Machine Learning, CSE 5693, Section E1
Spring 2026
MW 6:30-7:45pm
OLS 129

Instructor Name: Philip Chan   **Phone: 321-674-7280**

Office Location: 209 Harris Center   **Email: pkc@cs.fit.edu**

Office Hours: MW 2-4pm

Course website: https://cs.fit.edu/~pkc/classes/ml/

Course Objectives

1. understand and implement basic machine learning algorithms
2. propose and evaluate improvements to an algorithm as a mini-research project

Required Texts / Materials:

- Machine Learning, Tom Mitchell, McGraw-Hill, 1997.

Required Training (if applicable): pre-requisities

- Artificial Intelligence (CSE 4301/5290) or Analysis of Algorithms (CSE 4081/5211).

- Basic probability and statistics.

- Proficient knowledge in data structures, algorithms, and programming.

- Machine learning / data science libraries cannot be used

Grading Policy (including late work policy):

- Assignments (50%) and term project (20%)

- Final exam (30%)

- A: 90%, B: 80%, C: 70%, D: 60%

- Late assignments are accepted, but 20% is deducted for each day.

Course Attendance Policy:

- students are expected to attend classes

Course Policy on Use of Generative AI:

The university guideline on Responsible Use of Generative AI in Academic Work is located at https://www.fit.edu/provost/academic-guidelines/responsible-use-of-generative-ai-in-academic-work/

Where to Find Extra Help:

- n/a

Academic Honesty Definitions & Procedures: Is located in the student handbook at https://www.fit.edu/policies/student-handbook/standards-and-policies/academic-honesty/

- Students are encouraged to help each other on assignments, but plagiarism (copying) is prohibited.

    ○ first violation: zero on assignment/test

    ○ second violation: 'F' for the course

Title IX Statement: The university's Title IX policy is available at https://www.fit.edu/policies/title-ix/

Title IX of the Education Amendments of 1972 is a federal civil rights law that prohibits discrimination on the basis of sex in federally funded education programs and activities. Florida Institute of Technology policy also prohibits discrimination on the basis of sex.

Florida Tech faculty are committed to helping create a safe learning environment for all students that is free from all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you, or someone you know, have experienced or is experiencing any of these behaviors, know that help and support are available.

Florida Tech strongly encourages all members of the community to take action, seek support, and report any incident of sexual harassment or gender discrimination to

   David McMahan, Title IX Coordinator

- Phone: 321-309-3068

- Email: titleixcoordinator@fit.edu

- Office: Denius Student Center, Room 215

Please note that as your professor, I am required to report any incidents to the Title IX Coordinator.

If you wish to speak to an employee who does not have this reporting responsibility, please contact the **Student Counseling Center** at 321-674-8050.

Academic Accommodations: Florida Tech is committed to equal opportunity for persons w/disabilities in the participation of activities operated/sponsored by the university. Therefore, students w/documented disabilities are entitled to reasonable educational accommodations. The Office of Accessibility Resources (OAR) supports students by assisting w/accommodations, providing recommended interventions, and engaging in case management services. It is the student's responsibility to make a request to OAR before any accommodations can be approved/implemented. Also, students w/approved accommodations are encouraged to speak w/the course instructor to discuss any arrangements and/or concerns relating to their accommodations for the class.

Office of Accessibility Resources (OAR):

- Phone: 321-674-8285
- Email: accessibilityresources@fit.edu
- Website: https://www.fit.edu/accessibility-resources

Recording Disclosure (Privacy Waiver): This course may be recorded for use by students and/or faculty. Enrolled students are subject to having their images and voices recorded during the classroom presentations, remote access learning, online course discussions, and remote office hours/meetings. Course participants should have no expectation of privacy regarding their participation in this class. Recordings may <u>not</u> be reproduced, shared with those not registered in the courses, or uploaded to other online environments. All recordings will be deleted at the conclusion of the academic term.

Anticipated Weekly Subject Matter and Assignment Schedule:

The schedule below is subject to change at the instructor's discretion.

	Weekly Topic	Assignment
Week 1	Introduction (Ch1)	
Week 2	Concept Learning (Ch2)	
Week 3	Decision Tree Learning (Ch3)	
Week 4	Decision Tree Learning (Ch3)	Wed: HW1 due
Week 5	Decision Tree Learning (Ch3)	
Week 6	Artificial Neural Networks (Ch4)	
Week 7	Artificial Neural Networks (Ch4)	Wed: HW2 due
Week 8	Artificial Neural Networks (Ch4)	
Week 9	Genetic Algorithms (Ch9)	
Week 10	Genetic Algorithms (Ch9)	Wed: HW3 due
Week 11	Spring Break	
Week 12	Rule Learning (Ch10)	
Week 13	Rule Learning (Ch10)	Wed: HW4 due
Week 14	Instance-Based Learning (Ch8)	
Week 15	Bayesian Learning (Ch6)	
Week 16	Bayesian Learning (Ch6)	Wed: Term project due

FINAL EXAM Information: May 6 (Wed), 6-8pm