Course title: Project Management								
Course code: NRG 103	No. of credits: 3	<b>L-T-P:</b> 28-14-0	Learning					
			hours: 42					
Pre-requisite course code and title (if any):								
Department: Department of Natural Resources								
Course coordinator: Dr Vinay Sinha Course instructor: Dr Subodh Jain			h Jain					
Contact details:								
Course type: Core Course offered in: Semester 1			1					
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# **Course Description**

The course is designed for the students to prepare them for the working in various projects right from conceptualization to delivery of products. It will be applicable regardless of the size and scope of the project one is handling with and will ensure the appropriate processes and tools for the job.

# Course objectives

Course content						
SNo	Topic	L	T	P		
1.	Introduction to Project Management	2				
	(Definition, Need/Benefits, achieve business objective, role of					
	Project Manager, project Life Cycle, Integrative approach, process					
	group)					
2.	Creating a Project Proposal	2	2			
	(Establishing Objectives, scoping the boundaries, priorities strategic					
	development, WBS/PBS, responsibility, communication plan)					
3.	Estimation in Project Proposal	2				
	(Basic, Time, Cost, Resource, Techniques, Guidelines)					
4.	Developing Project Plan	2	2			
	(Evaluating and Constructing network, Schedule, Criticality, Gantt					
	Charts, Techniques)					
5.	Project Proposal Evaluation	2				
	(Reading, evaluating feasibility-resource, time, cost, idea, quality)					
6.	Project Resource Management	2				
	(Overview and types of resource, Resource constraints &					
	scheduling, Allocation methods, resource vis-à-vis other activities					
	of project planning)					
7.	Preparation for presentation	2	2			
	(Designing small write-ups-introduction, literature review,					
	materials, methods, results, discussion, summary, conclusions)					
8.	Presentation skills development	2				
	(Presenting in a formal meeting with-data, figures, graphs, tables,					
	contents etc.)					
9.	Attending presentation and meetings	2	2			
	(Expressing freethinking, opinions, judgments (written and oral)					
	and analyses; Formulation of questions; Responding comments and					
	critique given by other)					
10.	Risk Management	2				

	(Concept, process, PERT, Contingency planning, funds, time,			
	unexpected changes in control and management)			
11.	Time Management		2	
	(Rationale, Options, Time compression techniques, mapping and			
	managing project cost and time, trade-offs)			
12.	Project Monitoring and Controlling	2	2	
	(Monitoring process (time, cost, resource), control processes, earned			
	value cost/schedule system, variance analysis, CBA and other			
	techniques)			
13.	Project Closure	2		
	(Quality assurance, auditing (resources, time, cost), submission,			
	auditing, closure)			
14.	Group discussions	2	2	
	Total	28	14	

#### **Evaluation** criteria

2 minor tests: 10% each
Practical: 40%
Major exam: 40%

#### **Learning outcomes**

#### Pedagogical approach

### Materials

#### Required text

- 1. Kevin A. (2005) Managing Agile Projects, Oshawa, ON, Multi-Media Publications Inc..
- 2. Scott B. (2005) Art of Project Management, Cambridge, MA, O'Reilly Media.
- 3. Fred B. (1995) The Mythical Man-Month, 20th Anniversary Edition, Adison Wesley.
- 4. Comninos D. and Frigenti E. (2002) The Practice of Project Management A Guide to the Business-Focused Approach, Kogan Page.

#### Suggested readings

- 1. Andrew S. and Jennifer G. (2005) Applied Software Project Management, Cambridge, MA, O'Reilly Media.
- 2. Bent F. (2006) From Nobel Prize to Project Management: Getting Risks Right, Project Management Journal, 37(3), pp. 5-15.
- 3. Eric V. (2005) The Fast Forward MBA in Project Management, 2nd, Wiley.
- 4. Gary H. (2001) Project Management (The Briefcase Book Series), McGraw-Hill.
- 5. Harold K. (2003) Project Management: A Systems Approach to Planning, Scheduling and Controlling, 8th Ed., Wiley.
- 6. Jack R.M. and Samuel J.M. (2002) Project Management: A Managerial Approach, 5th ed., Wiley.
- 7. James L. (2002) Fundamentals of Project Management, 2nd ed., American Management Association.
- 8. Project Management Institute (2003) A Guide To The Project Management Body of Knowledge, 3rd ed., Project Management Institute.
- 9. Richard H.T. and Edward Y. (2000) Software Engineering Project Management, 2nd Ed., Wiley-IEEE Computer Society Press.
- 10. Stephen R.P. (2005) As-builts-Problems and Proposed Solutions, Construction Management Association of America.

- 11. Tomlinson R.F. (2005) Thinking about GIS: Geographic Information System Planning for Managers, ESRI Press, 328 pp.
- 12. Yamal C. (2006) Professional Project Management, The Guide, 1st Edition, Monterrey, NL MEXICO, McGraw Hill.

### Case studies

Websites

### Journals

- 1. International Journal of Project Management
- 2. Project Management Journal

### Additional information (if any)

### Magazines

- 1. Coordinates
- 2. GIM International
- 3. GIS World
- 4. GIS@development
- 5. Goespatial today
- 6. GPS World

# **Student responsibilities**

Attendance, feedback, discipline, guest faculty etc.