Course Syllabus

Course	CISC 7026 Fall 2024
Time	19:00-22:00, Mondays
Location	Room E11-1009
Description	This course introduces the theory and application of deep neural networks
Instructor	Steven Morad <smorad at um.edu.mo>
Office Hours	TBD
Teaching Assistants	TBD
Grading	• Assignments: 70% • Quizzes: 20% • Participation: 10%
Late Work Policy	• −25% 0-1 days late • −50% 1-2 days late • −75% 2-3 days late • −100% 3+ days late
Prerequisites	• Linear Algebra • Multivariable Calculus • Programming in Python
Preliminary Lecture Schedule	• Week 1: No Lecture (visa issues) • Week 2: Introduction to the Course • Week 3: Linear Regression • Week 4: Neural Networks • Week 5: Backpropagation and Optimization • Week 6: Training Tricks • Week 7: Convolutional Neural Networks • Week 8: Autoencoders and Generative Models • Week 9: Recurrent Neural Networks • Week 10: Graph Neural Networks • Week 11: Attention and Transformers • Week 12: Foundation Models • Week 13: Reinforcement Learning I • Week 14: Reinforcement Learning II
Preliminary Assignment Schedule	• Week 3-4: Linear Regression • Week 4-5: Neural Networks and Backpropagation • Week 5-7: MLP Regression • Week 7-9: Convolutional MNIST Classification • Week 9-11: LSTM • Week 11-14: Transformer