IIHMR UNIVERSITY

Courses on Sustainability

Academic Year: 2024-2025

Name of the Course/ Subject	Course Code	Batch	Theory/ Practical	SDGs	Nature of Course	Module Link
Corporate Social Responsibility	DM-744	2023-25	Theory	SDG 12	Sustainabilty	DM- 744 Corporate Social Responsibility_2024-25.pdf
Environmental Social Governance	DM-745	2023-25	Theory	SDG 13	Sustainabilty	DM-745 Excellence in Environmental, Social and Governance (ECG)_2024-25.pdf
Livelihood System & Programmes	DM-746	2023-25	Theory	SDG 1	Rural Development	DM- 746 Livelihood System and Programmes_2024-25.pdf
Water, Sanitation and Hygiene Management	DM-750	2023-25	Theory	SDG 6	Environmental sustainability	DM- 750 Water, Sanitation and Hygiene (WASH) Management_2024-25.pdf
Natural Resource Management, Climate Change & Resilience	DM-753	2023-25	Theory	SDG 13	Environmental sustainability	DM- 753 Natural Resource Management, Climate Change and Resilience_2024-25.pdf
Sustainability and Circular Economy	PHRM-751	2023-25	Theory	SDG 12	Sustainabilty	module
The Intersection of Climate Change, Environment, One Health and Sustainability with Public Health- Part I	EC-251	2023-25	Theory	SDG 13	Climate Sustainability	E 1_EC-251&252_The Intersection of Climate Change Environment One Health and Sustainability with Public Health - Part I and II.pdf
The Intersection of Climate Change, Environment, One Health and Sustainability with Public Health- Part II	EC-252	2023-25	Theory	SDG 13	Climate Sustainability	E 1_EC-251&252_The Intersection of Climate Change Environment One Health and Sustainability with Public Health - Part I and II.pdf
Social and Environmental Determinants of Health	607.101	2023-2025	Theory	SDG 10	Environmental sustainability	MPHIS 607.101 Social & Environmental Determinants of Health.pdf

1. Course Information

Course Title	Corporate Social Responsibility
Course Code	DM-744
Contract Hours	48
Course Credit	3

2. Program Outcome (PO)

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

The course examines leadership and ethical decision making and delivers information needed to establish ethical goals and resolve ethical problems in a global marketplace.

Corporate Social Responsibility can teach students how to apply the knowledge and concept on the field for organization as CSR activities. These programs cover all aspects of Corporate Social Responsibility particularly theoretical, practical, legislations in form of best practices. Companies Act 2013 and Section 135 on Corporate Social Responsibility provides an enabling framework for companies to play a more proactive role in inclusive growth of the country. With this unique legislation, corporate India is well poised to transform the social landscape of the country and reap long term benefits of a sustainable growth. It also requires companies to adopt those CSR initiatives that have a programmatic, quantifiable, and sustainable approach rather than mere philanthropy. This has also created a tremendous opportunity for professionals to play an active role in nation building by becoming CSR professionals whose services can be availed by companies and CSR implementing organizations to derive maximum impact from their CSR projects.

Trained CSR professionals are therefore the need of the hour as the latent power of the new legislation begins to transform CSR landscape. To meet this critical need, and to be an effective manager, one must understand

the basic characteristics and scope of CSR and have a strong grasp on a wide range of management skills and concepts. Simplifying some of the best academic thinking on this subject, IIHMR University has rolled out the course for MBA-Development Management.

4. Course Objectives

To explore the concept of Corporate Social Responsibility, need, while emphasizing on and importance of CSR, as well as probabilities and possibilities in corporate world. The courses detail the principles of sustainability, the roles of multiple disciplines in their effective implementation, and management strategies that incorporate environmental compliance standards and achieve organizational missions. The CSR module recognizes the need for candidates to have business skills that integrate social, environmental, financial, and ethical considerations.

The objectives of the course are to:

- Train and develop the understanding of concepts, theories, and responsible business practices to enter the CSR domain.
- Train and develop the understanding of how CSR is linked with other facets of business.
- Develop project formulation and management in skills among Learners in CSR
- Exposure of green CSR implementation in the country
- Develop the understanding of sustainable and responsible business leadership and ethics

5. Course Outcome

After the course students will be able to:

CO 1	Understanding the CSR landscape; Describe and critically evaluate the concept of corporate responsibility and future trends about the role of the corporation in society
CO 2	Understanding, applying and analysing how CSR activity as a company's strategy creates long-term benefits for company and society.
CO 3	Understanding companies' law 2013 in context of CSR.
CO 4	Understanding, applying and analysing how corporate governance creates win-win situation for company and community.
CO 5	Understanding, applying and analysing the criteria for successful corporate-non-profit partnerships.
CO 6	Understanding, applying and analysing the principles, practice and examples of CSR in India

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6
PO1	3	3	1	2	2	2

PO2	1	2	2	3	1	1
PO3	2	2	3	3	2	1
PO4	3	1	1	1	3	2

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, 2 denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Topics/Contents	CO	Bloom's Learning (BL) Levels
Unit 1	**Corporate Social Responsibility** Concept of Corporate Social Responsibility Evolution of Corporate Social Responsibility Principles of Corporate Social Responsibility Approaches of Corporate Social Responsibility Forms of Corporate Social Responsibility in India Scope of Corporate Social Responsibility in India	CO1	BL1
Unit 2	**Companies Act 2013 and CSR** What is Companies Act 2013 Company Act 2013 and its Different Clauses and Sub Clauses What is impact on CSR activities?	CO3	BL3, BL4, BL5
Unit 3	**CSR Capacity Mapping with Reference to SDG** Concept of Sustainability Development Role of Business in Sustainable Development CSR Framework	CO1	BL1, BL2
Unit 4	**Stakeholders & the Social Contract** Introduction	CO 4	BL2, BL3, BL4, BL5

	What is a stakeholder? Multiple stake holding The classification of stakeholders Stakeholder Theory Regulation and its implications Risk Reducing Group Exercise Assignment		
Unit 5	**Green CSR and Corporate Governance** Concept of green CSR Stockholm declaration and earth submit Concept and elements of Corporate Governance Evolution of Corporate Governance Elements of Corporate Governance Ethical philosophies The Gaia Hypothesis Corporate Behaviour CSR, Ethics and Corporate Behaviour Corporate Reputation	CO 4	BL2, BL3, BL4
Unit 6	**Responsible Business Conduct and Sustainability Management** Concept of Sustainable Development Relation Between Sustainable Development and CSR CSR Report Format SEBIs Circular of Business Responsibility and Sustainable Reporting Impact Assessments of CSR Expenditure		BL4, BL5, BL 6
Unit 7	**Role of International Organizations for Corporates** What are International Organisations? Role of International Organisations Functions of international organisations	CO 5	BL4, BL5
Unit 8	**Best Practices** Best practices in World Best practices in India Assignment	CO 6	BL 4, BL5

Note: The Bloom's Taxonomy in the above table are as follows: BL1: Remember, BL2: Understand, BL3: Apply, BL4: Analyse, BL5: Evaluate, BL6: Create

10. Course Policies

This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the

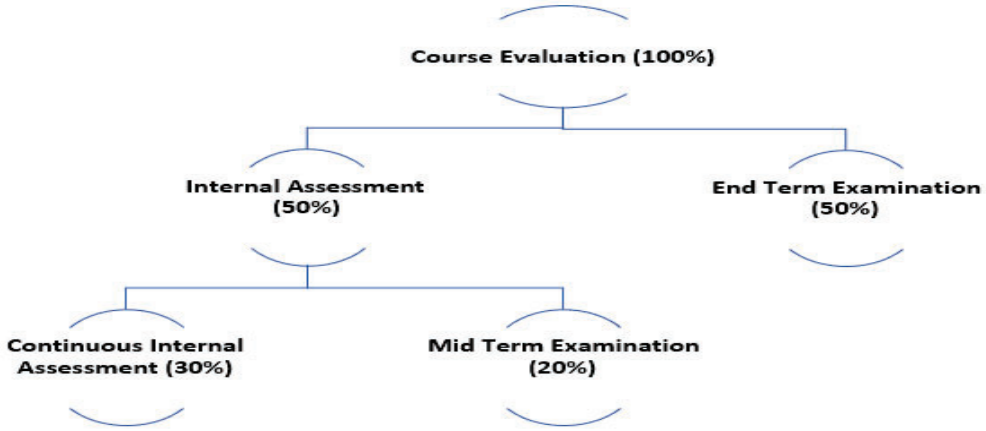
End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters

12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix

S. No.	Activity	CO1	CO2	CO3	CO4	CO5	CO6
1.	Home Assignments (Individual / Group)	√	√	√	√	√	√
2.	Viva-Voce						
3.	Case Study	√	√	√	√	√	√
4.	Review Paper	√	√	√	√	√	√
5.	Group Work						
6.	Presentations	√	√	√	√	√	√
7.	Model Development Role-Play						
8.	Rapid Fire Questions						
9.	Quiz						
10.	Class Assignments (Individual / Group)	√	√	√	√	√	√
11.	Posters						
12.	Class Participation	√	√	√	√	√	√
13.	Mid Term Examination	√	√	√	√	√	√
14.	End Term Examination	√	√	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment.

13. Session Plan

The teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilize these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Corporate Social Responsibility:** • Concept of Corporate Social Responsibility • Evolution of Corporate Social Responsibility • Principles of Corporate Social Responsibility • Approaches of Corporate Social Responsibility • Forms of Corporate Social Responsibility in India • Scope of Corporate Social Responsibility in India	Lecture, Discussion	• Blowfield, M. and Murray, A. (2008). Corporate Responsibility: a critical introduction, Oxford University Press. • Burchell, J. (Ed) (2008). The Corporate Social Responsibility Reader: Context and Perspectives, Routledge
Day 2	**Companies Act 2013 and CSR:** • What is Companies Act 2013 • Company Act 2013 and its Different Clauses and Sub Clauses • What is impact on CSR activities?	Lecture, Discussion	• K. R. Pillai (2017), Responsibility in India: A Journey from Corporate Philanthropy to Governance Mandate • Corporate Responsibility in India: Academic Perspectives on the Companies Act 2013 • Carroll, A.B. and Buchholtz, A.K. (2006). Business & Society: Ethics and Stakeholder Management, 6th Edition, Thomson South-Western
Day 3	**CSR Capacity Mapping with Reference to SDG:** • Concept of Sustainability Development • Role of Business in Sustainable Development • CSR Framework	Lecture, Discussion and Video	• Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. Academy of Management Review, 10(4), 758−769.
Day 4	**Stakeholders & the Social Contract:** • Introduction • What is a stakeholder? Multiple stake holding	Lecture, Discussion,	• Hawkins, D.E. (2006). Corporate Social Responsibility: Balancing tomorrow's sustainability

Day	Topics/Contents	Pedagogy	Reading Materials
	• The classification of stakeholders Stakeholder Theory • Regulation and its implications Risk Reducing • Group Exercise • Assignment		and Today's profitability, Paulgrave Macmillan
Day 5	**Green CSR and Corporate Governance** • Concept of green CSR Stockholm declaration and earth submit • Concept and elements of Corporate Governance • Evolution of Corporate Governance • Elements of Corporate Governance • Ethical philosophies • The Gaia Hypothesis • Corporate Behaviour • CSR, Ethics and Corporate Behaviour • Corporate Reputation	Lecture, Discussion, Case study	• Crane, A.; Matten, D. (2006). Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization, 2ndEdition, Oxford University Press • Hawkins, D.E. (2006). Corporate Social Responsibility: Balancing tomorrow's sustainability and Today's profitability, Paulgrave Macmillan
Day 6	**Responsible Business Conduct and Sustainability Management:** • Concept of Sustainable Development • Relation Between Sustainable Development and CSR • CSR Report Format • SEBIs Circular of Business Responsibility and Sustainable Reporting • Social Impact Assessments of CSR Expenditure	Lecture, Discussion, Case study	• Corporate Social Responsibility: Readings and Cases in a Global Context, Routledge • Jonker, J. and de Witte, M. (eds) (2006) Management Models for Corporate Social Responsibility, Springer • Corporate Social Responsibility Practice: Strengthening implementation of corporate social responsibility in global supply chains, World Bank Group, October 2003 • Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. Harvard Business Review, 80(12), 56−68

Day	Topics/Contents	Pedagogy	Reading Materials
Day 7	**Role of International Organizations for Corporates** • What are International Organisations? • Role of International Organisations • Functions of international organisations	Lecture, Discussion, Case study	• Carroll, A.B. and Buchholtz, A.K. (2006). Business & Society: Ethics and Stakeholder Management, 6th Edition, Thomson South-Western.
Day 8	**Best Practices** • Best practices in World • Best practices in India	Lecture, Discussion, Case study and Video	• LV Prasad eye institute: managing corporate social responsibility partnerships • Crane, A.; Matten, D. (2006). Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization, 2ndEdition, Oxford University Press, ISBN-13: 978-0-19-928499-3.
	Midterm Examination		

14. Readings

Books

1. Blowfield, M. and Murray, A. (2008). *Corporate Responsibility: a critical introduction*, Oxford University Press.
2. Burchell, J. (Ed) (2008). *The Corporate Social Responsibility Reader: Context and Perspectives*, Routledge
3. Carroll, A.B. and Buchholtz, A.K. (2006). *Business & Society: Ethics and Stakeholder Management*, 6th Edition, Thomson South-Western.
4. Crane, A.; Matten, D. and Spence, L. (eds) (2007). *Corporate Social Responsibility: Readings and Cases in a Global Context*, Routledge, ISBN: 978-0-415-42429-5.
5. Crane, A.; McWilliams, A.; Matten, D.; Moon, J. and Siegel, D.S. (eds) (2008). *The Oxford Handbook of Corporate Social Responsibility*, Oxford University Press, ISBN-13: 978-0-19-921159-3.
6. Crane, A.; Matten, D. (2006). *Business Ethics: Managing Corporate Citizenship and Sustainability in the Age of Globalization*, 2nd Edition, Oxford University Press, ISBN-13: 978-0-19-928499-3.
7. Hawkins, D.E. (2006). *Corporate Social Responsibility: Balancing tomorrow's sustainability and Today's profitability*, Paulgrave Macmillan.
8. Jonker, J. and de Witte, M. (eds) (2006) *Management Models for Corporate Social Responsibility*, Springer

References Books

- *Kotler, P. and Lee, N. (2005). Corporate Social Responsibility: doing the most good for your company and your cause, Wiley.*
- *May, S.; Cheney, G. and Roper, J. (2007). The Debate over Corporate Social Responsibility, Oxford University Press. Vogel, D. (2005). The Market for Virtue: The potential and limits of Corporate Social Responsibility, Brookings*

Web Sites

- *GiveIndia (http://www.giveindia.org/):*
- *Indian Confederation of NGOs (http://www.icongo.in/):*
- *http://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf*
- *www.igidr.ac.in/pdf/publication/WP-2015-023.pdf*

Journal/Magazine

- *Basu, K. and G. Palazzo, 2008. "Corporate Social Responsibility: A Process Model of Sensemaking," Academy of Management Review 33(1), pp. 122-13.*
- *Corporate Social Responsibility Practice: Strengthening implementation of corporate social responsibility in global supply chains, World Bank Group, October 2003. "*
- *Corporate Social Responsibility: Implications for Small and Medium Enterprises in Developing Countries, United Nations Industrial Development Organization, 2002, http://www.unido.org/userfiles/BethkeK/csr.pdf (pdf file size 1.13mb).*
- *Fortune. (2007). 100 best companies to work for 2007. Retrieved June 14, 2007, from http://money.cnn.com/magazines/ fortune/bestcompanies/2007/snapshots/1.html*
- *KPMG 2008, Corporate Social Responsibility: Towards a Sustainable Future: A White Paper, KPMG in India, KPMG.https://www.kpmg.com/in/en/services/.../whitepaper%20on%20csr.pdf*
- *Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. Harvard Business Review, 80(12), 56−68*
- *PWC (2013). Handbook on Corporate Social Responsibility in India, Price Waterhouse Coopers Private Limited. http://www.pwc.in/assets/pdfs/publications/2013/handbook-on-corporate-social-responsibilityin-india.pdf*
- *Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. Academy of Management Review, 10(4), 758−769.*

1. Course Information

Course Title	Excellence in Environmental, Social and Governance (ECG)
Course Code	DM-745
Contract Hours	48
Course Credit	3

2. Program Outcome (PO)

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

An organization's success does not only depend on its strategic repertoire within a given market, but also on how well it incorporates environmental, social, and governance (ESG) factors in its strategy. By engaging with peer organizations, non-governmental agencies, the media, and other external stakeholders, firms can proactively identify and address ESG issues. Consideration of ESG factors in strategy can help simultaneously achieve a long-term competitive advantage as well as enhance a firm's social and environmental impact. ESG reporting is critical for a rising economy like India because it gives all stakeholders the chance to create a system of economic measurement that goes beyond traditional financial measurements.

