CSE422 Lecture Plan

	Topic	No. of Classes	Content	Slide Link
Before Midterm	Introduction	1	Brief history, Turing test, Rational vs Human behavior, AI agents	https://docs.google.com/presentation/d/1Q0vFcuQqKyfT8GUOQaY7Azx_ipo_txAw/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Informed Search	2/3	Role of search algorithms in AI, State space, Heuristic formation, Greedy best-first search, A* search, Heuristic admissibility and consistency, Heuristic dominance	https://docs.google.com/presentation/d/1_feMaGYPXmDWy_t_KOlviU2lnpWsDFt-/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Local Search	2	Hill climb algorithm, Issues with hill climb algorithm, Remedies of the issues, Simulated annealing. Gradient descent intro	https://docs.google.com/presentation/d/1x6TeSbOLHzfZ_TPMXTxn_dsm4wVkS2lB/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Genetic Algorithm	2	Solving n-queen problems using basic genetic algorithm, Knapsack and traveling salesman problem solving using genetic algorithm (For practice)	https://docs.google.com/presentation/d/1ICqmQwBFAMF_trZDA0eEuPUazl33G3V9/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Games	2	2-player game tree formation, Minimax, alpha-beta pruning	https://docs.google.com/presentation/d/1th8eUbrg2fKKXQe_19zGbEoGBy7Tt_AC/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true

After Midterm	Probability Theory	2	Probability intro, solving problems from joint probability distribution table, Checking independence and conditional independence,	https://docs.google.com/presentation/d/1bIxgnpulcW060aRy5-S9ZPx0UFyMOmlq/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Naive Bayes	2	Bayes theorem, Learning phase in naive Bayes, classification using naive Bayes	https://drive.google.com/file/d/13ytLfaOY8kWTgmcBM65mDtd2BkcYP5PK/view?usp=sharing
	Regression Analysis	2	Basics of supervised learning. Basics of gradient descent, basic steps of gradient descent in linear regression	*https://drive.google.com/file/d/12iV7z5HeDLyw50B88vpjjyekrmFV2n45/view?usp=sharing*
	Artificial Neural Networks	2	Perceptron architecture, Gradient descent, Hyperparameter selection, Intro to variants of neural networks	https://docs.google.com/presentation/d/1l9DXxLPu84vVQZmRRhgdLquQKYV4d3Jq/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true
	Decision Tree	2		https://docs.google.com/presentation/d/1bBdf_knHdGFl6fItkiZVhQO1B5faY93v/edit?usp=sharing&ouid=107280348520227181657&rtpof=true&sd=true