

Course title : Project design and management for sustainable development practice			
Course code : MPD 129	No. of credits : 4	L-T-P distribution : 42-8-12	Learning hours : 56
Pre-requisite course code and title (if any) : None			
Faculty : Prof. G.Krishnamurthi		Department: Department Policy Studies	
Course coordinator (s) : Dr. Smriti Das		Course instructor (s) : Prof. G.Krishnamurthi	
Contact details :			
Course type : Compulsory Core			
Course offered in : Semester 3			
Course Description :			
<p>The course aims at imparting to the students' knowledge of principles of processes commonly used in project cycle management and the skills for effective application of such processes for sustainable community-driven development programmes. It will cover the tools and techniques for identification, analysis, design, implementation, monitoring and evaluation of programmes and projects from the point of view of all stakeholders.</p>			
Course objectives :			
<p>The course will develop the students' skills for:</p> <ul style="list-style-type: none"> ▪ Conducting in-depth analysis of geographical, environmental, political, and institutional landscape of a development challenge ; ▪ Identification of a holistic project concept that addresses immediate and long-term challenges and concerns through collaborative and participatory approaches; ▪ Identification of data/information needed for preparing a feasible project proposal; ▪ Collection of data, and analysis and synthesis of relevant information into a logical and cohesive project proposal which is feasible from all angles – technology, markets, inputs, institutions, management, environment, finance, and implementability; ▪ Analysis of risks inherent in the projects and formulation of feasible risk management approaches as back-up solutions; ▪ Identification of funding sources for long-term capital requirements and day-to-day working capital, and ability to liaise with the agencies for timely flow of funds; ▪ Critical appraisal of projects by financial institutions and funding agencies; ▪ Development of work plans for effective implementation of the projects through teams consisting of project staff, beneficiaries and other key stakeholders; ▪ Integration of knowledge gained from monitoring and evaluation systems into the project design and revision of project objectives and activities; and ▪ Use of commercial project management software packages and an appreciation of their limitations. 			

Course Contents:				
Module	Topic	L	T	P
1.	<p>Project Idea Generation</p> <ul style="list-style-type: none"> ○ Project – Definitions, Attributes ○ Project Life Cycle ○ Project Identification – Approaches for Generation and Screening of Project Ideas – Individual and Group Creativity Methods ○ Appreciation of macro-environment in relation to project choice ○ Financial Mgt. Tools for Project Screening – Investment, Benefits, Payback, ROI ○ Group Work on Project Idea Generation and Screening ○ Group presentations of Project Concepts <p><i>Remarks: The first steps of LFA, viz. stakeholder analysis, problem tree and objectives tree development, and strategy analysis will be simultaneously introduced and related to the other project design approaches.</i></p>	10	1	2
2.	<p>Project Design</p> <ul style="list-style-type: none"> ○ Project Feasibility Study – Aspects of ○ Project Preparation and Appraisal <ul style="list-style-type: none"> ○ Steps and Processes ○ Cash Flow Estimates ○ Concepts of Economies of Scale and Minimum Volumes ○ Break-even analysis and need for healthy growth of cash inflows and surplus ○ Cash Flow Analysis and use of MS Excel ○ Sensitivity Analysis with MS Excel ○ Group Work on Project Preparation 	10	1	2
3.	<p>Project Financing and Appraisal</p> <ul style="list-style-type: none"> ○ Sources for project funds – long-term and working capital ○ Decision on Capital Structure (Debt-Equity), including tax-related issues ○ Preparation of Discounted Cash Flow Statements (where necessary) and criteria for financial appraisal – Payback, ROI, ARR, NPV, IRR, Discounted Payback/ARR/ROI ○ Project Budgets and their integration with the organisational budget ○ Project Appraisal Process by FIs and Funding Agencies ○ Simulation of Project Appraisal by students in groups and Presentations 	6	2	4
4.	<p>Project Implementation Planning</p> <ul style="list-style-type: none"> ○ DBS, WBS, Activity Lists, Predecessor Relationships, Estimation of Duration ○ Project Organization ○ Preparation of networks and Gantt Charts 	4	2	2

