SSN COLLEGE OF ENGINEERING
KALAVAKKAM- 603110
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

COURSE PLAN

Course Handler	**:**	Dr. G. Raghuraman
Subject Code & Name	**:**	CS6010 - Social Network Analysis
Batch	**:**	2013 - 2017
Class	**:**	BE (CSE) VIII Semester 'B'

Content Delivery Methods (CDM) : Powerpoint presentations\Use of ICT\Chalk and Blackboard - for all lectures, Demonstration during class hours

Unit No. & Name	Topics	CDM	Hours Planned	Hours Handled	Reasons for Deviation
I **INTRODUCTION**	Limitations of current Web		1		
	Development of Semantic Web		1		
	Emergence of the Social Web		1		
	Development of Social Network Analysis		1		
	Key concepts and measures in network analysis		1		
	Electronic discussion networks, Blogs and online communities		1		
	Web-based networks		1		
	Applications of Social Network Analysis		1		
	Planned Hours		**9**		
	Ontology-based knowledge Representation		1		
	Resource Description Framework		1		

II **MODELLING, AGGREGATING & KNOWLEDGE REPRESENTATION**	Web Ontology Language		2		
	State-of-the-art in network data representation		1		
	Ontological representation of social individuals		1		
	Ontological representation of social relationships		1		
	Aggregating and reasoning with social network data		1		
	Advanced representations		1		
	Planned Hours		**9**		
III **EXTRACTION AND MINING COMMUNITIES IN WEB SOCIAL NETWORKS**	Extracting evolution of Web Community from a Series of Web Archive		1		
	Detecting communities in social networks		1		
	Definition of community		1		
	Evaluating communities		1		
	Methods for community detection and mining		1		
	Applications of community mining algorithms		1		
	Tools for detecting communities social network infrastructures and communities		1		
	Decentralized online social networks		1		
	Multi-Relational characterization of dynamic social		1		

	network communities				
	Planned Hours		**9**		
IV **PREDICTING HUMAN BEHAVIOUR AND PRIVACY ISSUES**	Understanding and predicting human behaviour for social communities		1		
	User data management, Inference and Distribution		2		
	Enabling new human experiences, Reality mining, Context – Awareness		1		
	Trust in online environment, Trust models based on subjective logic		2		
	Trust network analysis - Trust transitivity analysis		1		
	Combining trust and reputation – Trust derivation based on trust comparisons		1		
	Attack spectrum and countermeasures		1		
	Planned Hours		**9**		
V **VISUALIZATION AND APPLICATIONS OF SOCIAL NETWORKS**	Graph theory, Centrality - Clustering		1		
	Node-Edge Diagrams - Matrix representation		1		
	Visualizing online social networks	Demo	2		
	Visualizing social networks with matrix-based representations		1		
	Matrix and Node-Link Diagrams		1		

	Hybrid representations - Applications		1		
	Cover networks - Community welfare - Collaboration networks		1		
	Co-Citation networks.		1		
	Planned Hours		**9**		

Total Number of Syllabus Hours: 45
Total Number of Planned Hours: 45

(Dr. G. Raghuraman)

Prepared by	**Reviewed By**	**Approved by**
Faculty-Incharge	PAC- UG Team	(HOD / CSE)