DEPARTMENT of MANAGEMENT, KOCHI

Environmental Management & Sustainable Development (EMSD) [GM509C]

MBA 2017 – 2019

Trimester VI (JAN – MARCH 2019)

COURSE OUTLINE & SESSION PLAN

About the Course

The focus of the course will be on the *'Nine Planetary Boundaries'* and discuss some of the key concepts widely debated in the current global context, including climate change, biodiversity loss, ocean acidification, landuse, freshwater, ozone layer depletion etc. *Since the Brundtland Commission report for the first time brought out a comprehensive global thought on "Our Common Future", sustainable development has been one of the key drivers of understanding development, i.e.* "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Ever since, there continues to be several discourses on Sustainable Development that needed to be informed to the business students for a better appreciation of the challenges surfacing the global business environment. At the same time, global development too is afflicted by problems of poverty, income inequality, (in)access to basic provisions like drinking water, sanitation, health care, education and energy needs, where governments and the private/ corporate sectors have to invest, needing proper balancing of the economic and business rationales across countries. This course, in the process would attempt to understand the planetary boundaries and development needs that are critical for the stakeholders including the future management professionals to keep in mind while pursuing their business development goals.

The core of the business involves two components namely (economic) value (of the good and service) and platform (commonly known as market). Market also plays an important role in eliciting the economic values of goods and services. However, most of the components of planetary boundaries as well as development needs are prone to market failure (and even state failure). In the absence of market arriving at the value of goods and services require alternative methods. This conceptual basis of understanding values (of environmental goods and services as identified in the nine planetary boundaries) and methods of valuation in the absence or failure of market would be the important key concepts the future managers need to be aware of to incorporate in business models.

At the third level it is important to understand the practices (essentially at micro level), policies and advocacies (at the macro and global level) are the key features the managers need to be aware of. Therefore, at the policy and advocacy level the concepts like "triple P (People-Planet-Profit)" or economic principles like "Equity-efficiency-sustainability" would help us in devising projects or policies.

After these thoughts and concepts, we move on to practices (best or worst) as well as policies and advocacy based on various cases and global discourse. The cases relating to planetary boundaries like biodiversity, climate change impact, pollutions, land use at various micro context will be useful. Similarly, at policy and advocacy levels, an understanding of the much hotly debated concepts, Climate Change, IPCC, the Millennium Development Goals (MDGs); Sustainable Development Goals (SDGs), etc., and how these

concepts would affect global business, needing a thorough overhauling of the structure and contents of the business practices.

With such well thought out and designed course contents, it is expected that the students/ scholars would be aware of their business and social responsibilities, for the sake of our entire planet, as well as the opportunities they would have towards making meaningful as well as significant contributions towards a livable and prosperous planet.

COURSE OBJECTIVE

In this Course on ***Environmental Management and Sustainable Development (EMSD)***, we propose to offer five specific areas of learning, as felt relevant to the management students. The basic objectives are:

1. Sensitizing the business professionals on their affirmative role in environmental management and sustainable development;

2. Understanding planetary boundaries and the impacts of natural and anthropogenic interventions on these planetary boundaries;

3. Understanding Environmental Implications of Economic Growth and through appropriate methods of valuation in the context of well-developed markets and absence or failure of such markets (say, Risk Analysis, Policy Impacts, etc.);

4. Key aspects of Sustainability and Sustainable Development Goals (SDGs) and implications at the micro (resources) and macro (policy and advocacy) levels through various cases and discussions involving economy/ business sectors; and

5. Identifying appropriate strategies for sustainable environmental management systems, social innovative projects, key concepts in social innovation development through their own projects

LEARNING OUTCOMES

Upon completion of this course, students will be able to complete the following key tasks:

1. Knowledge:	- Understanding and appreciation of environmental issues and concerns at large; - Learning the role of the three basic components of eco systems and environment and underlying causes of their degradation - Understanding the policy scenario and the existing environmental conventions/ regulations/ laws - Understanding strategies, initiatives and functions at micro, macro, and global levels
2. Attitude:	- To build proactive, analytical and professional initiatives towards developing management policies and practices through sensitization of needs and requirements of individuals and organizations for sustainable development
3. Skill sets:	- Development of skills of utilization of analytical tools for environmental planning - Development of sustainable planning for sustainable development of environment, economy and firms.
4. Habit:	- Finally, we wish that you form a **H**abit of living responsibly in this challenging era, and spread the message of *Ecology*, *Equity and Economy*. As future business managers, you have a huge potential to leave behind a very positive footprint.

At the end of the course, the students are expected to have acquired knowledge base and skill sets to successfully propose and defend a sustainable, social innovative business model as part of the mandatory course project.

COURSE DESCRIPTION

Course Description: The course would combine lectures, discussion of cases, working on projects leading term papers and in class group presentation by the students.

Suggested Course Materials and Readings*

Basic Reference: Jacob Thomas, Environmental Management – Text and Cases, Dorling Kindersley (India) Pvt. Ltd. 2014.

- Environmental Management, Ajith Sankar, R.N., Oxford University Press, New Delhi, 2015
- Environmental Management, N. K. Uberoi, Second Edition, Excel Books, 2003.
- Environmental Management and Development, C. J. Barrow, Routledge, 2006.
- Environmental Management, Sustainable Development and Human Health, (Eds.) [2009], Eddie N. Laboy-Nieves & Fred C. Schaffner; Ahmad H. Abdelhadi; Mattheus F. A. Goosen, CRC Press/Balkema is an imprint of the Taylor & Francis Group, London, UK, 596p.
- Jonathan M. Harris & Brian Roach (2013), Environmental and Natural Resource Economics: A Contemporary Approach, M.E. Sharpe, Armonk, New York/ London (UK)
- Kerr, John M., Dinesh K. Marothia, Katar Singh, C. Ramasamy, William R. Bentley (Ed.) (1997), Natural Resource Economic: Theory and Application in India, Oxford and IBH Publishing Company Ltd., New Delhi.
- Markandya, Anil and Julie Richardson (1997), Environmental Economics, Earthscan Publications, London.