4. Course Objectives

The course is intended to highlight the impact and implications of ESG on developments sector and to achieve the objectives of Sustainable Development Goal. This module helps to understand the history and framework behind ESG, and how to create a path forward using smarter methods to identify risk, navigate ESG issues, and reach ESG investing goals. The potential impact and implications of environmental, social and governance (ESG) developments, climate related risks and opportunities for companies, and how companies can drive value creation through ESG is being explored and discussed.

The objectives of the course are to:

- Understand different approaches to responsible investment considering environmental, social and governance (ESG) factors.
- Develop an understanding of environmental factors, systemic relationships, material impacts, megatrends, and approaches to environmental analysis at different levels.
- Gain insight into social responsibilities, value-based management, and ethics in business.
- Understanding of analyzing ESG factors that affect company performance, and security valuation.

5. Course Outcome

After the course, students should be able to :

CO 1	Understanding the context for different approaches to responsible investment and specifically, consideration of environmental, social and governance (ESG) factors.
CO 2	Understanding of environmental factors, systemic relationships, material impacts, megatrends and approaches to environmental analysis at country, sector, and company levels.
CO 3	Understanding, applying, analysing and evaluate the governance factors, key characteristics, main models, and material impacts.
CO 4	Understanding, applying and analysing the social responsibilities of business including value-based management and ethics.
CO 5	Understanding, applying and analysing the ESG factors that affect industry and company performance, and security valuation across a range of asset classes.

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4	CO 5
PO1	3	3	1	2	2
PO2	1	2	2	3	1
PO3	2	2	3	3	2
PO4	3	1	1	1	3

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, 2 denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
Unit 1	**Introduction to ESG –** Concept and Importance **Approaches to ESG investing.** Responsible investment. Socially responsible investment (SRI). Sustainable investment. Best-in-class investment. Ethical/values-driven investment. Thematic investment. Impact investment. Green investment. Social investment. Shareholder engagement **CSR/ESG** -Corporate Social Responsibility versus Environmental Social Governance Benefits and challenges to organisations of adhering to good practice in ESG. **ESG Market**	CO 1	BL 1
Unit 2	**Environmental Factors** – Climate change. • Climate change mitigation. • Climate change adaptation and resilience measures. **Approaches to environmental analysis** in both developed and emerging countries, including: • Company, project, sector, country and market level analysis. **Environmental risks** - carbon foot printing and other carbon metrics, natural capital approach and climate scenario analysis **Strategies for Sustainable Development** -Environmental pressures and environmental problems impact on corporate mission, competitive strategy, technology choices, product development decisions, and production processes.	CO 1, CO 2	BL 2
Unit 3	**Social Factors** -Relationships and activities between business activities and social issues, Factors influencing social change	CO 1, CO 2	BL2

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
	in terms of potential impact on companies and their social practices.		
Unit 4	**Governance** - Evolution of corporate governance frameworks and key motivators for step change: • Development of corporate governance. • Roles and responsibilities of Board Engagement and Stewardship –Benefits and Criticism Evolution of corporate governance frameworks	CO 3, CO 4	BL 3, BL 4
Unit 5	**ESG Analysis, Valuation and Integration -** Defining and Measuring ESG Performance, Different approaches of integrating ESG analysis into a firm's investment process	CO 5	BL 5

Note: Please enter appropriate BL levels against each unit in the above table. The Bloom's Taxonomy Levels are as follows:
BL1: Remember BL2: Understand BL3: Apply BL4: Analyse BL5: Evaluate BL6: Create

10. Course Policies

This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

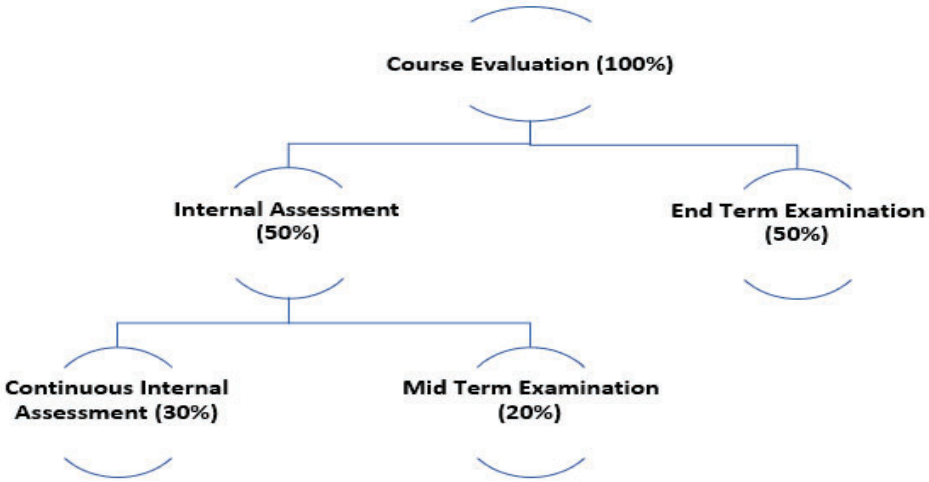
Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30% weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5
1.	Home Assignments (Individual / Group)	√	√	√	√	√
2.	Viva-Voce					
3.	Case Study	√	√	√	√	√
4.	Review Paper	√	√	√	√	√
5.	Group Work					
6.	Presentations	√	√	√	√	√
7.	Model Development Role-Play					
8.	Rapid Fire Questions					
9.	Quiz					
10.	Class Assignments (Individual / Group)	√	√	√	√	√
11.	Posters					
12.	Class Participation	√	√	√	√	√
13.	Mid Term Examination	√	√	√	√	√
14.	End Term Examination	√	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment

13. Session Plan

The teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Introduction to ESG:** • Concept and Importance • Approaches to ESG investing. • Responsible investment. • Socially responsible investment (SRI). • Sustainable investment. • Best-in-class investment. • Ethical/values-driven investment.	Lecture, Presentation, Discussion and Critical Readings.	• Karlheinz Spitz; John Trudinger; Matthew Orr; Environmental Social Governance Managing Risk and Expectation,2022, CRC Press • Tracy Dathe, René Dathe, Isabel Dathe, Marc Helmold; Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management; 2022

	• Thematic investment. • Impact investment. • Green investment. • Social investment. • Shareholder engagement		• Karlheinz Spitz; John Trudinger; Matthew Orr; Environmental Social Governance Managing Risk and Expectation,2022, CRC Press
Day 2	**Corporate Responsibility:** • Corporate Social Responsibility versus Environmental Social Governance • Benefits and challenges to organizations of adhering to good practice in ESG. **Environmental Factors:** • Climate change. • Climate change mitigation. • Climate change adaptation and resilience measures • Approaches to environmental analysis • Environmental risks Strategies for Sustainable • Environmental Factors Development	Lecture, Discussion, Case study Group work, Critical Reading, Analysis, Evaluation Documentary	• Kotler, P. and Lee, N. (2005). Corporate Social Responsibility: doing the best for your company and your cause, Wiley. • Tracy Dathe, René Dathe, Isabel Dathe, Marc Helmold; Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management; 2022 • CSR as a Driver where ESG Performance will Ultimately Matter | Symphonya. Emerging Issues in Management (unicusano.it) • Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. Sustainability, 10(10), 3635. • Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699. • Environmental, Social, and Governance (ESG) Practice and Firm Performance: • An International Evidence, Imlak Shaikh • Management Development Institute Gurgaon, Gurugram, Haryana, India • Dan-Costin Nitescu & Maria-Alexandra Cristea, 2020. "Environmental, Social and Governance Risks – New Challenges for the Banking Business Sustainability," The Amfiteatru

			Economic Journal, Academy of Economic Studies - Bucharest, Romania, vol. 22(55), pages 692-692, August.
Day 3	**Strategies for Sustainable Development:** • Social Factors • Relationships and activities between business activities and social issues, • Factors influencing social change in terms of potential impact on companies and their social practices. • Factors influencing social change in terms of potential impact on companies and their social practices	Lecture, Discussion Documentary, Case study analysis and evaluation	• Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699. • Hill J, Environmental, Social, and Governance (ESG) Investing (2020): A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio • Singhania, M., & Saini, N. (2022). Systems approach to environment, social and governance (ESG): Case of Reliance industries. Sustainable Operations and Computers, 3, 103-117.
Day 4	**Governance:** • Evolution of corporate governance frameworks and key motivators for step change: • Development of corporate governance. • Roles and responsibilities of Board	Lecture, Discussion	• Alexander Landau, Janina Rochell, Christian Klein, Bernhard Zwergel, First published: 20 January 2020 • Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports? https://www.icsi.edu/media/webmodulehttp://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/CORPORATE%20SOCIAL%20RESPONSIBILITY%20%20Management_Models_for_Corporate_Social_Responsibility.pdf/Guidance_Note_on_CSR_Final.pdf

Day 5	**Engagement and Stewardship**: • Engagement and Stewardship • Benefits and Criticism • Evolution of corporate governance frameworks	Lecture, Critical reading, Discussion	• N Nemoto (2022). Strengthening Environmental, Social, and Governance Investment under COVID-19 | Asian Development Bank (adb.org) • Alexander Landau, Janina Rochell, Christian Klein, Bernhard ZwergelFirst published: 20 January 2020; Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports?
Day 6	**ESG Analysis:** • Defining • Valuation and Integration Measuring • ESG Performance	Lecture, Discussion	• N Nemoto, Dadhich G,Atrey R; (2022), Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
Day 7	**Different Approaches of Integrating ESG Analysis:** • Exclusionary screening • Best-in-class selection • Thematic investing • Impact investing • Active ownership	Lecture, Discussion,	• Hill J, Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio,2020 • Dadhich G,Atrey R; 2022, Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
Day 8	Mid-term Examination		

14. Readings

Books

1. Atrey R; 2022, Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
2. Dathe T, DatheR, Dathe I, Helmold M; (2022),Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management.
3. Hill J, (2020) Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio,2020.
4. Karlheinz Spitz; John Trudinger; Matthew Orr; (2022) Environmental Social Governance Managing Risk and Expectation,2022, CRC Press

Reference Books

1. Kotler, P. and Lee, N. (2005). *Corporate Social Responsibility: doing the most good for your company and your cause*, Wiley.
2. May, S.; Cheney, G. and Roper, J. (2007). *The Debate over Corporate Social Responsibility*, Oxford University Press. Vogel, D. (2005). *The Market for Virtue: The potential and limits of Corporate Social Responsibility*, Brookings.

Journal/Websites

- *Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699.*
- *Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699.*
- *CSR as a Driver where ESG Performance will Ultimately Matter | Symphonya. Emerging Issues in Management (unicusano.it)*
- *Dan-Costin Nitescu & Maria-Alexandra Cristea, 2020. "Environmental, Social and Governance Risks – New Challenges for the Banking Business Sustainability," The AMFITEATRU ECONOMIC journal, Academy of Economic Studies - Bucharest, Romania, vol. 22(55), pages 692-692, August.*
- *Environmental, Social, And Governance (ESG) Practice And Firm Performance: An International Evidence Imlak Shaikh; Management Development Institute Gurgaon, Gurugram, Haryana, India; Received 12 January 2021; accepted 11 October 2021*
- *Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. Sustainability, 10(10), 3635.*

1. Course Information

Course Title	Excellence in Environmental, Social and Governance (ECG)
Course Code	DM-745
Contract Hours	48
Course Credit	3

2. Program Outcome (PO)

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

An organization's success does not only depend on its strategic repertoire within a given market, but also on how well it incorporates environmental, social, and governance (ESG) factors in its strategy. By engaging with peer organizations, non-governmental agencies, the media, and other external stakeholders, firms can proactively identify and address ESG issues. Consideration of ESG factors in strategy can help simultaneously achieve a long-term competitive advantage as well as enhance a firm's social and environmental impact. ESG reporting is critical for a rising economy like India because it gives all stakeholders the chance to create a system of economic measurement that goes beyond traditional financial measurements.

4. Course Objectives

The course is intended to highlight the impact and implications of ESG on developments sector and to achieve the objectives of Sustainable Development Goal. This module helps to understand the history and framework behind ESG, and how to create a path forward using smarter methods to identify risk, navigate ESG issues, and reach ESG investing goals. The potential impact and implications of environmental, social and governance (ESG) developments, climate related risks and opportunities for companies, and how companies can drive value creation through ESG is being explored and discussed.

The objectives of the course are to:

- Understand different approaches to responsible investment considering environmental, social and governance (ESG) factors.
- Develop an understanding of environmental factors, systemic relationships, material impacts, megatrends, and approaches to environmental analysis at different levels.
- Gain insight into social responsibilities, value-based management, and ethics in business.
- Understanding of analyzing ESG factors that affect company performance, and security valuation.

5. Course Outcome

After the course, students should be able to :

CO 1	Understanding the context for different approaches to responsible investment and specifically, consideration of environmental, social and governance (ESG) factors.
CO 2	Understanding of environmental factors, systemic relationships, material impacts, megatrends and approaches to environmental analysis at country, sector, and company levels.
CO 3	Understanding, applying, analysing and evaluate the governance factors, key characteristics, main models, and material impacts.
CO 4	Understanding, applying and analysing the social responsibilities of business including value-based management and ethics.
CO 5	Understanding, applying and analysing the ESG factors that affect industry and company performance, and security valuation across a range of asset classes.