	<ul style="list-style-type: none"> ○ Resource estimation, leveling, allocation ○ Concept of Optimum Project Duration ○ Critical Path and Critical Chain – Importance of TOC ○ Project Budget Revision based on resource schedule ○ Project Management Information System ○ Project Monitoring and Control Plan ○ Project Risk Management and Fall-back solutions ○ Project Implementation Completion and Exit Strategy ○ Programme/Project Evaluation Plan ○ Use of standard PM software packages for implementation planning <p><i>Remarks: Students will simultaneously use LF Matrix to portray the project information comprehensively and deploy it for participatory implementation, monitoring, control and evaluation.</i></p>			
5.	<p>Project Implementation Management</p> <ul style="list-style-type: none"> ○ Need for team approach ○ Importance of communication ○ Project Systems and Processes for procurement, award of contracts, workforce management and reviews ○ Earned Value Method ○ Participatory Implementation ○ Management issues and their resolution ○ Project Manager – Unique Requirements 	4	2	
6	<p>Project Monitoring and Evaluation</p> <ul style="list-style-type: none"> ○ Centralised vs. Participatory Monitoring ○ Optimal Project Review Intervals ○ Use of PM software for monitoring ○ Control Decisions based on monitoring inputs ○ Project Evaluation <ul style="list-style-type: none"> ○ Evaluation Study Design <ul style="list-style-type: none"> ▪ Formative vs. Summative ▪ Desk vs. Field-based ▪ Internal vs. External ○ Data Analysis, Inference and Conclusion ○ Project Revision and New Projects <p><i>Remarks: Students will continue to use LF Matrix, in addition, for development of OVIs and MOVs for participatory implementation, monitoring, control and evaluation.</i></p>	8		2
Total		42	8	12
Evaluation procedure :				
<i>Component</i>		<i>Weight (%)</i>		
• Minor tests and Quizzes (2*5)		:10		

- Group Projects
- Project Preparation – Stage I (Draft) :15
- Project Appraisal :10
- Project Preparation – Stage II (Final) :25
- Presentations – Projects :10
- Presentation – Appraisal :10
- Final examination :20
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Learning outcomes :

1. The course will also sensitise the students to the difficulties and dilemmas that project managers face in the implementation of programmes and projects aimed at bringing about changes.
2. It will help them develop a comprehensive understanding of the various approaches and tools (including LFA) required for effective change management.
3. The course will also address the organisational and human resource management challenges while implementing sustainable development programmes and projects.

Pedagogical approach :

The course will be delivered through a mix of lectures, simulation exercises, tutorials, case discussions and discussion of current projects. The lectures will be kept to the barest minimum, and the focus during the sessions will be active classroom discussion to develop clarity and skills.

The learning in the course will be through simulation of real-life situations, problems and issues. The simulation exercises, broadly comprising preparation of feasible project proposals by the students in groups and their appraisal, are expected to promote the students' curiosity, logical reasoning skills and creativity to develop innovative solutions which can be implemented, promote equitable distribution of benefits and are feasible from all aspects – social, cultural, organizational, managerial, technological, environmental and financial.

Suggested Readings :

1. David Potts (2005) *Project Planning and Analysis for Development*, Viva Books Private Limited
2. Mantel J, et. al. (2011) *Project Management*, Wiley India
3. Nicholas (2011) *Project Management for Business and Technology*, PHI
4. Gray, Larson (2008) *Project Management: The Managerial Process*, TMH
5. Khatua Sitangshu (2011) *Project Management and Appraisal*, OUP
6. Chandra Prasanna (2011) *Projects: Planning, Analysis, Selection, Financing, Implementation, and Review*, TMH
7. Pinto Jeffrey (2012) *Project Management: Achieving Competitive Advantage*, Pearson
8. *Guide to Practical Project Appraisal* (1978), United Nations, Reprinted by Oxford & IBH
9. *A Guide to the Project Management Body of Knowledge* (2008), PMI

Other readings

1. Project Reporter
2. International Journal of Project Management
3. PM Network

Additional information (if any) : The term 'Lecture' is loosely used here for conformance with the standard nomenclature adopted in university systems. However, the sessions have to be extremely

discussion-based for effective learning of concepts and practices by students.

Student responsibilities :

Attendance: At-least 75% attendance will be necessary to be able to appear for the final exam.

Course Reviewers:

1. Prof. BN Hiremath, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, Gujarat.
2. Prof. KV Raju, IRMA
3. Prof. HK Mishra, IRMA