleri, P.** (2020). *Corporate social responsibility: Concept, cases and trends*. New Delhi: Cengage Learning India.
- **Tayal, P.** (2024). *Sustainable India: Towards 2075 – Roadmap for harmonious living in 150 blue-green cities*. New Delhi: Clever Fox Publishing.
- **Bhardwaj, A.** (Ed.). (2024). *Sustainable development in India: Future challenges*. New Delhi: Shandilya Publications.
- **Schaper, M.** (Ed.). (2016). *Making ecopreneurs: Developing sustainable entrepreneurship* (2nd ed.). London: Routledge.

Suggested Readings

- **Bharucha, E.** (2019). *Environmental studies for undergraduate courses* (2nd ed.). Hyderabad: Universities Press.
- **Guha, R.** (2014). *Environmentalism: A global history*. New Delhi: Penguin Books.
- **Kaushik, A., & Kaushik, C. P.** (2018). *Perspectives in environmental studies* (6th ed.). New Delhi: New Age International.
- **Miller, G. T., & Spoolman, S.** (2019). *Environmental science* (16th ed.). Boston, MA: Cengage Learning.

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