## 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=""></smorad>
Office Hours	10:00-12:00 Thursdays
Grading	<ul> <li>Assignments: 30%</li> <li>Quizzes: 30%</li> <li>Final Project: 30%</li> <li>Participation: 10%</li> </ul>
Late Work Policy	<ul> <li>-15% 0-1 days late</li> <li>-30% 1-2 days late</li> <li>-50% 2-3 days late</li> <li>-100% 3+ days late</li> </ul>
Late Quiz Policy	Lowest Quiz Grade Dropped
Prerequisites	<ul> <li>Linear Algebra</li> <li>Multivariable Calculus</li> <li>Programming in Python</li> <li>Introduction to Deep Learning</li> </ul> Preliminary Schedules, Subject to Change
Lecture • Week 1 (01.09): Introduction	
Beeture	<ul> <li>Week 2 (01.16): Bandits (S&amp;B 2)</li> <li>Week 3 (02.06): Decision Processes (S&amp;B 3)</li> <li>Week 4 (02.13): Quiz 1 and Coding</li> <li>Week 5 (02.20): Trajectory Optimization (S&amp;B 5)</li> <li>Week 6 (02.27): Q Learning (S&amp;B 6)</li> <li>Week 7 (03.06): Deep Q Learning (S&amp;B 6)</li> <li>Week 8 (03.13): Policy Gradient (S&amp;B 13)</li> <li>Week 9 (03.20): Actor Critic I (S&amp;B 13)</li> <li>Week 10 (03.27): Actor Critic II (S&amp;B 13)</li> <li>Week 11 (04.03): Offline RL</li> <li>Week 12 (04.10): Memory and POMDPs</li> <li>Week 13 (04.17): Imitation Learning</li> <li>Week 14 (04.24): LLMs</li> </ul>
Assignment	<ul> <li>Due Week 8 (03.19): Linear Q Learning</li> <li>Due Week 11 (04.09): Deep Q Learning and Policy Gradient</li> <li>Due Week 15 (05.04): Final Project</li> </ul>
Quiz	<ul> <li>Week 4 (02.13): Bandits and MDPs</li> <li>Week 8 (03.13): Classical RL</li> <li>Week 11 (04.03): Modern RL</li> </ul>