

Instructor: Prof. Zack Kilpatrick, ECOT 647, zpkilpat@colorado.edu

Lecture Time & Location: MWF 11-11:50am, Watch Materials Posted on Webpage

Office hours: Mon 12-1:30pm, Tues 12-1pm, or by appt (Now on zoom: will email url)

Course webpage: <https://zpkilpat.github.io/appm4370.html>

Tentative and Ambitious Course Outline:

Week	Material Covered
11	Readouts; perceptrons; backprop; convolutional networks
12	Recurrent networks; chaotic networks; learning in recurrent networks
13-15	Project work time

Grading: Unchanged. 60% for six problem sets; 20% for ‘no collaboration’ problems; 20% for final project. Final grades determined on a 10-point scale, subject to possible *downshifting*.

Problem sets: Two problem sets remain. **Please make as legible a scan as possible and send your completed homework to me by 11am on the due date. Late homework is still not accepted.** Use Scannable by Evernote or Genius Scan when scanning with your phone.

Assignment/Exam Schedule	Date Assigned	Due Date
Problem set 5	Wed, Mar 4	Wed, Mar 18
Problem set 6	Wed, Mar 18	Wed, Apr 8
Develop project proposal	Mon, Feb 24	Fri, Mar 20
Final project report and/or talk	Fri, Mar 20	Wed, Apr 29

Projects: You may now work individually or in groups of three (undergraduates) or two (graduate students). I will adjust my expectations for individuals, considering the reduction in person-power, but would prefer people still work in groups if possible.

By 11am on Fri, Mar 20, each group submits a one-page project proposal. See [here](#) for details on project expectations.

If your group wants to meet with me while developing your proposal or working on your project, you can either just join in on the office hours zoom call, or we can make an appointment at a separate time. I will mostly schedule times during our regular class period, since everyone is sure to be free then. I don’t want to just have an open zoom call then though because multiple groups may get on the zoom call at one time, which could get confusing.

By 11am on Wed, Apr 29, each group must submit a 15-25 minute video presentation or a 10-15 page written report. I would prefer the video presentation, but you can do either. All students must also submit to me an account of all they did for the project, and a peer evaluation for group members. I will award extra credit to groups that submit both a high quality report and presentation. Reports should be emailed as pdfs (not word docs). Video presentations should be:

- Recorded by superimposing your voice over a slide presentation, with your oration synced to slide timing. Keynote and Powerpoint have built-in options for doing this. You’re welcome to use another method if it works well.
- Email me a web address where I can download and view the presentation (e.g., youtube, dropbox, or google drive) and also share this presentation with your fellow students in Canvas, so they may view and make constructive comments and responses to your work.

I also plan to share all submitted papers with other students, so everyone can see each other's work and make comments.

Each individual is required to read the paper or view the video presentation of three other groups and leave a substantive comment on Canvas in response. This is part of your project grade, and must be done before 11:59pm on Sun May 3 (the final exam day for this class).

Your paper and/or presentation should demonstrate understanding of the reference material, show significant progress in answering your posed research question, and provide an easy-to-understand explanation of your findings. Expectations of grad students are higher.