Syllabus for APC 425: Machine Learning

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Introduction to machine learning and methods, including neural networks and deep learning. Incorporates underlying concepts, hands-on experience and machine learning tools. Topics include generative AI and large language models, supervised, unsupervised, and reinforcement learning.

Prerequisite(s)

APC 350: Programming II

Course Outcomes

Upon completing this course, you will be able to do the following:

- Understand what machine learning is and what are its benefits and applications.
- Understand the concepts behind different machine learning methods.
- Apply machine learning methods to make predictions for any real-world application.
- Evaluate, analyze, and compare performance of machine learning methods.

Course Requirements/Components

- Weekly Quizzes
- Assignments
- Midterm
- Final Exam

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Evaluation Methods	Percentage of final grade
Weekly Quizzes	15%
Assignments	40%
Midterm	20%
Final Exam	25%