



BIRLA INSTITUTE OF TECHNOLOGY AND
SCIENCE, Pilani

Hyderabad Campus
**FIRST SEMESTER 2021-
2022**

Course Handout

20/08/2021

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

Course No. : **ECON F345**
Course Title : **BEHAVIORAL ECONOMICS**
Instructor-in-Charge : **Dushyant Kumar**
Instructors : **Dushyant Kumar**

1. Scope and objective of the course:

Behavioral economics focuses on incorporating insights from psychology with regard to human behavior to enrich the standard economic analysis. The main tools to arrive at these insights are lab as well as natural experiments. The central aim of these behavioural models is to improve the explanatory and predictive power of standard (neoclassical) economic theory. People might behave 'irrationally' (irrational as defined in standard economic theory), moreover in a systematic and predictive way, hence incorporating these irrationalities is going to enrich the analysis of human behavior. In the last two decades or so, behavioral economics has established itself as a prominent subarea in economics. This course is aimed to provide an introduction and overview of behavioral economics. We will be covering topics such as heuristics and biases, decision making under uncertainty, prospect theory, reference dependence and, inter-temporal choice.

Upon the successful completion of the course, the students will be able to understand how behavioral economics builds on traditional economic models and psychology. They will be able to better understand and appreciate the real-life phenomenon such as saving decisions, overconfidence, rule of thumb, sub-optimal consumer choice, etc. They will be able to demonstrate knowledge of some of the main theoretical and empirical findings, and apply the main concepts from this field to a variety of contexts.

The course is an introductory course. Familiarity with Microeconomics (ECON F242) will be helpful although it is not a prerequisite.

2. Text Book (TB):

Sanjit Dhami: *The Foundations of Behavioural Economic Analysis: Volume I: Behavioural Economics of Risk, Uncertainty, and Ambiguity*, Oxford University Press, 2019.

3. Reference Book:

- R1.** Erik Angner: *A Course in Behavioral Economics*, Palgrave macmillan education, Second edition, 2016.
- R2.** Edward Cartwright: *Behavioral Economics*, Routledge Taylor & Francis Group, 2014.
- R3.** Daniel Kahneman: *Thinking, Fast and Slow*, Penguin Press, 2012.
- R4.** Dan Ariely: *Predictably Irrational: The Hidden Forces that Shape Our Decisions*, Harper Collins, 2010.
- R5.** Richard H Thaler: *Misbehaving: The Making of Behavioural Economics*, Penguin, 2016.

4. Course Plan:



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Lecture No.	Learning Objectives	Topics to be covered	Chapter in the Text Book
Module 1: Introduction to Behavioral Economics			
1-4	Overview of the Behavioral Economics	Introduction: Scope and Coverage, Examples, Origin, Role of Experiments, Replication Issues, Theoretical Foundations	Introduction (TB), Chapter 1 (R1), Section 5 (TB), notes
5	Introduction to Decision-Making under Certainty	Welfare Maximisation, Consistency of Choices, Opportunity Costs and Sunk Costs- Relevance in Decision Making	Chapter 3 (R1), notes
6-7	Strategic Interactions with Rational Players- Basics of Game Theory	Dominance, Nash Equilibrium, Subgame Perfect Nash Equilibrium	notes
8-9	Basic Behavioral Biases	Menu Dependence, Anchoring, Heuristics and Rules of the Thumb	Chapter 3, notes
Module 2: Behavioral Models of Decision Making			
10-11	Introduction to the Standard Expected Utility Theory and the Evidence on Human Choice under Risk and Uncertainty	Expected Utility Theory: Axioms, Independence Axiom, Evidence of Violations	Chapter 1 (TB), notes
12-13	Rank Dependent Utility (RDU) Theory	Attitudes to risk under RDU, Drawbacks	Chapter 2.3, notes
14-18	Introduction to Prospect Theory and Its Applications	Basic Formulation, Elicitation of Utility Functions and Probability Functions, Axiomatic Foundations, Limitations	Chapter 2 (TB), notes
19-21	Introduction to Prominent Alternative Decision Theories	Regret Theory, Disappointment Aversion	Chapter 2 (TB), notes
Module 3: Applications of Behavioral Decision Theory			
22-27	Introduction to Various Applications of Behavioral Decision Theories and Evidences	1. The endowment effect and exchange asymmetries 2. Myopic loss aversion 3. Goals as reference points	Chapter 3 (TB), notes



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		4. Contracts as reference Points	
Module 4: Behavioral Theory and Intertemporal Choice			
28-32	Introduction to Behavioral Issues in the Case of Intertemporal Choice	Exponential Discounting, Hyperbolic Discounting, Nudge, Other Issues	Chapter 8-9 (R1), notes
Module 5: Learning and Social Interactions			
33-37	Learning from New Information	Bayesian Updating, Confirmatory Bias, Law of Small Numbers	Chapter 5 (R2), notes
38-42	Interacting with Others	The Beauty Contest, Level-k Thinking, Focal Points, Learning from Experience	Chapter 6 (R2), notes

5. Learning Outcomes:

Module 1: Introduction to Behavioral Economics

The students will be introduced to the field of behavioral economics. They will get to know its applications, scope and relevance. We will overview some of the core concepts in this field.

Module 2: Behavioral Models of Decision Making

The students will learn about the main drawbacks of standard expected utility theory. What are the alternative ways to analyse people's behavior under uncertainty, how does prospect theory help us better understand people's behavior, how does the issue of regret and disappointment affect our decision-making process; the students will be able to analyze all these issues after going through this module.

Module 3: Applications of Behavioral Decision Theory

In this module, the students will learn about various applications of behavioral theory concepts. How does having different endowments affect our decision making, how does having different goals and reference points affect our decision making; the students will be able to analyze these issues in a systematic manner after going through this module.

Module 4: Behavioral Theory and Inter-temporal Choice

For most of our decisions, the consequences are not instant. It is realised over time. How should we incorporate this time element in our decision making? How does people incorporate future payments and incomes in their considerations, what policy incentivises people to save for the future properly; the students will be able to analyze all these issues after going through this module.

Module 5: Learning and Social Interactions

People try to use new information to improve their decisions. How do people typically incorporate the new information? When individuals work as a group, the outcome is going to be interdependent. How do people typically coordinate with others, what are the ways to improve?

6. Evaluation Scheme:



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EC No.	Evaluation Component	Duration	Weights	Date & Time	Nature of Component
1	Midsem	90 min.	30	21/10/2021 3.30 -5.00PM	OB
2	Assignment (Reports-Presentation), Problem Sets	--	15	To be announced	OB
3	Quizzes (5)	--	15	To be announced	OB
4	Comprehensive Exam	120 min.	40	21/12 FN	CB

7. Chamber Consultation hours: to be announced in the class.

8. Notices: Notices would be displayed on the course **CMS** page.

9. Make-up policy

Make-up will be given only on Doctor's recommendation and with prior (at least 01 day before the test/exam) permission of the Instructor-in-Charge/Instructor. Requests for make-up made by phone/sms or during/after the test/exam would NOT be entertained at all. The requests need to be made through official email only. If a student is representing the Institute in a seminar/conference/sports event etc., they need to produce a valid proof of the same to apply for make-up.

10. Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

Instructor-in-Charge
ECON F345