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4	CO 5
PO1	3	3	1	2	2
PO2	1	2	2	3	1
PO3	2	2	3	3	2
PO4	3	1	1	1	3

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, 2 denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
Unit 1	**Introduction to ESG –** Concept and Importance **Approaches to ESG investing.** Responsible investment. Socially responsible investment (SRI). Sustainable investment. Best-in-class investment. Ethical/values-driven investment. Thematic investment. Impact investment. Green investment. Social investment. Shareholder engagement **CSR/ESG** -Corporate Social Responsibility versus Environmental Social Governance Benefits and challenges to organisations of adhering to good practice in ESG. **ESG Market**	CO 1	BL 1
Unit 2	**Environmental Factors** – Climate change. • Climate change mitigation. • Climate change adaptation and resilience measures. **Approaches to environmental analysis** in both developed and emerging countries, including: • Company, project, sector, country and market level analysis. **Environmental risks** - carbon foot printing and other carbon metrics, natural capital approach and climate scenario analysis **Strategies for Sustainable Development** -Environmental pressures and environmental problems impact on corporate mission, competitive strategy, technology choices, product development decisions, and production processes.	CO 1, CO 2	BL 2
Unit 3	**Social Factors** -Relationships and activities between business activities and social issues, Factors influencing social change	CO 1, CO 2	BL2

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
	in terms of potential impact on companies and their social practices.		
Unit 4	**Governance** - Evolution of corporate governance frameworks and key motivators for step change: • Development of corporate governance. • Roles and responsibilities of Board Engagement and Stewardship –Benefits and Criticism Evolution of corporate governance frameworks	CO 3, CO 4	BL 3, BL 4
Unit 5	**ESG Analysis, Valuation and Integration -** Defining and Measuring ESG Performance, Different approaches of integrating ESG analysis into a firm's investment process	CO 5	BL 5

Note: Please enter appropriate BL levels against each unit in the above table. The Bloom's Taxonomy Levels are as follows:
BL1: Remember BL2: Understand BL3: Apply BL4: Analyse BL5: Evaluate BL6: Create

10. Course Policies

This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

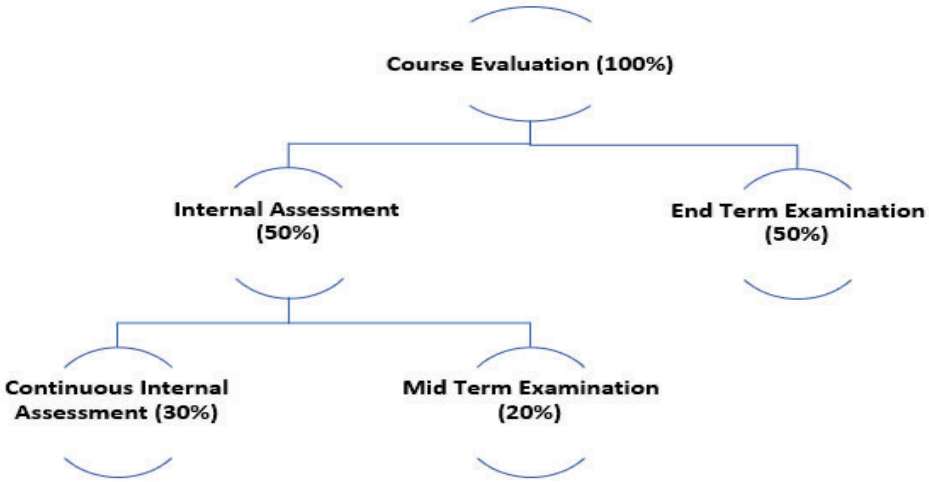
Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30% weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5
1.	Home Assignments (Individual / Group)	√	√	√	√	√
2.	Viva-Voce					
3.	Case Study	√	√	√	√	√
4.	Review Paper	√	√	√	√	√
5.	Group Work					
6.	Presentations	√	√	√	√	√
7.	Model Development Role-Play					
8.	Rapid Fire Questions					
9.	Quiz					
10.	Class Assignments (Individual / Group)	√	√	√	√	√
11.	Posters					
12.	Class Participation	√	√	√	√	√
13.	Mid Term Examination	√	√	√	√	√
14.	End Term Examination	√	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment

13. Session Plan

The teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Introduction to ESG:** • Concept and Importance • Approaches to ESG investing. • Responsible investment. • Socially responsible investment (SRI). • Sustainable investment. • Best-in-class investment. • Ethical/values-driven investment.	Lecture, Presentation, Discussion and Critical Readings.	• Karlheinz Spitz; John Trudinger; Matthew Orr; Environmental Social Governance Managing Risk and Expectation,2022, CRC Press • Tracy Dathe, René Dathe, Isabel Dathe, Marc Helmold; Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management; 2022

	• Thematic investment. • Impact investment. • Green investment. • Social investment. • Shareholder engagement		• Karlheinz Spitz; John Trudinger; Matthew Orr; Environmental Social Governance Managing Risk and Expectation,2022, CRC Press
Day 2	**Corporate Responsibility:** • Corporate Social Responsibility versus Environmental Social Governance • Benefits and challenges to organizations of adhering to good practice in ESG. **Environmental Factors:** • Climate change. • Climate change mitigation. • Climate change adaptation and resilience measures • Approaches to environmental analysis • Environmental risks Strategies for Sustainable • Environmental Factors Development	Lecture, Discussion, Case study Group work, Critical Reading, Analysis, Evaluation Documentary	• Kotler, P. and Lee, N. (2005). Corporate Social Responsibility: doing the best for your company and your cause, Wiley. • Tracy Dathe, René Dathe, Isabel Dathe, Marc Helmold; Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management; 2022 • CSR as a Driver where ESG Performance will Ultimately Matter | Symphonya. Emerging Issues in Management (unicusano.it) • Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. Sustainability, 10(10), 3635. • Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699. • Environmental, Social, and Governance (ESG) Practice and Firm Performance: • An International Evidence, Imlak Shaikh • Management Development Institute Gurgaon, Gurugram, Haryana, India • Dan-Costin Nitescu & Maria-Alexandra Cristea, 2020. "Environmental, Social and Governance Risks – New Challenges for the Banking Business Sustainability," The Amfiteatru

			Economic Journal, Academy of Economic Studies - Bucharest, Romania, vol. 22(55), pages 692-692, August.
Day 3	**Strategies for Sustainable Development:** • Social Factors • Relationships and activities between business activities and social issues, • Factors influencing social change in terms of potential impact on companies and their social practices. • Factors influencing social change in terms of potential impact on companies and their social practices	Lecture, Discussion Documentary, Case study analysis and evaluation	• Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699. • Hill J, Environmental, Social, and Governance (ESG) Investing (2020): A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio • Singhania, M., & Saini, N. (2022). Systems approach to environment, social and governance (ESG): Case of Reliance industries. Sustainable Operations and Computers, 3, 103-117.
Day 4	**Governance:** • Evolution of corporate governance frameworks and key motivators for step change: • Development of corporate governance. • Roles and responsibilities of Board	Lecture, Discussion	• Alexander Landau, Janina Rochell, Christian Klein, Bernhard Zwergel, First published: 20 January 2020 • Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports? https://www.icsi.edu/media/webmodulehttp://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/CORPORATE%20SOCIAL%20RESPONSIBILITY%20%20Management_Models_for_Corporate_Social_Responsibility.pdf/Guidance_Note_on_CSR_Final.pdf

Day 5	**Engagement and Stewardship**: • Engagement and Stewardship • Benefits and Criticism • Evolution of corporate governance frameworks	Lecture, Critical reading, Discussion	• N Nemoto (2022). Strengthening Environmental, Social, and Governance Investment under COVID-19 | Asian Development Bank (adb.org) • Alexander Landau, Janina Rochell, Christian Klein, Bernhard ZwergelFirst published: 20 January 2020; Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports?
Day 6	**ESG Analysis:** • Defining • Valuation and Integration Measuring • ESG Performance	Lecture, Discussion	• N Nemoto, Dadhich G,Atrey R; (2022), Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
Day 7	**Different Approaches of Integrating ESG Analysis:** • Exclusionary screening • Best-in-class selection • Thematic investing • Impact investing • Active ownership	Lecture, Discussion,	• Hill J, Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio,2020 • Dadhich G,Atrey R; 2022, Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
Day 8	Mid-term Examination		

14. Readings

Books

1. Atrey R; 2022, Benchmarking ESG & CSR: A Compendium of Best Practices in ESG & CSR in India, Taxmann
2. Dathe T, DatheR, Dathe I, Helmold M; (2022),Corporate Social Responsibility (CSR), Sustainability and Environmental Social Governance (ESG) Approaches to Ethical Management.
3. Hill J, (2020) Environmental, Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice of a Sustainable Portfolio,2020.
4. Karlheinz Spitz; John Trudinger; Matthew Orr; (2022) Environmental Social Governance Managing Risk and Expectation,2022, CRC Press

Reference Books

1. Kotler, P. and Lee, N. (2005). *Corporate Social Responsibility: doing the most good for your company and your cause*, Wiley.
2. May, S.; Cheney, G. and Roper, J. (2007). *The Debate over Corporate Social Responsibility*, Oxford University Press. Vogel, D. (2005). *The Market for Virtue: The potential and limits of Corporate Social Responsibility*, Brookings.

Journal/Websites

- *Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699.*
- *Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. Sustainability, 10(12), 4699.*
- *CSR as a Driver where ESG Performance will Ultimately Matter | Symphonya. Emerging Issues in Management (unicusano.it)*
- *Dan-Costin Nitescu & Maria-Alexandra Cristea, 2020. "Environmental, Social and Governance Risks – New Challenges for the Banking Business Sustainability," The AMFITEATRU ECONOMIC journal, Academy of Economic Studies - Bucharest, Romania, vol. 22(55), pages 692-692, August.*
- *Environmental, Social, And Governance (ESG) Practice And Firm Performance: An International Evidence Imlak Shaikh; Management Development Institute Gurgaon, Gurugram, Haryana, India; Received 12 January 2021; accepted 11 October 2021*
- *Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. Sustainability, 10(10), 3635.*

III. Course Name: Livelihood System and Programmes

1. Course Information

Course Title	Livelihood System and Programmes
Course Code	DM-746
Contract Hours	48
Course Credit	3

2. Program Outcome (PO)

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

The course seeks to enable reflective professional action in the context of transforming livelihoods of poor and marginal communities for bettering lives and increased wellbeing in contemporary India. The focus of discussion is on livelihoods located in forest, grassland and farmland as practiced in agro ecologies of India. This world of livelihoods is diverse and fascinating tapestry of material practices that have adaptive capacities for everyday survival.

4. Course Objectives

The course provides an opportunity to the students to learn and understand concepts of vulnerabilities consequences of modernity, rapid urbanization, rising rates of unemployment and competing claims over natural resource regimes coupled with market driven resource intensive use for private maximization and Sustainable Livelihood.

The objectives of the course are to:

- Form an understanding of the connection between livelihoods thinking and modern development.
- Gain basic understanding of nature and diversity of rural subsistence systems / livelihoods in different agro ecological regions of India in the context of rapid rural transformation and urbanisation

- Develop empathy on issues and challenges of attaining livelihoods security for vulnerable and marginal rural communities.
- Enhance skills and perspective to undertake sustainable livelihood interventions in the continuum of forests, grasslands and farmlands in rural India.

5. Course Outcome

After the course students will be able to:

CO 1	Understanding the different combination of subsistence practices as the basis of livelihoods in a rapidly transforming rural India.
CO 2	Understanding, applying and analysing the basic features and identify prime movers of the processes of rural transformation in specific regional contexts.
CO 3	Understanding, applying and analysing the issues and diversity of challenges to constituting sustainable livelihoods in the context of connect between community livelihoods and modern. Development
CO 4	Understanding the link between multidimensional nature of poverty, livelihoods and food security
CO 5	Understanding, applying and analysing how to develop empathy and inculcate knowledge and skills to respond to challenges of bettering livelihoods in the continuum of forest, grasslands and farmlands.

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4	CO 5
PO1	2	2	3		**3**
PO2	2		3	2	**3**
PO3	3	2	2	2	**3**
PO4			**2**	**3**	**2**

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, 2 denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Topics/Contents	CO	Bloom's Learning (BL) Levels
Unit 1	Livelihoods and Sustainable Development	CO 1, CO2, CO3	BL1, BL2, BL3, BL4
Unit 2	Livelihood Programs: State and Market as prime movers of rural transformation: towards urbanism rooted in industrial society.	CO 1, CO2, CO3	BL1, BL2, BL3, BL4
Unit 3	Farm Based livelihoods: Agro Ecological Regions, Subsistence Systems in the Continuum of Forest, Grasslands and farmlands	CO2, CO3, CO4	BL1, BL2, BL3, BL4, BL5, BL6
Unit 4	CSOs and roles in livelihood promotion: Evolution of livelihood programes of State, Civil Society and community action	CO3, CO4, CO5	BL1, BL2, BL3, BL4,
Unit 5	FPOs and functions in livelihood security	CO3, CO4, CO5	BL2, BL3, BL4
Unit 6	Farm Based Livelihood Policies and Strategies Community Managed Sustainable Farm Based Livelihood	CO2, CO3, CO4	BL2, BL3, BL4

Note: The Bloom's Taxonomy in the above table are as follows:
BL1: Remember, BL2: Understand, BL3: Apply, BL4: Analyse, BL5: Evaluate, BL6: Create

10. Course Policies

This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

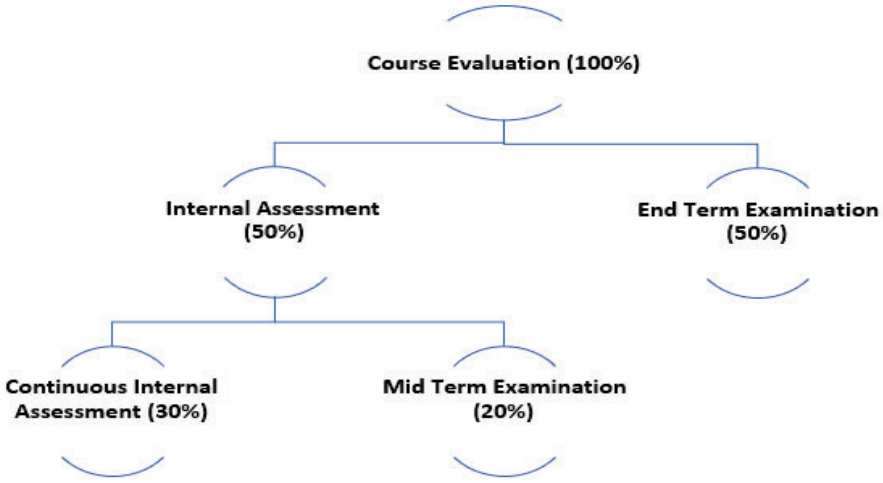
Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5
1.	Home Assignments (Individual / Group)					
2.	Viva-Voce					
3.	Case Study	√	√	√	√	√
4.	Review Paper	√	√	√	√	√
5.	Group Work	√	√		√	√
6.	Presentations	√	√	√		√
7.	Model Development Role-Play					
8.	Rapid Fire Questions					
9.	Quiz					
10.	Class Assignments (Individual / Group)	√		√	√	√
11.	Posters					
12.	Class Participation	√	√	√	√	√
13.	Mid Term Examination	√	√	√	√	√
14.	End Term Examination	√	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment.

13. Session Plan

Normally, the teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Basic Concepts:** • Livelihood • Productivity • Sustainable Living and Poverty	Discussion and Presentation	• Sachs, I. (2000). Understanding development: People, livelihood, markets and the state in mixed economies. Oxford University Press.

