



SECOND SEMESTER 2020-21
COURSE HANDOUT

Date: 18.01.2021

In addition to part I (General Handout for all courses appended to the Time table) this portion gives further specific details regarding the course.

Course No : MBA G564
Course Title : Decision Making
Instructor-in-Charge : Anil Bhat
Instructor(s) : Shaili Singh
Tutorial/Practical Instructors:

1. Course Description: Decision Analysis, Decisions under certainty and under uncertainty, Behavioral Decision Making, Framing of Decisions and Psychology of Choice, Common errors, Paradoxes, Anomalies and Traps, Game theory- simple, two - player and bi- matrix games, Concepts of dominance, equilibrium and iterated dominance, Negotiation Analysis, Joint and Collaborative Decisions

2. Scope and Objective of the Course:

The purpose of this course is to present a broad and an integrative approach from the perspectives of decision analysis, behavioral decision making, game theory and negotiation analysis to managerial decision making. It will explore-

- i) How analytically inclined managers should or could make wise decisions (Decision Analysis perspective)? –A prescriptive approach
- ii) How ordinary individuals do make decisions (Behavioral Decision Making perspective)? -A descriptive approach
- iii) How groups should make separate interactive decisions (Game Theory perspective)? -A normative approach and finally
- iv) How groups should and could make joint collaborative decisions (Negotiation Analysis perspective).

The course will use cases, journal articles and exercises to demonstrate the application and critical appreciation of the concepts and techniques discussed.

3. Text Books:

- **[TB1] Howard Raiffa** “Negotiation Analysis: The science and Art of Collaborative Decision Making” PHI Learning New Delhi 2009
- **[TB2] Avinash Dixit ,Susan Skeath & David Reiley** “ Games of Strategy, Viva Books; 3rd Revised edition (1 January 2017)

4. Additional Readings:

- **Richard H Thaler**-“Misbehaving: The Making of Behavioural Economics”
- **Daniel Kahneman**, “Thinking, Fast and Slow”
- **Dan Ariely** “Predictably Irrational: The Hidden Forces That Shape Our Decisions”



5. Course Plan:

Module No.	Sessions	Lecture Session	Reference	Learning outcomes
I	2	Decision Perspectives	TB1 Ch.1	To appreciate four approaches to decision making viz. Decision Analysis, Behavioral Decision Making, Game Theory & Negotiation Analysis perspectives
II	10	Decision Analysis	TB1 Ch.2	To understand how individuals should or could decide
		Rational Choice Under certainty, Outcomes and preferences, completeness and Transitivity		To understand Rational Choice Under certainty
		Uncertainty and Decision Making, Uncertainty states, outcomes and acts, Dominance, Decision Criteria Under uncertainty		To understand Choice Criteria Under Uncertainty
		Attitude to Risk, Expected Utility Theorem, Conditional thinking, Beliefs, information and uncertainty		To learn when more information is potentially valuable For decision Making
		Decision Trees		Learn how to construct and analyze decision trees.



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III	8	Behavioral Decision Making, rationality and its limits, approaches to examination of decision processes, and consequences of limits on rationality	TB1 Ch.3	To understand the psychology on how real people do decide
		Biases in Decision Making. Gains Vs Losses, Framing and Confirmation bias, Prospect theory		To understand Framing of Decisions and Psychology of Choice, Common errors, Paradoxes, Anomalies and Traps
IV	10	Game Theory: Introduction to Game Theory	TB1 Ch4 TB2	To understand how rational beings should decide separately in Interactive situations Overview, Applications, Classifying Games, Strategies, Payoffs, Dilemma, Pure Strategies, Nash Equilibrium, Dominant Strategies
		Simultaneous Move Games with Pure Strategies		To learn about Discrete Pure Strategies, Nash Equilibrium, Dominance, Minimax strategies, Minimax theorem for zero sum game
		Games with Sequential Moves		Learn how to construct Game Trees, Nodes, Branches, Outcomes, Payoffs, Adding Players and Moves, Backward Induction
		Combining Sequential and Simultaneous Moves		To understand Two-stage Games, Changing order of moves
		Simultaneous Move Games with Mixed Strategies		To learn about Two-by-Two Games, Equilibrium in mixed strategy, Minimax method, Mixing in Non- Zero Sum Game, and Zero Sum game
		Repeated Games		To understand the Prisoner's Dilemma
	5	Negotiation Analysis' Essence of joint decision Making, Distributive Negotiations	TB1 Ch5	To understand how you should and could collaborate with others



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		Presentations		

6. Evaluation Scheme:

Component	Duration	Weightage (%)	Date	Time	Venue	Remarks
Mid-term	90 min.	25				CB
Term Papers/assign. / quiz		20				Individual-Work
Project/Cases		20				Group-Work
Compre. Exam.	2 Hours	35				CB

7. Chamber Consultation Hour: Saturdays 5.30pm -6.30 pm

8. Notices: LMS Nalanda

9. Make-up Policy: No make-ups will be given **except** only on genuine **medical grounds** and **only** with prior permission from Instructor-in-charge

10.Note

- Each student has to take up a **project** by selecting any decision problem of interest that is within the scope of the course and collect primary data wherever possible. The progress in the project will be continuously monitored and evaluated. A written report of the same will have to be finally submitted to the instructor and also presented before the class.
- Highest level of intellectual integrity is expected of students while they work on term papers/projects in terms of giving proper acknowledgement and avoiding plagiarism failing which they will be heavily penalized. Students are also expected to submit their assignments on time failing which these may not be evaluated.

Instructor-in-charge