

# Syllabus for CMSC 490

Fall Term 2023 3:10 MWF Mr. Gregg

## Course Description and Objectives

CMSC 490 is an introduction to neural networks, including a survey of modern applications. The programming language for this course is Python. We will be working with the Keras library to implement neural networks.

I plan to cover the following topics:

- Introduction to Python and Keras
- An overview of the history of neural networks
- Basic machine learning applications, including classification and regression problems
- Neural networks for machine vision applications
- Neural networks for natural language processing

## How this Course is Structured

We will meet three times a week for lectures.

We will have two midterm exams and a final exam.

## Grading Policy

Assignments and exams have the following weights:

Homeworks - 60%      Midterm exam - 10% each      Final exam - 20%

Late policy for assignments is that assignments may be turned in after the initial due date for a 5% penalty for each day the assignment is late. I will waive all or part of the late penalty if you have a valid excuse; however, you must contact me before the initial due date to ask for an extension.

## Textbook

Our text is *Deep Learning with Python, Second Edition* by François Chollet.

## Office Hours

Office hours this term are 1:00-3:00 M-F. My office is Briggs 413. My email address is [greggj@lawrence.edu](mailto:greggj@lawrence.edu).

## Course Web Site

The course web site is at <http://www.lawrence.edu/fast/greggj/cmsc490.html>. The web site will feature lecture notes and other supplementary materials.