Day	Topics/Contents	Pedagogy	Reading Materials
			• Livelihood and Development https://www.tatatrusts.org/our-work/livelihood
Day 2	**Sustainable Livelihoods Framework and Sustainable Development:** • Vulnerability Context • Livelihood Assets • Livelihood Strategies & Outcomes	Discussion and Presentation	• Scoones, I. (1998). Sustainable Rural Livelihoods: A framework for analysis. Institute of Development Studies. • DFID sustainable Livelihood Framework chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf
Day 3	**Livelihood Programs:** • National Rural Livelihood Mission • Mahatma Gandhi NREGA • PMAY-G • SBM, Livelihood clusters and institutions- SHGs, VO, FPOs		• Pritchard, B. (2014). Feeding india: Livelihoods, entitlements and capabilities. Earthscan. • Jha, S. C. (2013). Poverty, unemployment and National Rural Livelihood Mission (NRLM). Abhijeet Publications. • Tivāṛī, U. R. P., Caudharī, R., & Caudharī, K. (2011). Mahātmā Gāṅdhī naregā = Mahatma Gandhi NREGA. Ṛ̊CA Prakāśana.
Day 4 & 5	**Agroecological Based Livelihood Programs:** • Agro Ecological Regions • Subsistence Systems in the Continuum of Forest • Grasslands and Farmlands • Farm based Livelihood And Production Systems: • Rashtriya Krishi Vikas Yojana -(RKVY) • Pradhan Mantri Krishi Sinchai Yojana (PMKSY) • National Bank for Agriculture and Rural Development (NABARD)- WADI programme		• Poulsen, F. (2020). Farmers and farming: Practices, management and Challenges. Nova Science Publishers. • Farm based livelihood programs chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.giz.de/de/downloads/giz2022-en-exploring-agriculture-based-livelihood.pdf

Day	Topics/Contents	Pedagogy	Reading Materials
Day 6	**Farmers Producer Organizations and Roles:** • Emerging Landscape of FPOs, Value Chains in Agriculture: Challenges and Opportunities • Case studies	Discussion and Presentation	• Ton, G., Bijman, J., & Oorthuizen, J. (2007). Producer organisations and market chains: Facilitating trajectories of change in developing countries. Wageningen Academic Publishers. • Understanding CSOs intervention https://srijanindia.org/ • **NABARD FPO** https://www.nabard.org/demo/auth/writereaddata/File/FARMER%20PRODUCER%20ORGANISATIONS.pdf
Day 7	**Livelihood:** • Food and nutrition security • Food production, market access and income generation for marginalized farmers	Discussion and Presentation	• Agriculture, Food Security, and Rural Development. (2010). Oxford University Press. • An intertwined relationship between poverty and nutrition https://www.researchgate.net/publication/343951732_The_Intertwined_Relationship_Between_Malnutrition_and_Poverty
Day 8	**Role of CSOs in Promoting Farm Based Livelihood:** • Mahila Kisan Shashaktikaran pariyojana (MKSP) • Community managed sustainable agriculture (CMSA)	Discussion and Presentation	• Magee, T. (2013). A Field Guide to Community Based Adaptation. Routledge, Taylor & Francis Group, Earthscan. • Assessing India's FPO systems https://tci.cornell.edu/?blog=assessing-indias-fpo-ecosystem
	Mid-term Examination		

14. Reading

Books

1. Agriculture, Food Security, and Rural Development. (2010). Oxford University Press.
2. Bandopadhyay A., & Chaudhuri B B., (2004). Tribes, Forest and Social Formation in Indian History, Manohar, New Delhi.
3. Gajbhiye K.S. and Mandal C., (2015). Agro-Ecological Zones, their Soil Resource and Cropping Systems, National Bureau of Soil Survey and Land Use Planning, Nagpur

4. Jana, N. C., Banerjee, A., & Ghosh, P. K. (2022). Sustainable Livelihoods of Tribal Communities in Odisha, India: The Case of Mayurbhanj. Cambridge Scholars Publishing.
5. Jha, S. C. (2013). Poverty, unemployment and National Rural Livelihood Mission (NRLM). Abhijeet Publications.
6. Ludden D. (1999). Farming Landscapes, Excerpted From David, An Agrarian History of South Asia, New Cambridge History of India, IV.4, Cambridge.
7. Magee, T. (2013). A Field Guide to Community Based Adaptation. Routledge, Taylor & Francis Group, Earthscan.
8. Poulsen, F. (2020). Farmers and farming: Practices, management and Challenges. Nova Science Publishers.
9. Pritchard, B. (2014). Feeding india: Livelihoods, entitlements and capabilities. Earthscan.
10. Rakshit, A., Chakraborty, S., Parihar, M., Meena, V. S., Mishra, P. K., & Singh, H. B. (Eds.). (2022). Innovation in Small-Farm Agriculture: Improving Livelihoods and Sustainability. CRC Press.
11. Sachs, I. (2000). Understanding development: People, markets and the state in mixed economies. Oxford University Press.
12. Scoones, I. (1998). Sustainable Rural Livelihoods: A framework for analysis. Institute of Development Studies.
13. Shah, M., & Vijayshankar, P. S. (Eds.). (2022). Tribal Development Report: Livelihoods. Taylor & Francis.
14. Springate-Baginski, O., & Blaikie, P. (Eds.). (2013). Forests people and power: the political ecology of reform in South Asia. Routledge.
15. Tambe, S. (2022). Teaching and Learning Rural Livelihoods. Springer International Publishing.
16. Taylor, M. (2014). The political ecology of climate change adaptation: Livelihoods, agrarian change and the conflicts of development. Routledge.
17. Tivāṛī, U. R. P., Caudharī, R., & Caudharī, K. (2011). Mahātmā Gāṅdhī naregā = Mahatma Gandhi NREGA. ṚCA Prakāśana.
18. Ton, G., Bijman, J., & Oorthuizen, J. (2007). Producer organisations and market chains: Facilitating trajectories of change in developing countries. Wageningen Academic Publishers.

Journals

- *Aggarwal B., (2011). 12th Five Year Plan Working group on Disadvantaged Farmers Including Women, Planning Commission GoI.*
- *BhatC.P.,(1982). Environmental Participation and Livelihood in Himalayan Perspective: Experiences of Chipko Movement.*
- *Bose A., (2000). Ecology, Economy and Society in Himalayan Villages, Economic and Political Weekly, Vol. 35, No. 31, pp. 2707-2709.*
- *Sabar B., (2010). Tribal Agriculture: The Chuktia Bhunjias in Central India, Economic & Political Weekly, vol xlv no 12, pp 77-79.*
- *Scoones I., (2009). Livelihoods perspectives and rural development, Journal of Peasant Studies, Vol. 36, No. 1.*

E References

- http://livelihoodsrc.dfid.gov.uk/
- http://livelihoodsrc.dfid.gov.uk/thematic-area.phphttp://www.merriam-webster.com/dictionary/livelihood http://www.oxfam.org.uk/resources/learning/livelihoods/index.html http://www.eldis.org/go/topics http://www.eldis.org/go/topics/dossiers/livelihoods-connect http://www.eldis.org/vfile/upload/1/document/0812/LAC.pdf http://opendocs.ids.ac.uk/opendocs/handle/123456789/29
- https://nraa.gov.in/
- https://aajeevika.gov.in/ https://aajeevika.gov.in/en/content/genesis
- https://aajeevika.gov.in/en/nrlm-repository/coredocuments https://aajeevika.gov.in/en/content/state-missions https://www.worldbank.org/en/news/feature/2011/07/05/the-national-rural- livelihoods-project
- *Joshi., E. (2022). Assessing India's FPO systems.* https://tci.cornell.edu/?blog=assessing-indias-fpo-ecosystem
- *Siddiqui.,F. et.al. (2020). An intertwined relationship between poverty and Nutrition.* https://www.researchgate.net/publication/343951732_The_Intertwined_Relationship_Between_Malnutrition_and_Poverty
- *Srijan. (2022). Understanding CSOs interventions. https://srijanindia.org/*
- *NABARD. (2020). Farmer Producer Organiztions in India.* https://www.nabard.org/demo/auth/writereaddata/File/FARMER%20PRODUCER%20ORGANISATIONS.pdf.
- *DFID. (2021). Sustainable Livelihood Framework. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/*http://www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf
- *Tatatrust. (2022). Livelihood and Development.* https://www.tatatrusts.org/our-work/livelihood

1. Course Information

Course Title	Water, Sanitation and Hygiene (WASH) Management
Course Code	DM-750
Contract Hours	48
Course Credit	3

2. Program Outcomes

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

In order to be an effective manager in development management, one must understand the basic of WASHN like water, sanitation, hygiene, biomedical waste, nutrition and others and have a strong grasp on a wide range of management skills and concepts.

The learner will be able to understand the role of Sustainable Development Goals (SDG) in handling health and WASHN related morbidities and mortalities. The course also covers the various components of water, sanitation, hygiene and nutrition and its national policies. It also aims to enhance capabilities of students in critically analyzing them and to familiarize them with the scope of enhancing these programmes and policies.

4. Course Objectives

The main objective of the course is to provide students with an in-depth knowledge parlance of "WASH" as well as its intrinsic connect to the students. The objectives of the course are to:

- Understand WASH and Nutrition, related impact on Health.
- Understand the government policies and related water and health Programmes.
- Understand about sustainable management of water and sanitation for all, Water and Sanitation in SDGs 6

- Understand about minimum standards in Water Supply, Sanitation and Hygiene Promotion
- Understand and develop WASH System and it's building blocks for Sustainable Development Goal
- Understand about WASH impact on climate change and WASH.

5. Course Outcome (CO)

CO 1	Understanding why a management of health and WASH has become crucial in today's dynamic public health sector and WASH impact on climate change and WASH
CO 2	Understanding the National policy and critical analysis of water, sanitation and hygiene policy.
CO 3	Understanding, applying and analysing the minimum standards in Water Supply, Sanitation and Hygiene Promotion
CO 4	Understanding, applying and analysing the WASH in Health in the health care facilities.
CO 5	Understanding, applying and analysing the WASH System and it's building blocks for Sustainable Development Goal

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4	CO 5
PO1	3	3	3	2	**2**
PO2		3	2		
PO3	3	3	3	2	**2**
PO4		3	3		2

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by online lectures augmented by discussions, experiential exercises discussion group exercise. Academically relevant movies will also be a feature of this subject.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Topics/Contents	CO	Bloom's Learning (BL) Levels
Unit 1	**About WASH**		BL1, BL2, BL3
	Why WASH What are WASH interventions? Health impacts of unsafe WASH	CO1, CO4, CO5	
Unit 2	**Lessons Learned from Previous Strategy Period and Principal of WASH**		BL4, BL5
	Lessons Learned Over the Previous Strategy Period Principal of WASH Program	CO1, CO4, CO5	
Unit 3	**WASH in the global SDG agenda**		BL 2, BL3, BL4
	Definition of the SDGs SDGs in a Changing World Ensure availability and sustainable management of water and sanitation for all Water and Sanitation in the other SDGs Definition of the SDG global indicator monitoring framework Water and Sanitation Services in SDG 6	CO1, CO4, CO5	
Unit 4	**National Water Policy (2012)**		BL1, BL2, BL3
	Definition of water, sanitation, and Hygiene Status and situation analysis of WASH in India Why is access to clean water and sanitation important? What constitutes adequate sanitation? Different national level program and guidelines of WASH in India	CO2, CO3	
Unit 5	**National Health Policy 2017**		BL1, BL2, BL3
	An Overview of National Health Programmes in India Policy and Implementation Issues in various NHP National Health Mission	CO2, CO3	
Unit 6	**WASH and Health**		BL1, BL2, BL3
	WASH and Health	CO4	
Unit 7	**Minimum Standards in Water Supply, Sanitation and Hygiene Promotion**		BL1, BL2. BL3, BL4
	WASH Standard The importance of water supply, sanitation and hygiene promotion in emergencies Links to the standards common to all sectors	CO3	

Unit	Topics/Contents	CO	Bloom's Learning (BL) Levels
	Vulnerabilities and capacities of disaster-affected populations The Minimum Standards Excreta Disposal Vector Control Solid Waste Management Drainage		
Unit 8	**WASH System and it's building blocks for Sustainable Development Goal**		BL2. BL3, BL4
	Systems approaches and WASH Institutions Policy and Legislation Finance Regulation and Accountability Planning and Monitoring Infrastructure Water Resource Management Learning and Adaptation Applying the building blocks	CO5	
Unit 9	**WASH Impact on Climate Change**		BL2. BL3, BL4
	Climate change, a global issue Understanding the Impacts on WASH Services Taking Action: Key Considerations and Responses Adaptation and Mitigation Measures	CO1	

Note: The Bloom's Taxonomy in the above table are as follows:
BL1: Remember, BL2: Understand, BL3: Apply, BL4: Analyse, BL5: Evaluate, BL6: Create

10. Course Policies

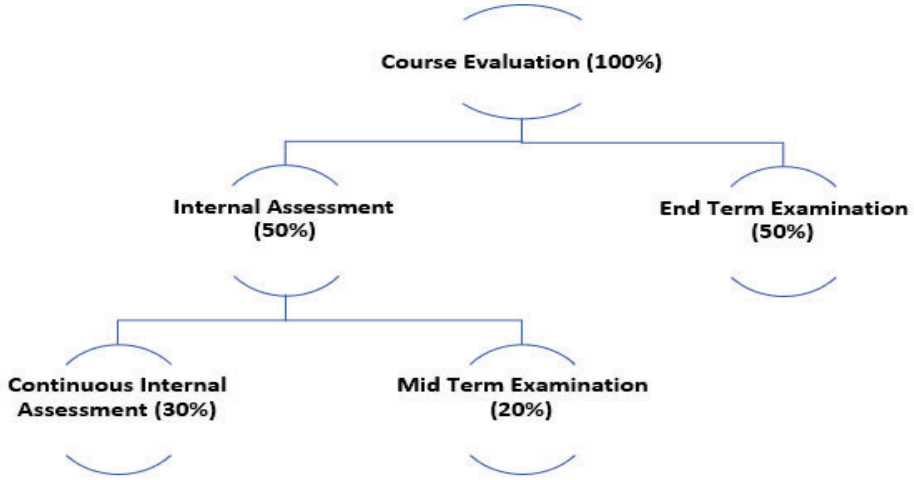
This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.
E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix

S. No.	Activity	CO1	CO2	CO3	CO4	CO5
1.	Home Assignments (Individual / Group)	√	√	√	√	√
2.	Viva-Voce					
3.	Case Study	√	√	√	√	√
4.	Review Paper	√	√	√	√	√
5.	Group Work					
6.	Presentations	√	√	√	√	√
7.	Model Development Role-Play					
8.	Rapid Fire Questions					
9.	Quiz					
10.	Class Assignments (Individual / Group)	√	√	√	√	√
11.	Posters					
12.	Class Participation	√	√	√	√	√
13.	Mid Term Examination	√	√	√	√	√
14.	End Term Examination	√	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment.

