Course Syllabus

Course	CISC 7404 Spring 2025
Time	19:00-22:00, Thursdays
Location	E12-G005
Description	This course introduces decision making
Instructor	Steven Morad <smorad at um.edu.mo>
Office Hours	10:00-12:00 Thursdays
Grading	• Assignments: 30% • Quizzes: 30% • Final Project: 30% • Participation: 10%
Late Work Policy	• −15% 0-1 days late • −30% 1-2 days late • −50% 2-3 days late • −100% 3+ days late
Late Quiz Policy	Lowest Quiz Grade Dropped
Prerequisites	• Linear Algebra • Multivariable Calculus • Programming in Python • Introduction to Deep Learning
Preliminary Schedules, Subject to Change	
Lecture	• Week 1 (01.09): Introduction • Week 2 (01.16): Bandits (S&B 2) • Week 3 (02.06): Decision Processes (S&B 3) • Week 4 (02.13): Quiz 1 and Coding • Week 5 (02.20): Trajectory Optimization (S&B 5) • Week 6 (02.27): Q Learning (S&B 6) • Week 7 (03.06): Deep Q Learning (S&B 6) • Week 8 (03.13): Policy Gradient (S&B 13) • Week 9 (03.20): Actor Critic (S&B 13) • Week 10 (03.27): Model-Based RL • Week 11 (04.03): Offline RL • Week 12 (04.10): Memory and POMDPs • Week 13 (04.17): Imitation Learning • Week 14 (04.24): LLMs
Assignment	• Due Week 8 (03.19): Linear Q Learning • Due Week 11 (04.09): Deep Q Learning and Policy Gradient • Due Week 15 (04.30): Final Project
Quiz	• Week 4 (02.13): Bandits and MDPs • Week 8 (03.13): Classical RL • Week 11 (04.03): Modern RL