*Note: * Additional List of Readings will be given during the course. Reference material drawn by the instructor from other sources will be communicated at the appropriate time.*

EVALUATION CRITERIA

Components	Weightage (out of 100)
Environment Quiz	15
Research Article Review	15
Project Report/ Assignment	20
Project Presentation	10
End term Examination	40

ACADEMIC HONESTY

Class conduct and ethical standards:

Students are advised to be interactive and encouraged to ask questions/ clarifications in the class room sessions. Plagiarism will not be tolerated in this class or at the University. Plagiarism is the use of another person's words without proper citation. Because the writer represents these words as his or her own, plagiarism is the academic equivalent of theft. In accordance with the University Code of Academic Misconduct, plagiarism in any form will result in an "F" for this course and possible expulsion from the University. If any clarifications needed, discuss with the Instructor personally.

Important Note:

It is recommended that students read the required readings circulated after attending the classroom sessions. The lecture sessions are designed as introductions to each topic, and the readings are provided to give a more in-depth and supplementary elaborations of the topics discussed in the class. Additional readings are extremely necessary for understanding the lectures. While attending to the classes, don't merely focus on the points and facts being discussed. Instead, focus on the broader conceptual domains of each topic, and think about how it informs your understanding of the course on Economic and Environment Policy.

SESSION PLAN

Module & Contents	Sessions	Ref. Book Chapter
Module 1: Conceptual Issues in Environmental and Natural Resources Management ▪ Environment and Its Integral Components: Ecology, Ecosystem & habitat ▪ Environmental Resources: Land (Agriculture), Water, Forests/ Wildlife, Fisheries ▪ Stakeholders of Environment ▪ Carrying Capacity of Ecosystems (& Earth)	**1 – 2**	**Chapters 3 & 5, Environmental Management, Jacob Thomas**
Module 2: State of Natural Resources and Environment: Cases of Land, Water, Forestry, Fishery/ Environment and Development Since Industrial Revolution ▪ Environmental Degradation & Pollution: the role of natural and anthropogenic factors ▪ Population Growth and Environmental Impact ▪ Agriculture, Industrial Growth, Urbanisation ▪ Pollution & Pollution Control ▪ Wastes and Hazardous Wastes ▪ Footprints: Ecological/ Water/ Energy/ Carbon	**3 - 5**	**Chapter 4, Environmental Management, Jacob Thomas**
Module 3: Dimensions of Environmental Management: ▪ Economic, Socio-cultural, Technological, Ethical & Moral, Political & Legal Dimensions ▪ Urban Environmental Management (UEM) ▪ Managing the local Environment ▪ Concepts of Good Environmental Management ▪ Environmental Management System and Processes ▪ Waste Management ▪ Development Management ▪ Environmental Awareness	**6-10**	**Chapters 5-10, Environmental Management, Jacob Thomas**
Module 4: Environmental Governance Institutions ▪ Legal Framework for Environmental Management ▪ Environmental Regulations/ Compliance Mechanisms ▪ International and National Frameworks for Environmental Protection ▪ The Role and Performance of Environmental Governance Institutions – International and National	**11-14**	**Chapters 11-12, Environmental Management, Jacob Thomas**

Module 5: Global Warming and Climate Change ▪ Debate on Climate Change – the manifestations of Climate Change; Natural and anthropogenic (human interventions) ▪ Climate change: Adaptation and Mitigation Strategies at International and national contexts ▪ International and National Efforts at Carbon Emission Reductions	**15-18**	**Chapter 13, Environmental Management, Jacob Thomas**
Module 6: Sustainable Development in theory and practice ▪ Global Responses to Sustainable Development ▪ Sustainable Development Goals (vs Millennium Development Goals) ▪ The Paris and Post-Paris Convention on Climate Change and Sustainable Development ▪ Triple Bottomline of Sustainability: Food, Water, Energy nexus ▪ Potential and Barriers to Sustainable Business ▪ Sustainable rural and urban livelihoods	**19-20**	**Chapters 16 - 17, Environmental Management, Jacob Thomas**
Module 7: Environmental Valuation ▪ Why environment and natural resources are prone to market failure? ▪ Values (Economic or otherwise) of Environment and Natural Resources: Use, Option, Existence ▪ Signals of Natural Resource Depletion/ scarcity and valuation methods (Health cost, amenities and Hedonic Pricing, Travel Cost methods, Contingent Valuation Methods, Choice Experiments, Limitations of these signals) ▪ Payment for Ecosystem Services (PES)	**21-23**	
Module 8: Socially and Environmentally Responsible Business Management ▪ The relevance of Green Growth Green Business paradigms ▪ Environmental Values of Business ▪ Corporate Social Responsibility and Environmental Impacts ▪ Environmental Risk Management & Environmental Strategy ▪ Environmental and Ecological Stewardship ▪ Student Project presentations on Case Studies	**24-30***	**Chapters 14-15 and Chrs. 18-19, Environmental Management, Jacob Thomas**

NOTE: *PRESENTATION BY STUDENTS/ GROUPS (5 SESSIONS).