13. Session Plan

Normally, the teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Why WASH:** • What are WASH interventions? • Health impacts of unsafe Lessons Learned Over the Previous Strategy Period • Principal of WASH Program WASH	Lecture and group exercises	• Chauhan SK, Bihua Z. (1983) Who puts the water in the taps?: Community participation in third World Drinking Water, sanitation, and health. London: International Institute for Environment and Development • Als, D., Meteke, S., Stefopulos, M., Gaffey, M. F., Kamali, M., Munyuzangabo, M., Shah, S. C., Jain, R., Radhakrishnan, A., Siddiqui, F. J., Ataullahjan, A., & Bhutta, Z. A. (2020). Delivering water, sanitation and hygiene interventions to women and children in conflict settings: a systematic review. BMJ Global Health
Day 2	**WASH in the Global SDG Agenda:** • SDGs in a Changing World • Ensure availability and sustainable management of water and sanitation for all • Definition of the SDG global indicator monitoring framework and Water and Sanitation Services in SDG 6	Lecture and group exercises	• Organization, W. H. (2017, October 27). Progress on Drinking-Water, Sanitation and Hygiene: 2017 Update and SDG Baselines.
Day 3	**Water, Sanitation, and Hygiene:** • Definition of water, sanitation, and Hygiene • Status and situation analysis of WASH in India, • Why is access to clean water and sanitation important? • What constitutes adequate	Lecture and group exercises	• Dakhode, Sarika U.; Gaidhane, Abhay M.; Choudhari, Sonali G.. Policy, programs, and activities for promotion of water, sanitation and hygiene practices in schools of India. Journal of Family Medicine and Primary Care 11(8):p 4310-4318, August 2022. | DOI: 10.4103/jfmpc.jfmpc_2102_21

Day	Topics/Contents	Pedagogy	Reading Materials
	sanitation, and Different national level program and guidelines of WASH in India		
Day 4	**National Health Programmes:** • An Overview of National Health Programmes in India • Policy and Implementation Issues in various NHP and National Health Mission	Lecture and group exercises	• National Health Initiatives. (n.d.). Retrieved May 5, 2023, from https://health.gov/our-work/national-health-initiatives
Day 5	**WASH and Health:** • The provision of Water, Sanitation • Health Care Waste Management • Hygiene and Environmental Cleaning Infrastructure and Services across all parts of a Facility	Lecture and group exercises	• World Health Organization. (n.d.). Health product and policy standards. World Health Organization. Retrieved May 5, 2023, from https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health
Day 6	**WASH Standard:** • The importance of water supply, anitation and hygiene promotion in emergencies, • Links to the standards common to all sectors, • Vulnerabilities and capacities of disaster-affected populations, The Minimum Standards, Excreta Disposal, Vector Control, Solid Waste Management and Drainage • WASH System and it's building blocks for Sustainable Development Goal	Lecture and group exercises	• World Health Organization. (n.d.). Water, sanitation and hygiene (WASH). World Health Organization. Retrieved May 5, 2023, from https://www.who.int/health-topics/water-sanitation-and-hygiene-WASH • Thomas, E. A., Andrés Luis Alberto, Borja-Vega, C., & Sturzenegger Germán. (2018). Innovations in wash impact measures: Water and sanitation measurement technologies and practices to inform the Sustainable Development Goals. World Bank Group.
Day 7	**WASH Impact on Climate Change:** • Climate change, a global issue • Understanding the Impacts on WASH Services • Taking Action: Key	Lecture and group exercises	• Turnbull, M., Sterrett, C. L., & Hilleboe, A. (2013). Toward resilience: A guide to disaster risk reduction and climate change adaptation. Practical Action Publishing.

Day	Topics/Contents	Pedagogy	Reading Materials
	Considerations and Responses • Adaptation and Mitigation Measures		
Day 8	Midterm Examination		

14. Readings

Books

1. Allan A, Hendry S, Rieu-Clarke A.(2017). *Routledge Handbook of Water Law and policy*. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.
2. Blaylock RL. (2006) *Health and Nutrition Secrets That Can Save Your Life*. Albuquerque, NM: Health Press.
3. Carter, R. C. (Ed.). (2015). Water, Sanitation, and Hygiene in Humanitarian Contexts: Reflections on current practice. Practical Action Publishing. http://www.jstor.org/stable/j.ctv10crc2b
4. Chandra R, Aneja R. (2004)*Water, environment and sanitation assessment*. Delhi: Isha Books.
5. Chauhan SK, Bihua Z. (1983) *Who puts the water in the taps?: Community participation in third World Drinking Water, sanitation, and health*. London: International Institute for Environment and Development.
6. Eslamian, S., & Eslamian, F. A. (2017). Handbook of Drought and Water Scarcity: Environmental Impacts and Analysis of Drought and Water Scarcity. CRC Press.
7. Hooja, R., Arora, R. K., & Parnami, K. K. (2007). Water Management: Multiple Dimensions.
8. Thomas, E. A., Andrés Luis Alberto, Borja-Vega, C., & Sturzenegger Germán. (2018). Innovations in wash impact measures: Water and sanitation measurement technologies and practices to inform the Sustainable Development Goals. World Bank Group.
9. Turnbull, M., Sterrett, C. L., & Hilleboe, A. (2013). *Toward resilience: A guide to disaster risk reduction and climate change adaptation*. Practical Action Publishing.
10. Organization, W. H. (2001). Water Quality: Guidelines, Standards, and Health : Assessment of Risk and Risk Management for Water-related Infectious Disease. World Health Organization.
11. Organization, W. H. (2015). Sanitation Safety Planning: Manual for Safe Use and Disposal of Wastewater Greywater and Excreta. World Health Organization.
12. Organization, W. H. (2017, October 27). Progress on Drinking-Water, Sanitation and Hygiene: 2017 Update and SDG Baselines.
13. UNESCO. (2020). The United Nations World Water Development Report 2020: Water and Climate Change.
14. WHO and UNICEF. (2015). Progress on Sanitation and Drinking Water: 2015 update and MDG Assessment. World Health Organization.

Journals

- *Abdou, A., Munoz, B. E., Nassirou, B., Kadri, B., Moussa, F., Baarè, I., Riverson, J., Opong, E., & West, S. K. (2010). How much is not enough? A community randomized trial of a Water and Health Education programme for Trachoma and Ocular C. trachomatis infection in Niger. Tropical medicine & international health : TM & IH, 15(1), 98–104. https://doi.org/10.1111/j.1365-3156.2009.02429.x*
- *Als, D., Meteke, S., Stefopulos, M., Gaffey, M. F., Kamali, M., Munyuzangabo, M., Shah, S. C., Jain, R., Radhakrishnan, A., Siddiqui, F. J., Ataullahjan, A., & Bhutta, Z. A. (2020). Delivering water, sanitation and hygiene interventions to women and children in conflict settings: a systematic review. BMJ Global Health, 5(Suppl 1), e002064. https://doi.org/10.1136/bmjgh-2019-002064*
- *Brockett, S., Wolfe, M. K., Hamot, A., Appiah, G. D., Mintz, E. D., & Lantagne, D. (2020). Associations among Water, Sanitation, and Hygiene, and Food Exposures and Typhoid Fever in Case–Control Studies: A Systematic Review and Meta-Analysis. American Journal of Tropical Medicine and Hygiene, 103(3), 1020–1031. https://doi.org/10.4269/ajtmh.19-0479*
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Mäusezahl, D., Medlicott, K., Neira, M., Stocks, M. E., Wolf, J., & Cairncross, S. (2014). Burden of disease from inadequate water, sanitation and hygiene in low- and middle-income settings: a retrospective analysis of data from 145 countries. Tropical Medicine & International Health, 19(8), 894–905. https://doi.org/10.1111/tmi.12329

- *Shrestha, A., Kunwar, B.M. & Meierhofer, R. Water, sanitation, hygiene practices, health and nutritional status among children before and during the COVID-19 pandemic: longitudinal evidence from remote areas of Dailekh and Achham districts in Nepal. BMC Public Health 22, 2035 (2022). https://doi.org/10.1186/s12889-022-14346-8*
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E References

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1. Course Details

Course Title	Natural Resource Management, Climate Change and Resilience
Course Code	DM-753
Contract Hours	48
Course Credit	3

2. Program Outcomes

The program outcome (POs) for MBA-Development Management two years' full-time course are as follows:

PO 1	Develops perspective on achieving Sustainable Development Goals (SDGs) in the 21st century.
PO 2	Builds knowledge competencies, analytical and creative skills for problem solving and innovating to attain sustainable development.
PO 3	Prepares professionals to work in CSOs, Non-Profits, Development organizations, Businesses, Govt Development Missions, CSR, public systems.
PO 4	Inculcates willingness to work in challenging geographies / contexts as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

3. Course Description

Nowadays entire world is witness of continuous environmental and ecological deterioration due to unplanned urbanisation; rapid industrialisation; intensive agriculture; indiscriminate consumption of natural resources; haphazard disposal and mismanagement of solid, hazardous and biomedical waste; radiations from nuclear power plants; emissions of greenhouse gases and ozone depleting substances; melting of glaciers and sea level rise; devastating flood and drought; degradation of water, air and soil quality; deprivation of biodiversity; violation of the laws, rules and regulations concerned with air, water, soil and noise quality etc.

The above-mentioned deteriorating factors would certainly cause significant complications in human sustenance, survival and imbalance between development and environment and hence its remediation is essential not only by making the laws, implementing effective governance and administration but also by providing education, awareness and sensitivity among the students towards global environmental and ecological concerns.

By introducing the course 'Natural Resource Management, Climate Change and Resilience' in the course curriculum of MBA-DM, it can help the students to generate concrete idea about ecosystem and ecosystem services; management of ecosystem and environment; sustainable development and SDGs; forest and silvicultural practices; management of wasteland; common land management, forest management and policy;

climate science, climate change and impacts; policies on climate change and governance etc. Indeed, the conceived understanding, analytical ability and deliberations of the course paper will be envisaged in their professional endeavors.

4. Course Objectives

The course is designed to develop an in-depth understanding of environmental challenges that our mother earth is facing in today's context. Furthermore, the course will also equip the learners about challenges of natural resource management and sustainable developmental goals both at national and global context.

The objectives of the course are to:

- Understand the concept of ecosystem and ecosystem services, conservation and management of ecosystem and environment.
- Understand, apply and analyze the concept of sustainable development prospective and SDGs, challenges and strategies linked with sustainable development.
- Understand, apply and analyze the silvicultural practices; protection, prevention and conservation of forest; forest management and policy.
- Understand, apply and analyze the concept of climate science; climate change and impacts; global initiatives on climate change mitigation; policies on climate change and governance.

5. Course Outcome

By the end of this course, students would be able to:

CO 1	Understanding the concept of ecosystem and ecosystem services; conservation and management of ecosystem and environment
CO 2	Understanding and analysing the concept of sustainable development prospective and SDGs, challenges and strategies linked with sustainable development
CO 3	Understanding, applying and analysing the natural resource management; silvicultural practices; protection, prevention and conservation of forest; forest management and policy
CO 4	Understanding, applying and analysing the concept of climate science; climate change and impacts; climate change mitigation; policies on climate change and governance

6. Course Articulation Matrix (Interrelation between CO and PO)

PO/CO	CO 1	CO 2	CO 3	CO 4
PO1	3	3	3	**2**
PO2		3	2	
PO3	3	3	3	**2**
PO4		3	3	

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here, 3 denotes **high** strength of correlation between CO and PO, 2 denotes **medium** strength of correlation between CO and PO and 1 denotes **weak** strength of correlation between CO and PO.

7. Pedagogy

The course consists of two sessions (seventy-five-minutes) each week, primarily involving lectures, discussions, case study and class test as internal assessment. Besides, students will be more exposed with the objectives of course by practical field training/exposure /excursion.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Topics/Contents	CO	Bloom's Learning (BL) Levels
Unit 1	Fundamentals of Ecosystem	CO1	BL1, BL2
Unit 2	Sustainable Development Prospective & SDGs	CO2	BL1, BL2, BL3, BL4, BL5
Unit 3	Natural Resource Policy & Problems in India	CO3	BL1, BL 2
Unit 4	Forest Management & Policy	CO3	BL1, BL2, BL 3
Unit 5	Understanding collective actions for natural resource management, types of commons, management of commons and governance of commons and livelihood security	CO3	BL1, BL2, BL3
Unit 6	Environmental Pollution & Control Measures	CO4	BL1, BL2, BL3
Unit 7	General Overview of Climate Science and Impacts	CO4	BL1, BL2, BL3
Unit 8	Climate Change & Governance	CO4	BL2, BL3, BL 4

Note: Bloom's Taxonomy Levels are as follows:
BL1: Remember BL2: Understand BL3: Apply BL4: Analyse BL5: Evaluate BL6: Create

10. Course Policies

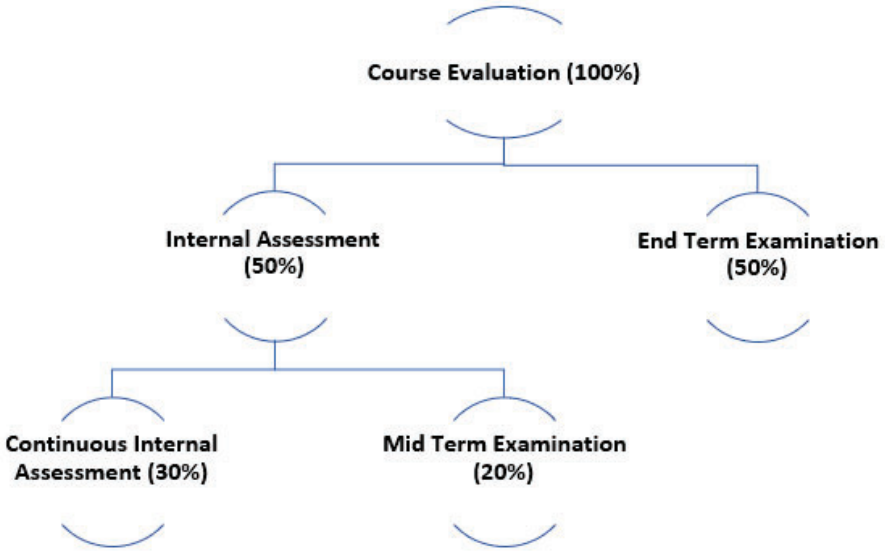
This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.
E-Mail: Each student has an e-mail id and a password, provided by university. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below.

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix

S. No.	Activity	CO1	CO2	CO3	CO4
1.	Home Assignments (Individual / Group)	√	√	√	√
2.	Viva-Voce				
3.	Case Study	√	√	√	√
4.	Review Paper	√	√	√	√
5.	Group Work				
6.	Presentations	√	√	√	√
7.	Model Development Role-Play				
8.	Rapid Fire Questions				
9.	Quiz				
10.	Class Assignments (Individual / Group)	√	√	√	√
11.	Posters				
12.	Class Participation	√	√	√	√
13.	Mid Term Examination	√	√	√	√
14.	End Term Examination	√	√	√	√

Note: Please tick the relevant cell to show the respective alignment.

13. Session Plan

Normally, the teaching for each course is scheduled from Monday to Thursday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilize these sessions.

