MYRA SCHOOL OF BUSINESS

Course Title: Social Network Analysis, Markets, and Strategies
Instructor: Shalini Urs

Networks play a crucial role in almost every aspect of human life—from opinion forming to decision-making. Consequent to the spread of Social Media, network sciences – a multidisciplinary subject has become a favorite area of study. Social Network Analysis (SNA) has emerged as an approach and a methodology to understand groups, group dynamics, their behavior and apply the same to diverse practical areas. SNA helps in understanding aggregate human behavior and developing strategies for leveraging the power of networks. This course is intended to help prepare students for the era of networks with the knowledge of the theoretical frameworks and training in practical aspects using appropriate tools to leverage networks for marketing and strategy

A. Context and rationale:

- This course is developed based on (primarily) two courses – "Networks, Crowds, and Markets" taught at Cornell and "Social Network Analysis" a course taught at University of Michigan.
- The course is based on the book "Networks, Crowds, and Markets" by David Easley and Jon Kleinberg of the Department of Economics and the Department of Computer Science respectively, at Cornell and published by Cambridge University Press, in 2010
- This course goes into the streams – IS and Data Analytics; Marketing and Strategy

B. Course Description:

- This course SMS (SNA, Markets, and Strategy) will introduce the topics of Networks; Dynamics of Networks; Aggregate Behavior; Social Network Analysis: Power Laws and phenomena such as small world and long tail and the appropriate methods and tools of analysis and its relevance to understanding markets and development of strategies
- This course will briefly discuss primarily two theories that underpin this multidisciplinary field of "SNA, Markets, and Strategies" -- Graph Theory and Game Theory
- This course will have practical sessions involving exercises and student projects
- The software tool that we would be using is Gephi /Pajak

C. Course Objectives:

The objective of this course is to introduce, familiarize and train students in understanding the nature, structure, dynamics and the power of networks and prepare them to use SNA tools for diverse purposes including marketing and strategy.

This course will be taught using lectures, games, quizzes, plays and some practical training in one/two SNA software.

D. Grading and evaluation:

Sl. No	Activity	Percent
1	Class Participation	20
2	Quizzes	20
3	Group Presentation	20
4	Final Exam	20

E. Course Outline and Topics to be covered

1. Basic Concepts of Network and their Aspects
2. Graph Theory and Social Networks
3. Measuring and Measures of Networks
4. Network Dynamics and Network effects
5. SNA Tools and Analysis
6. Power laws, Popularity, and Long Tail
7. Small World Phenomena and Epidemics
8. Power in Social Networks and Aggregate behavior
9. Information Networks and WWW
10. Link Analysis, Web search, and SEO

Practicum: Will be using either the Pajek/Gephi

Text Book: Networks, Crowds, and Markets: Reasoning about a Highly Connected World by David Easley and Jon Kleinberg, Cambridge University Press, 2010