Course Code	CSC643
Course Name	Artificial Intelligence
Credits	4
Course Offered to	UG/PG
Course Description	This is an introductory course in Artificial Intelligence. This course introduces the students to various search techniques, knowledge representation, reasoning, and learning.

Pre-requisites		
Pre-requisite (Mandatory)	Pre-requisite (Desirable)	Pre-requisite(other)
CSE102 Data Structures & Algorithms		

*Please insert more rows if required

Post Conditions*(For suggestions on verbs please refer the second sheet)			
CO1	**CO2**	**CO3**	**CO4**
Students are able to apply basic search techniques for problem solving.	Students are able to explain how to represent Knowledge required for problem solving.	Students are able to apply reasoning to sift through data.	Students are able to utilize AI for application in real world.

Weekly Lecture Plan

Week Number	**Lecture Topic**	**COs Met**	**Assignment/Labs/Tutorial**
week 1	Introduction to AI	CO1, CO2	
week 2	Blind search and search based on Heuristics	CO1	
week 3	Search using constrained satisfaction	CO1	Assignment 1
week 4	Adversarial search (game playing)	CO1,CO2	
week 5	Nature inspired search algorithms	CO1,CO2	Assignment 2
week 6	Knowledge representation using Frames and Conceptual dependency	CO1,CO2	
week 7-8	Knowledge representation using Predicate Logic	CO2,CO3	
week 9-10	Probabilistic Reasoning: Bayesian Network, Dempser Shafer, Fuzzy Logic	CO2,CO3	Assignment 3
Week 11	Learning: Perceptrons and Neural Networks	CO3,CO4	Assignment 4
Week 12	Planning	CO2,CO3,CO4	
week 13	Knowledge representation : Natural Language processing, Applications	CO2,CO4	

*Please insert more rows if required

Weekly Lab Plan

Week Number	**Laboratory Exercise**	**COs Met**	**Platform (Hardware/Software)**

*Please insert more rows if required

Assessment Plan	
Type of Evaluation	% Contribution in Grade
Class Test	15
Mid-sem	25

*Please insert more row for other type of Evaluation

Resource Material	
Type	**Title**
Textbook	Artificial Intelligence: A modern approach by Peter Norvig and S Russell,
	Artificial Intelligence:by Rich, Knight, and Nair, TMH