Day	Topics/Contents	Pedagogy	Reading Materials
Day 1	**Fundamentals of Ecosystem:** • Ecosystem & their Structural & Functional Components • Food Chain, Food Web and Ecological Pyramids • Biogeochemical Cycling of Nutrients • Energy Flow & Ecosystem	Lecture, case study and exercise	• Weathers, K. C., Strayer, D. L., & Likens, G. E. (2021). Fundamentals of Ecosystem Science. Academic Press. • IIHMR U module
Day 2	**Sustainable Development Prospective & SDGs:** • Historical Perspective of Sustainable Development • Principles of Sustainable Development • Brundtland Commission • Earth Submit and Agenda 21 • Sustainable Development Goals and 2030 Agenda **Sustainable Development Challenges and Strategies:** • Sustainable Development Challenges • Sustainable Consumption and Production • India's Goals and Strategies for Sustainable Development	Lecture, case study and exercise	• Van, B. P. A. G., & der, H. R. van. (2019). Sustainable development goals and income inequality. Edward Elgar Publishing. • IIHMR U module
Day 3	**Natural Resource Policy & Problems in India:** • Importance of NRM • Policies and Institutions for NRM – Historical Perspectives, • Economic Analysis of NRM and Practical Applications	Lecture, case study and exercise	• Kerr, J. M. (1997). Natural Resource Economics: Theory and application in India. Oxford & IBH Pub. Co. • IIHMRU module and case study of FES & Other projects
Day 4	**Forest Management & Policy:** • Protection, Prevention and Conservation of Forest • Forest Movement and People's Participation • Social Forestry	Lecture, case study and exercise	• Tiwari, K.M. (2000). Social Forestry for Rural Development International Book Distributors

Day	Topics/Contents	Pedagogy	Reading Materials
	• Wasteland and Technologies for Wasteland Management • Forest Policies & Acts.		
Day 5	**Understanding Collective Actions and Commons:** • Theories of Collective Actions & Game Theory • Concept of Commons, Common Property & Common Pool Resources • Tragedy of Commons	Lecture, case study and exercise	• Ostrom, E. (1990). Governing the commons: The evolution of institution for collective action. • Balland & Platteau (1996). Halting degradation of natural resources.
Day 6	**Management of Commons:** • Regulated and Unregulated Commons • Common Resources and Institutional Sustainability – Institutional Design/ Structure, Crafted and Indigenous - Ostrom, Wade, Baland and Platteau and others • Factors influencing co-operations, Monitoring and evaluation of CPR Institution, CPR – Health	Lecture, case study and exercise	
Day 7	**Environmental Pollution & Control Measures:** • Air, Water, Noise, Soil & Radioactive Pollution & Control • Solid Waste Generation and Management • Acid Rain & their Consequences • Ozone Depletion and Montreal Protocol • Environmental Impact Assessment (EIA) **General Overview of Climate Science and Impacts:** • Vertical Structure of Atmosphere • Concept of Physical Meteorology • Green House Effect, Global Warming & Climate Change • Impacts of Climate Change on Natural & Managed Systems • Climate Change & Public Health • Water as Climate Issue • Climate Change Adaptation	Lecture, case study and exercise	• Matson, P., William, C.C., &Andersson, K. (1st Ed. 2016). Pursuing Sustainability: A Guide to the Science and Practice. • Archer, D. (2nd Ed. 2011). Global Warming: Understanding the Forecast .

Day	Topics/Contents	Pedagogy	Reading Materials
Day 8	**Climate Change & Governance:** • Journey from Kyoto to Copenhagen • Green House Gas Emissions and Accountability • Involvement of Communities/Stakeholders for Climate Change • Policies on Climate Change and Governance.	Lecture, case study and exercise	• Jamal, D. (2019).The End of Ice: Bearing Witness and Finding Meaning in the Path of Climate Disruption. The New Press
	End Term Examination		

14. Reference Material

Books

1. Archer, D. (2nd Ed.). *Global warming: Understanding the forecast*. John Wiley & Sons.
2. Balland & Platteau (1996). *Halting degradation of natural resources*. New York: Clarendon Press Oxford.
3. *Chopra*, K., *Kadekodi,* G. K. &*Murty,* M. N. (*1990*). *Participatory development*: *People* and *common property resources.* New Delhi: Sage.
4. Jamal, D. (2019). *The end of ice: Bearing witness and finding meaning in the path of climate disruption*. New York, London: The New Press.
5. Kerr, J. M. (1997). Natural Resource Economics: Theory and application in India. Oxford & IBH Pub. Co.
6. Kerr, J. M., Marothia, D. K., Singh, K., Ramasamy, C. & Bentley, W. R. (1997). *Natural resource economics: Theory and application in India.* Calcutta: Oxford & IBH Pub. Co. Pvt. Ltd.
7. Matson, P., Clark, W. C., & Andersson, K. (2016). *Pursuing sustainability: A guide to the science and practice*. New Jersy: Princeton University Press.
8. Meadows, D. H., Randers, J., & Meadows, D. L. (2013). The limits to growth: The 30-year *update*. Vermont, USA: Chelsea Green Publishing Company.
9. Ostrom, E. (1990). *Governing the commons: The evolution of institution for collective action*. London: Cambridge University Press.
10. Sengupta, N. (1991). *Managing common property irrigation in India and the Philippines*. New Delhi: Sage Publications.
11. Sinha, H. & Kumar, A. (Ed). (2013). *Governance of commons and livelihood security*. Ranchi: XISS & NABARD Publications.
12. Tiwari, K. M. (2000). Social Forestry for Rural Development. International Book Distributors
13. Van, B. P. A. G., & der, H. R. van. (2019). Sustainable development goals and income inequality. Edward Elgar Publishing
14. Weathers, K. C., Strayer, D. L., & Likens, G. E. (2021a). *Fundamentals of Ecosystem Science*. Academic Press.

e-Books

- *Big Earth Data in Support of the Sustainable Development Goals (2019). (2021). EDP Sciences.*
- *Daniel Bedford, & John Cook. (2016). Climate Change: Examining the Facts : Examining the Facts. ABC-CLIO.*
- *Daniels, J. A. (2017). Advances in Environmental Research. Nova Science Publishers, Inc.*
- *E. Oku, & O. Asubonteng. (2014). Harnessing Land and Water Resources for Improved Food Security and Ecosystem Services in Africa. United Nations University Institute for Natural Resources.*
- *E. Oku, & O. Asubonteng. (2014). Harnessing Land and Water Resources for Improved Food Security and Ecosystem Services in Africa. United Nations University Institute for Natural Resources.*
- *Federica Doni, Andrea Gasperini, & João Torres Soares. (2020). SDG13 - Climate Action : Combatting Climate Change and Its Impacts: Vol. First edition. Emerald Publishing Limited.*
- *Harun Rasid, & Bimal Paul. (2014). Climate Change in Bangladesh : Confronting Impending Disasters. Lexington Books.*
- *Irshad A. Khan. (2019). Forest Governance and Sustainable Resource Management. Sage Publications Pvt. Ltd.*
- *Larson, C. (2014). Management of Forests and Public Lands Through the Lens of Ecosystem Services. Nova Science Publishers, Inc.*
- *Lindhjem, H., Reinvang, R., & Zandersen, M. (2015). Landscape Experiences As a Cultural Ecosystem Service in a Nordic Context : Concepts, Values and Decision-making. Nordic Council of Ministers.*
- *Sander Jacobs, Nicolas Dendoncker, & Hans Keune. (2014). Ecosystem Services : Global Issues, Local Practices. Elsevier.*

E-Resource / Databases: (If Any)

- *Projects.worldbank.org/P132100?lang=enhttps://onlinelibrary.wiley.com/doi/abs/10.1002/ldr.852*
- *ProQuest E-Books Collection (COMPLEMENTARY) (Approx. 20,000 ebooks); Books - https://ebookcentral.proquest.com/lib/xissin; User Guide:*
- *ProQuest Management Collection for e-journals" ABI GLOBAL" –*
- *www.fao.org/land-water/land/sustainable-land-management/slm-practices/en*

Additional Reference Resources:

- *Central Pollution Control Board (CPCB): cpcb.nic.in*
- *Centre For Science and Environment: https://www.cseindia.org*
- *Foundation for Ecological Security (FES): fes.org.in*
- *Green Peace: https://www.greenpeace.org*
- *India Water Portal www.indiawaterportal.org*
- *International Union for Conservation of Nature (IUCN): https://www.iucn.org*
- *Ministry of Drinking Water and Sanitationwww.mdws.gov.in*
- *Ministry of Environment, Forest and Climate Change (MoEFCC): envfor.nic.in*
- *Sustainable Development Goals https://sustainabledevelopment.un.org*
- *The Energy and Resources Institute (TERI): www.teriin.org*

- *Redman, C. L., Grove, J. M., & Kuby, L. H. (2004). integrating social science into the long-term ecological research (LTER) network: social dimensions of ecological change and ecological dimensions of social change. Ecosystems, 7(2), 161–171. http://www.jstor.org/stable/3658486*
- *Haberl, H., Winiwarter, V., Andersson, K., Ayres, R. U., Boone, C., Castillo, A., Cunfer, G., Fischer-Kowalski, M., Freudenburg, W. R., Furman, E., Kaufmann, R., Krausmann, F., Langthaler, E., Lotze-Campen, H., Mirtl, M., Redman, C. L., Reenberg, A., Wardell, A., Warr, B., & Zechmeister, H. (2006). From LTER to LTSER: Conceptualizing the socioeconomic dimension of long-term socioecological research. Ecology and Society, 11(2). http://www.jstor.org/stable/26264831*

MBA Pharmaceutical Management
2024-25

Course Plan

Sustainability and Circular Economy
(PHRM-751)

October 7-11, 2024

Course Coordinator
Rahul Sharma

School of Pharmaceutical Management

1. Course Information

Course Title	Sustainability and Circular Economy
Course Code	PHRM-751
Course Credit	1.5
Course Instructor (s)	Rahul Sharma

2. Program Outcome (PO)

PO 1 To help understand the latest concepts and techniques of management and their application in making the people to play efficient and effective managerial roles in pharma Industry.

PO 2

To develop skills of analyzing, diagnosing and solving operational problems in Pharmaceutical and Healthcare care organization.

PO 3

To help learn about appropriate strategies for effective planning implementation and evaluation of policies in pharma sector

PO 4 To help learn the application of qualitative and quantitative analytical tools as applicable to Pharma sectors related problems

PO 5

Use Appropriate skills to support pharmaceutical and health care organization to take informed decisions.

PO 6

Utilize learning so acquired from training and practical exposure to solve real time problem in Pharma Industry.

3. Course Description

In the era of globalization and competitiveness, sustainable operations management (SOM) has started receiving attention of management practitioners and academicians. Business houses have started implementing the SOM practices and both operations management and management science researchers are contributing to immense development of this domain of knowledge.
Circular Economy and Sustainability forms the foundation of it. The course will push the students to learn the fundamentals of circular economy and explore regenerative models and transition strategies, misconceptions, and the latest trends in the field.

4. Course Objectives

- To understand sustainability and circular economy fundamentals
- Describe the three dimensions of sustainability (society, environment and economy)

- To understand and develop skills to integrate circularity and sustainability concepts into business applications
- To understand the circular economy and sustainable business models fundamentals
- To understand circularity metrics
- To define environmental and social dimensions of circularity for business specially in pharma sector

5. Course Outcome

The course will provide a detailed input about the knowledge of concepts of sustainability and developskills to implement sustainable and circularity methods in pharmaceutical industries.

CO 1	To understand sustainability and circular economy fundamentals
CO 2	To understand the three dimensions of sustainability (society, environment, and economy)
CO 3	To understand the circular economy and sustainable business models fundamentals
CO 4	To understand circularity metrics and standards

6. Course Articulation Matrix (Interrelation between CO and PO):

Outcomes	CO 1	CO 2	CO 3	CO 4
PO1	3	2	2	1
PO2	3	3	2	2
PO3	1	3	3	3
PO4	2	3	2	2
PO5	2	2	3	3
PO6	2	2	2	3
PO7	2	3	1	1
PO8	3	2	1	2

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here,
3 denotes **high** strength of correlation between CO and PO,
2 denotes **medium** strength of correlation between CO and PO and
1 denotes **weak** strength of correlation between CO and PO.

7. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

Students would be provided with the copy of the basic module related to the course. The subject will comprise classroom teaching using lectures, assignments, presentations, cases, and exercise

8. Course Requirement

Effective learning requires the active participation of students in class, it is therefore desired that every student report to the class well-prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis identification and genesis of, and recommendations to resolve the problem(s).

9. Course Syllabus

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
Unit 1	Introduction to Circular Economy, Concepts, Principles.	**1,2**	**BL1**
Unit 2	The environmental and social impacts of linear and extractive practices, Linear Economy versus Circular Economy. Barriers to and drivers of a circular economy, Circular Pharmaceutical Supply Chain	**1,2**	**BL1, BL2**
Unit 3	The circular economy and sustainable business models.	**3**	**BL1**
Unit 4	Resource efficiency measures	**2,3**	**BL1, BL2**
Unit 5	Circular economy in pharmaceutical industry.	**4**	**BL2**
Unit 6	Introduction to sustainability, Concept and definitions. Sustainable Development.	**4**	**BL2**
Unit 7	Measure sustainable performance, TBL, ESG and GRI	**3,4**	**BL2,BL4**
Unit 8	Role of operations manager in sustainability, Integrating sustainability in businesses.	**3,4**	**BL2**
Unit 9	Reverse logistics, Carbon footprint in pharma sector	**3,4**	**BL2**
Unit 10	Digital technologies and circular economy	**4**	**BL2, BL3**

Note: Please enter appropriate BL levels against each unit in the above table. The Bloom's Taxonomy Levels are as follows:
BL1: Remember
BL2: Understand
BL3: Apply
BL4: Analyse
BL5: Evaluate
BL6: Create

10.Course Policies

This course abides by the University's policies which can be found in the Student Handbook. Please note the following:

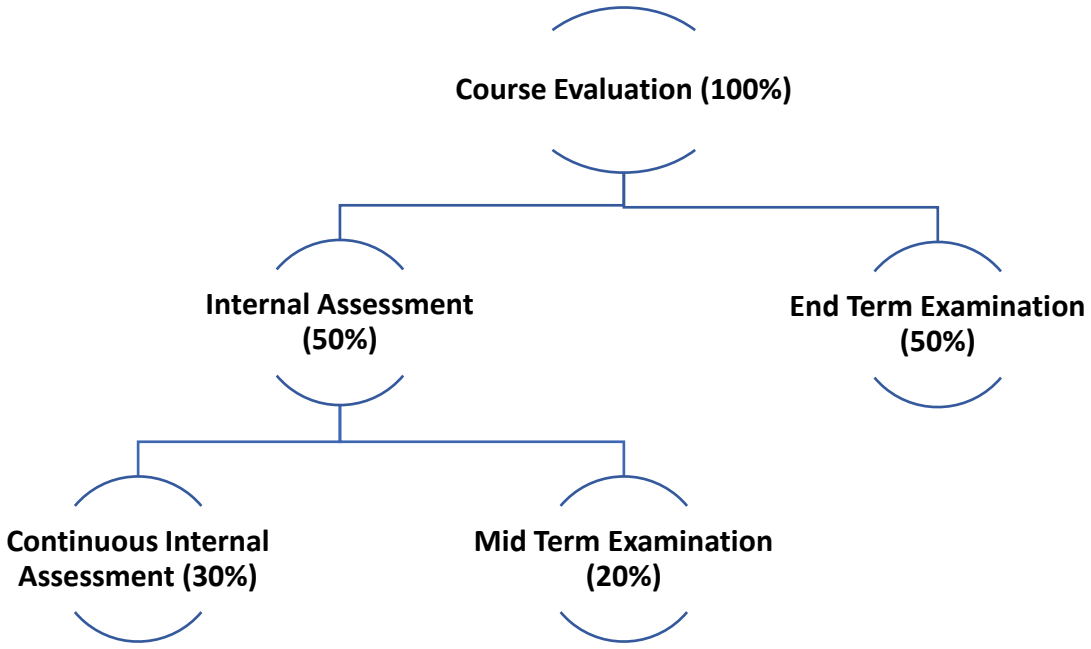
Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student have an e-mail id and a password, provided by University. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

11. Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. **Home Assignments (Individual / Group)**
2. **Viva-Voce**
3. Case Study
4. Review Paper
5. Group Work
6. **Presentations**
7. Model Development Role-Play
8. Rapid Fire Questions
9. **Quiz**
10. Class Assignments (Individual / Group)
11. Posters
12. **Class Participation**

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12. CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5	CO6
1.	**Home Assignments (Individual / Group)**	**X**	**X**	**X**			
2.	**Viva-Voce**	**X**	**X**	**X**	**X**		
3.	Case Study						
4.	Review Paper						
5.	Group Work						
6.	**Presentations**	**X**	**X**	**X**	**X**		
7.	Model Development Role-Play						
8.	Rapid Fire Questions						
9.	**Quiz**		**X**	**X**			
10.	Class Assignments (Individual / Group)						
11.	Posters						

12.	Class Participation						
13.	**Mid Term Examination**	**X**	**X**	**X**	**X**		
14.	**End Term Examination**	**X**	**X**	**X**	**X**		

Note: Please tick the relevant cell to show the respective alignment

13.Session Plan

Normally, the teaching for each course is scheduled from Monday to Friday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

Day	Session	Topic/Contents	Pedagogy	Readings
Day 1	1	Introduction to Circular Economy, Concepts, Principles, baseline understanding of circularity.	Lecture+ Discussion + Video +Exercise	Module Chapter – 1 Circular Economy -United Nations Industrial Development Organization
	2	The environmental and social impacts of linear and extractive practices, Linear Economy versus Circular Economy, Overview of constraints to adopting circular practices	Lecture+ Discussion+ Case	Module Chapter – 1
	3&4	Barriers to and drivers of a circular economy, Circular Pharmaceutical Supply Chain	Lecture+ Discussion+ Case	Circular economy A new relationship with our goods and materials by Walter R. Stahel Module Chapter-1
Day 2	1	The circular economy and sustainable business models, The characteristics of a circular business model, Linear and circular business models.	Lecture+ Discussion+ Case	Module Chapter-2 Business models in the circular economy (By Paul Ekins)
	2&3	Resource efficiency measures and business model changes, Relationships between resource efficiency measures and business model changes. Project and Hands on Exercise	Lecture+ Discussion+ Case	Case- Can We Create a Circular Pharmaceutical Supply Chain (CPSC) to Reduce Medicines Waste?
	4	Circular economy in pharmaceutical industry, Pharma's shift towards a circular economy	Discussion+ Case	Module Chapter-2

Day 3	1&2	Introduction to sustainability, Concept and definitions, Link to over-consumption and over-production from a business and economic standpoint. Sustainable Development, Impact of supply of natural resource and capacity of Ecosystem.	Discussion + Case Study+ Assignment	Module Chapter-3 Sustainability in 2minutes – GMIC by- Guy Bigwood https://www.youtube.com/watch?v=Doeb6QWJ5kA
	3&4	Measure sustainable performance: KPIs and Metrics, Triple Bottom Line (TBL); environmental, social and governance (ESG); UN sustainable development goals (SDGs), GRI Standards	Lecture+ Discussion+ Case	The Concept of Sustainable Development: From its Beginning to the Contemporary Issues Tomislav Klarin
Day 4	1&2	Role of Operations manager in Sustainability, Integrating sustainability in businesses.	Classroom Exercise + Discussion	Module Chapter-4 Insights on pharmaceutical sustainable supply chains by Ana Margarida Santos Bravo, José Crespo de Carvalho et al.
	3&4	Reverse logistics, Insights on pharmaceutical sustainable supply chains. Carbon footprint in pharma sector, Digital technologies and circular economy and sustainability.	Presentation, Classroom Exercise + Discussion	Module Chapter-4 , 5
Day5		Guest session: CSR Industry insight for sustainability and circular economy	Presentation + Discussion	

14. Readings

Please watch ´The History of our World in 18 Minutes´ https://www.ted.com/talks/david_christian_big_history (Christian, 2011) • Please watch ´The Earth is Full.´ http://www.ted.com/talks/paul_gilding_the_earth_is_full#t-277432 (Gliding, 2012)

Company Strategies and Reporting (examples)
Daimler AG https://www.daimler.com/sustainability/
Ernst & Young http://www.ey.com/DE/de/About-us/Corporate-Responsibility
http://www.ey.com/US/en/Services/Specialty-Services/ Climate-Change-and-Sustainability-Services/ Six-growing-trends-in-corporate-sustainability_overview

General Electric http://www.gecitizenship.com/
SAP http://www.sap.com/corporate-en/sustainability/index.epx
Siemens http://www.siemens.com/sustainability/en/

Reporting, Rating, Ranking
GRI https://www.globalreporting.org/ Oekom
Munich http://www.oekom-research.com/ INFRAS
Zürich http://www.infras.ch/d/infras/
Corporate Register http://www.corporateregister.com/
UN Global Compact http://www.unglobalcompact.org/
PRME http://www.unprme.org

Textbook:

Incidentally no single textbook is available, which deals with the course content comprehensively and meaningfully. However, the following book may be treated as an appropriate substitute of the textbook for this course.

Sustainable Operations and Supply Chain Management by Valeria Belvedere and Alberto Grando, Wiley, ISBN: 9781119285366.

Wiley Series in Operations Research And Management Science. John Wiley and Sons, 2017.

Carbon Footprint Calculator- https://www.tatapower.com/sustainability/sustainability-initiatives/customer/calculate-carbon-footprints.aspx

MBA Hospital and Health Management
MBA Pharmaceutical Management
MBA Development Management

Batch - 2024-25

Elective
Course Plan

The Intersection of Climate Change, Environment, One Health and Sustainability with Public Health (Part-I & II)

Dr Varsha Tanu
Dr Sandipta Chakraborty

Institute of Health Management Research

MBA Hospital and Health Management

1. Course Information

Course Title :	**The Intersection of Climate Change, Environment, One Health and Sustainability with Public Health'- Part I and II**
Course Code	**EC-251 & EC-252**
Course Credit :	**1.5**
Course Instructor (s) :	**Dr Varsha Tanu**

2. Program Outcome (PO)

PO 1 To help understand the latest concepts and techniques of management and their application in making the managerial roles of the participants efficient and effective.

PO 2 To develop skills of analysing, diagnosing and solving operational problems in the delivery of healthcare and hospital services.

PO 3 To help learn about appropriate strategies for effective planning, implementation and evaluation of institutional and community based health and family welfare programme.

PO 4 To help learn the application of qualitative and quantitative analytical tools as applicable to health and hospital management related problems.

PO 5 To help understand and appreciate methodologies of health/hospital management training and develop skills with focus on strategic responsibility for training and human resource development for health care delivery.

PO 6 To enlarge the outlook and vision of participants about the larger background and context of health care and health management in their historical, sociological and cultural framework.

PO 7 Help them to learn to promote the efficient and equitable allocation of resources and development of strategies to promote public health and cost-effective healthcare.

PO 8 To understand application of scientific approach to reduce cost of care through better material and money management.

MBA Pharmaceutical Management

3. Program Outcome (PO)

PO 1 To help understand the latest concepts and techniques of management and their application in making the people to play efficient and effective managerial roles in pharma Industry.

PO 2 To develop skills of analyzing, diagnosing and solving operational problems in Pharmaceutical and Healthcare care organization.

PO 3	To help learn about appropriate strategies for effective planning implementation and evaluation of policies in pharma sector
PO 4	To help learn the application of qualitative and quantitative analytical tools as applicable to Pharma sectors related problems
PO 5	Use Appropriate skills to support pharmaceutical and health care organization to take informed decisions.
PO 6	Utilize learning so acquired from training and practical exposure to solve real time problem in Pharma Industry.

MBA Development Management

4. Program Outcome (PO)

PO 1	Develops perspective and a strong conceptual framework on sustainable and inclusive development in the 21st century.
PO 2	Imparts appropriate knowledge, skills, and attitudes for development managers to work in diverse range of development organisations, enterprises, public systems.
PO 3	Inculcates willingness to work in challenging geographies / context as it requires resilience, perseverance, emotional, social intelligence, and courage of conviction.

5. Course Description

The course will integrate theoretical knowledge with practical applications, fostering a holistic approach to addressing elements of climate change and environmental health challenges. This module aims to empower health professionals to recognize, assess, and address environmental health issues in their practice, fostering a proactive and informed approach to improving community health outcomes.

6. Course Objective

This course aims to equip health professionals with a comprehensive understanding of the intricate relationship between climate, environmental factors and human health. Students will delve into the multifaceted aspects of environmental health and climatic uncertainties, gaining insights into the impact of various environmental elements on public well-being. By examining key concepts, case studies, and emerging issues, participants will develop the knowledge and skills necessary to address environmental health challenges in their professional practice.

7. Course Outcome

After the course, students should be able to

CO 1	To provide the students with a strategic perspective on addressing the challenges posed by climate change in healthcare systems.
CO 2	To enable the students integrating sustainability principles in which they will explore innovative strategies for managing the impacts of climate change on healthcare delivery, resource allocation, and organizational resilience.
CO 3	To explore the interconnectedness of environmental sustainability and healthcare delivery systems.
CO 4	To analyse case studies of successful sustainable practices international partnerships in climate-resilient health management.
CO 5	The students will be equipped with the knowledge and skills to develop and implement sustainable strategies for healthcare systems that can adapt to the challenges posed by climate change.
CO 6	They will be well-prepared to contribute to the development of resilient and environmentally conscious healthcare organisations.
CO 7	It will enable the students to focus on cutting-edge research methodologies, technological advancements, and emerging trends in the field.

8. Course Articulation Matrix (Interrelation between CO and PO):

Outcomes	CO 1	CO 2.	CO 3	CO 4	CO 5	CO 6	CO7
PO1	3	3	2	3	3	2	3
PO2	3	3	3	2	2	3	3
PO3	3	3	2	2	3	3	3
PO4	3	3	2	2	2	2	2
PO5	3	3	3	2	3	3	2
PO6	3	3	3	3	3	2	3
PO7	3	3	3	3	3	3	3
PO8	2	3	3	2	2	2	2

Note: Enter 1, 2 or 3 in the cell if the respective CO is related to the respective PO. Here,
3 denotes **high** strength of correlation between CO and PO,
2 denotes **medium** strength of correlation between CO and PO and
1 denotes **weak** strength of correlation between CO and PO.

9. Course Pedagogy

The course will be covered by classroom lectures augmented by discussions, case studies and group work, and assignments.

10.Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and defend his/her ideas. Preparation for the class calls for pre-reading of the topics/cases to be discussed later. Further, for meaningful discussion of the cases, the students are required to come ready with their case analysis-identification and genesis of, and recommendations to resolve the problem(s).

11.Course Syllabus

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
Unit 1	**Understanding the intersection of Climate Change and Health Management.** Defining the key concepts of climate change and its implications for health management. Explore the interconnectedness of environmental sustainability and health care practices.	**1,2**	**1,2,4,5**
Unit 2	**Introduction to One Health, One Health and its impact on Public Health,** Introduction to Diseases of One Health Importance, One Health in Global Context.	**1**	
Unit 3	**One Health in Indian Context,** Epidemiology in One Health Research, One Health Surveillance, One Health Approach in Outbreak Investigation.	**2**	
Unit 4	**Climate Resilient Health care System:** analysing the vulnerabilities of healthcare systems to climate change. Develop strategies for building resilience in healthcare infrastructure, Climatic parameters, Indian Metrological Department	**3,4**	**1,2,4,5**
Unit 5	**Introduction to Environmental Health and Environmental Determinants of Health:** Defining Environmental health; Tracing the evolution of environmental health policies and interventions.	**2,3,4**	**1,2,3,4,5**

	Air quality and respiratory health; water quality and waterborne diseases.		
Unit 6	**Built Environment and Health; Urbanisation and Health** Health implications of urban living; Issues related to infrastructure, Transportation and green spaces.	**3,4**	**1,2,4,5**
Unit 7	**Occupational Health:** Understanding the occupational hazards that can affect health professionals and strategies for creating safer workplaces.	**2,3**	**1,2,3,4,5**
Unit 8	**Food Safety and Nutrition**: Food borne Illness, Sustainable Agriculture and Health. Discussing the impact of agricultural practices on the environment and human health.	**2,3,4**	**1,2,3,4,5**
Unit 9	**Environmental Epidemiology**: Introducing epidemiological methods for assessing the impact of environmental factors on health outcomes.	**4,5**	**1,2,4,5**
Unit 10	**Policies and Interventions:** Analysing international and national policies addressing environmental health issues. Examining the role of regulatory frameworks in preventing and mitigating environmental health risks.	**5,6,7**	**1,2,3,4,5**
Unit 11	**Geospatial Technologies and its application in Public Health**, GIS and public health, Remote Sensing and its Applications in health and climatic surveillance, Importance of Mapping Natural Hazards	**2,3,4,5,7**	**1,3,4,5,6**
Unit 12	**Community Health and Environmental Justice**: Explore case studies highlighting environmental disparities and their impact on vulnerable populations. Discuss strategies for promoting equity in environmental health interventions.	**5,6,7**	**1,2,3,4,5,6**
Unit 13	**Emerging issues and Future Directions:** Investigating current trends and emerging issues in environmental health. Explore opportunities for research and innovation in the field.	**5,6,7**	**1,2,3,4,5,6**

Note: Please enter appropriate BL levels against each unit in the above table. The Bloom's Taxonomy Levels are as follows:
BL1: Remember
BL2: Understand
BL3: Apply
BL4: Analyse
BL5: Evaluate
BL6: Create

12.Course Policies

This course abides by the University's policies that can be found in the Student Handbook. Please note the following:

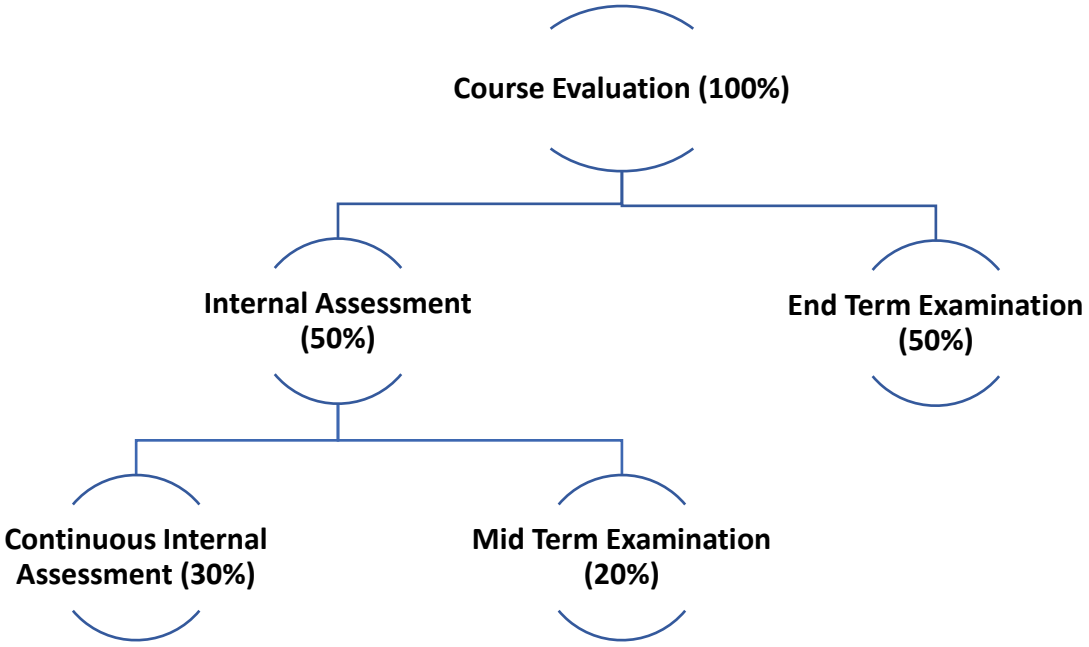
Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

E-Mail: Each student have an e-mail id and a password, provided by University. Students will receive course related information on this email. Students are advised to regularly check this email for updates on the course.

