

Course Code	ECO312		
Course Name	Industrial Organization (IO)		
Credits	4		
Course Offered to	UG		
Course Description	This course will introduce basic models of IO. It utilizes applied microeconomic theory and game theory to understand how firms take decisions in various settings like optimal expenditure on innovation, research & development, adoption of optimal technology, mergers and acquisitions, etc. The models include profit maximization when there is market power, advertising, heterogeneity in quality, vertical control, models of entry, accommodation and exit, and many others. The course helps one understand how to set up an objective function for a firm facing different challenges in a complex market structure. IO has grown into one of the fundamental fields within economics, and is essential in order to gain a broader understanding of the subject. This course will provide student an insight into real world production decisions.		
Pre-requisites			
Pre-requisite (Mandatory)	Pre-requisite (Desirable)	Pre-requisite(other)	
ECO 101 (Microeconomics) OR ECO 311 (Game Theory)	None	None	
Post Conditions			
CO1	CO2	CO3	CO4
Understand concepts that entail optimal production decisions among multiple producers, e.g., market power.	Understand the modelling strategies for decisions regarding advertising, quality, collusion, mergers, etc., that influence firm's profits	Understand how decisions are made under various market structures like monopoly, duopolies, and vertical control.	Utilize the aforementioned concepts to understand applied models like product differentiation, and firm entry and exit problems.
Weekly Lecture Plan			
Week Number	Lecture Topic	COs Met	Assignment/Labs/Tutorial
1	Introduction to Industrial Organization.	CO1	
1 & 2	Non - Cooperative Game Theory	CO1	
3	The Theory of the Firm	CO1	
3 & 4	Monopoly and Oligopoly	CO2, CO3	
5 & 6	Product Selection, Quality, and Advertising	CO2	
7 & 8	Price Discrimination	CO1, CO4	
8 & 9	Vertical Control	CO3	
10 & 11	Short Run Price Competition	CO1, CO3	
11 & 12	Product Differentiation: Price, Competition and Non-Price Competition	CO4	
12 & 13	Entry, Accomodation, and Exit	CO4	
13	Empirical Models in IO	CO4	
Assessment Plan			
Type of Evaluation	% Contribution in Grade		
Homework Assignments (4)	30		
Mid-sem exam	30		
Final exam	40		
Resource Material			
Type	Title		
Textbook	Tirole, J., The Theorv of Industrial Organization. Eastern Economy Edition.		