Zewail City of Science and Technology

University of Science and Technology

SCHOOL OF COMPUTATIONAL SCIENCES AND ARTIFICIAL INTELLIGENCE

DSAI 305, Interpretability & Explainability in AI, 2 Cr., Spring 2025, Required

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Week	Lecture	Lab	Task
1	Course Outline & Introduction	Machine Learning Revision - Lab 1	
2	Interpretable Models - Part 1	Machine Learning Revision - Lab 2	
3	Interpretable Models - Part 2	Exploratory Data Analysis and Feature Engineering - Lab 1	**Project Document Release + Team formation**
4	Global Model-Agnostic Methods Part 1	Exploratory Data Analysis and Feature Engineering - Lab 2	**Project Idea Submission**
5	Global Model-Agnostic Methods Part 2	GAM , Decision Trees and Random Forests Lab	
6	Loacal Model-Agnostic Methods Part 1	Features Importance Analysis Lab	
7	Local Model-Agnostic Methods Part 2	**Lab Exam 1**	**Project Phase 1 Delivary**
8	**Midterm**		
9	**Eid Vacation**		
10	Neural Network Interpretation - 1	Local Model-Agnostic Methods Lab	
11	Neural Network Interpretation - 2	Neural Networks Explaination Lab	
12	Time Series Analysis Algorithms and EDA Techniques - Part 1	Case Study Lab	
13	Time Series Analysis Algorithms and EDA Techniques - Part 2	**Lab Exam 2**	
14	Case Study - Computer Vision	**Project Phase 2**	