13.Course Assessment

Students' performance in the course will be evaluated by following two components, with 50% weightage to each component:

1. Internal Assessment (50%)
2. End-Term Examination (50%)



Internal Assessment: The internal assessment will be further divided into two parts, with the weightage given below

1. Continuous Internal Assessment (30%)
2. Mid-Term Examination (20%)

Part 1: Continuous Internal Assessment (CIA): The Continuous Internal Assessment will be of 30 % weightage. The faculty will conduct the Continuous Internal Assessment of the students by using at least two methods of assessment (for 3 credit course), from the methods given below:

1. Home Assignments (Individual / Group)
2. Viva-Voce
3. Case Study
4. Review Paper
5. Group Work
6. Presentations
7. Model Development Role-Play
8. Rapid Fire Questions
9. Quiz
10. Class Assignments (Individual / Group)
11. Posters
12. Class Participation

Part 2: Mid-Term Examination (MTE): The mid-term examination will be of 20 % weightage. The faculty will conduct the mid-term examination of the students during or at the

end of the course. It can either be objective type question paper / subjective type question paper or a mix of objective and subjective question paper.

End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

14.CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5	CO6
1.	Home Assignments (Individual / Group)	√	√	√	√	√	√
2.	Viva-Voce						
3.	Case Study	√	√	√	√		
4.	Review Paper						
5.	Group Work	√	√	√	√	√	
6.	Presentations						
7.	Model Development Role-Play						
8.	Rapid Fire Questions						
9.	Quiz						
10.	Class Assignments (Individual / Group)	√	√	√		√	
11.	Posters						
12.	Class Participation						
13.	Mid Term Examination		√		√		
14.	End Term Examination						√

Note: Please tick the relevant cell to show the respective alignment

15.Session Plan

Day/Date	Session 1	Session 2	Session 3	Session 4
	Dr. Sandipta		**Dr. Varsha**	
3/2/25	Introduction to the course (Part-II), Expectation of the learners, Learning objectives, Assessment and Students	One Health-Introduction, History and Evolution	**Understanding the intersection of Climate Change and Health Management.** Defining the key concepts of climate change and its	Explore the interconnectedness of environmental sustainability and health care practices.

	interaction plan, Pre-test		implications for health management.	
4/2/25	Case studies-on One Health	One Health Biology	**Climate Resilient Health care System:** analysing the vulnerabilities of healthcare systems to climate change.	Develop strategies for building resilience in healthcare infrastructure, Climatic parameters, Indian Metrological Department
5/2/25	Case studies- Self Reading	One Health Economics	**Introduction to Environmental Health and Environmental Determinants of Health:** Defining Environmental health; Tracing the evolution of environmental health policies and interventions.	Air quality and respiratory health; water quality and waterborne diseases.
6/2/25	One Health- Legal Framework	One Health- Leadership & Team building	**Field Visit to IMD**	
7/2/25	One Health- Quiz Round-1	One Health- Quiz Round-2	**Built Environment and Health; Urbanisation and Health**	Health implications of urban living; Issues related to infrastructure, Transportation and green spaces.
8 th and 9th weekend and Time to Self-Study				
10/2/25	One Health Epidemiology	One Health Survey, Surveillance, & Outbreak Investigation	**Occupational Health:** Understanding the occupational hazards that can affect health professionals and strategies for creating safer workplaces.	**Environmental Epidemiology**: Introducing epidemiological methods for assessing the impact of environmental factors on health outcomes.

11/2/25	One Health in Practice: Infectious diseases	One Health in Practice: AMR	**Food Safety and Nutrition**: Food borne Illness, Sustainable Agriculture and Health.	Discussing the impact of agricultural practices on the environment and human health.
12/2/25	One Health in Practice: Climate & Health-1	One Health in Practice: Climate & Health-2	**Geospatial Technologies and its application in Public Health**, GIS and public health, Remote Sensing and its	Applications in health and climatic surveillance, Importance of Mapping Natural Hazards
13/2/25	One Health in Practice: Non-communicable diseases	One Health in Practice: International & Indian Context	**Policies and Interventions:** Analysing international and national policies addressing environmental health issues.	Examining the role of regulatory frameworks in preventing and mitigating environmental health risks.
14/2/25	One Health Policy implication	Course Evaluation	**Field Visit to BISR**	

MPH – IMPLEMENTATION SCIENCE

2024-26

Course Plan

IIHMR UNIVERSITY

1. Course Information

Course Title	**Social and Environmental Determinants of Health**
Course Code	MPHIS- 607.101
Course Credit	3
Course Instructor	Dr Varsha Tanu

2. Program Outcome (PO)

PO 1	Provide students' knowledge and competencies to current and emerging national and global public health problems and tropical diseases
PO 2	Develop understanding of health systems in LMICs, and Universal Health Coverage and Sustainable Development Goals (SDG)
PO 3	Develop core competencies in epidemiologic methods in public health, health management and Implementation Research
PO 4	Develop understanding and basic concepts and skills in population and demography
PO 5	Provide knowledge and skills in data analysis and management
PO 6	Analysis of health behaviour of people and design behaviour change interventions
PO 7	Applications of principles of management in health care and public health, leadership and strategic management
PO 8	Learn concepts and application of logistics and supply chain management in health care
PO 9	Develop understanding of concepts and principles human resources for health
PO 10	Provide knowledge of health financing, financial management, managerial accounting and budgeting
PO 11	Learn principles and methods of Health Economics and cost of health care
PO 12	Provide knowledge and concepts Health Information Systems and utilization of information for decision making
PO13	Concepts, theories and design implementation research and their application in efficient and effective implementation of health programs and improved health outcomes
PO 14	Develop understanding of ethics in health services, systems and research

3. Course Description

The course will introduce students to the concept of social and environmental determinants of health. With the focus on universal health coverage, the course will delve into various international declarations, policies and goals which emphasize and advocate the importance of environmental and social determinants of health in facilitating the goal of health for all. The theoretical basis of various social and environmental determinants of health with existing and expected operational status will also be discussed to highlight their impact on health and health equity. This will culminate into analysis of country-specific policies and public sector programs with the capability

to directly or indirectly influence social and environmental determinants of health in the context of implementation research and tropical diseases.

4. Course Objectives

The course objective is to sensitize students on the importance of social and environmental determinants of health. The course will blend theoretical understanding with practical situations to understand and address implementation barriers in managing tropical diseases. The specific course objectives are:

Course objectives:

1. To develop perspective on the importance and framework of social and environmental determinants of health
2. To understand and appreciate study of social and environmental factors that influence health outcomes in the broader framework of sustainable development goals.
3. To build an understanding on role of social inequalities/system inequity in pursuit of universal health coverage
4. To appreciate role of gender in availability, accessibility and affordability of health care/services and learn gender analysis
5. To analyze public sector programs with special reference to social and environmental determinants of health and evaluate their implementation in ensuring health

5. Course Outcome

By the end of the course, students will be able to

CO 1	Understand the genesis of Universal Health Coverage and Sustainable Development Goals in the overall framework of social and environmental determinants of health
CO 2	Appreciate the perspective of SEDH and recall the theoretical groundings for social and environmental determinants of health
CO 3	Apply the understanding to analyze the role of social inequalities/inequity and gender in country-specific health programs
CO 4	Evaluate the implementation of country-specific tropical-disease programs in the light of social and environmental determinants of health
CO 5	Demonstrate understanding by providing (country/disease-specific) suggestions on implementation barriers to social and environmental determinants of Health

6. Course Articulation Matrix (Interrelation between CO and PO):

The below matrix exhibits mapping between CO and PO:

Outcomes	CO 1	CO 2.	CO 3	CO 4	CO 5
PO1	✓ 3	✓ 3	✓ 2	✓ 1	✓ 3
PO2	✓ 3	✓ 3	✓ 3	✓ 2	✓ 3
PO3					
PO4					
PO5					
PO6	✓ 1	✓ 2	✓ 3	✓ 2	✓ 1
PO7					
PO8					
PO9					
PO10					
PO11	✓ 2	✓ 3	✓ 3	✓ 2	✓ 2
PO12					
PO13			✓ 3	✓ 3	✓ 3
PO14	✓ 1		✓ 2	✓ 3	✓ 3

Note:
*3 denotes **high** strength of correlation between CO and PO,*
*2 denotes **medium** strength of correlation between CO and PO and*
*1 denotes **weak** strength of correlation between CO and PO.*

7. Course Pedagogy

The course pedagogy will include classroom lectures complemented with discussions, case studies (wherever applicable) and assignments of individual and group nature.

8. Course Requirement

Effective learning requires active participation of students in class, it is therefore desired that every student report to the class well prepared to present and discuss one's ideas. Preparation for the class calls for pre-reading of the topics/cases shared by the course instructor to enable meaningful discussion. Self-study in terms of reading and reviewing the literature is expected as a way to generate and enrich discussion, and assignment completion.

9. Course Syllabus

Unit	Content/ Topics	CO	Bloom's Learning (BL) Levels
Unit 1	International declarations, policies and goals like Universal Health Coverage, Rio declaration, Sustainable Development Goals	**1**	**1,2**
Unit 2	Social and Environmental Determinants of Health: Introduction and Theoretical basis	**2**	**1,2,4**
Unit 3	Environmental Determinants of Health - Climate Change, Safety of air, water, food	**2, 3,4**	**2,3,4**
Unit 4	Social determinants of health:	**2,3,4**	**2,3,4**
Unit 5	Social Inclusion and Non-Discrimination	**2,3**	**2,3,4**
Unit 6	Gender	**2,3**	**2,3,4**

Note: *Bloom's Taxonomy Levels are as follows:*
BL1: Remember
BL2: Understand
BL3: Apply
BL4: Analyse
BL5: Evaluate
BL6: Create

10. Course Policies

This course abides by the University's policies which can be found in the Student Handbook.

Attendance: Students are required to maintain a minimum attendance of 75% to be eligible to appear in the End-Term Examination of the course. Please refer to the student handbook for further details.

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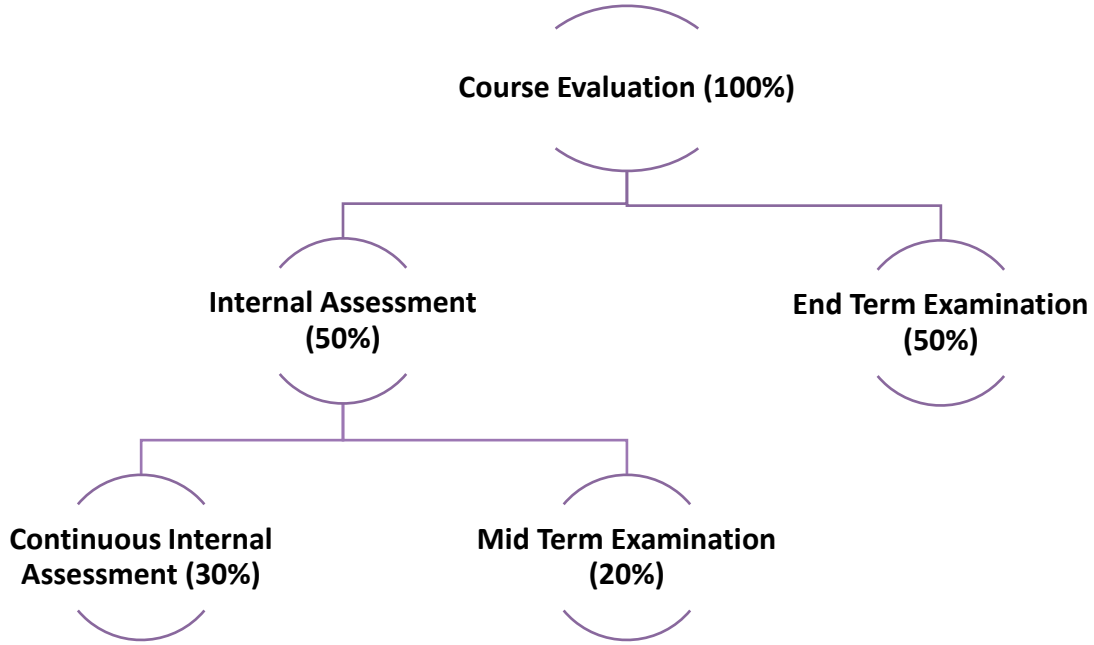

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End-Term Examination (ETE): It carries 50 % weightage, covering the full syllabus of the course. The end-term examination will be of maximum 50 marks to be completed in maximum three hours. The end-term examination will be conducted at the end of trimester on scheduled date published by Controller of Examination.

12.CO and Assessment Alignment Matrix:

S. No.	Activity	CO1	CO2	CO3	CO4	CO5
1.	**Home Assignments (Individual / Group)**					
2.	Viva-Voce					
3.	Case Study		✓	✓		
4.	Review Paper					
5.	**Group Work**					
6.	Presentations	✓	✓	✓	✓	✓
7.	Model Development Role-Play					
8.	Rapid Fire Questions					
9.	Quiz					
10.	Class Assignments (Individual / Group)	✓	✓	✓	✓	✓
11.	Posters					
12.	Class Participation	✓	✓	✓	✓	✓
13.	Mid Term Examination	✓	✓	✓	✓	✓
14.	End Term Examination	✓	✓	✓	✓	✓

13.Session Plan

Normally, the teaching for each course is scheduled from Monday to Friday (10:00am - 5:00pm). Each day, teaching is divided into four sessions: two before lunch break and two after lunch break. The faculty (instructor) decides how to utilise these sessions.

14.Readings

List of Website/Journals

- https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1