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ECE471, Selected Topics in Machine Learning – Syllabus, Fall 2019

tldr: We will introduce the concepts relevant to so called “deep learning” — our fundamental processes are based on computations performed over differentiable graphs, where nodes correspond to operations and edges correspond to operands.

**Instructor** Chris Curro, EE ’15, MEE ’16; [chris@curro.cc](mailto:chris@curro.cc)

**Reference Textbook** Ian Goodfellow and Yoshua Bengio and Aaron Courville.  
2016. *Deep Learning*. MIT Press. <http://www.deeplearningbook.org>

**Assignments** There will be a handful of programming assignments — I recommend using Python and Tensorflow for these — each will be due either 1 or 2 weeks after the assigned date. There will be 2 larger projects: a midterm and final.

**Quizzes** There will be quizzes most weeks. These quizzes will test understanding of assigned research papers. Expect 1-3 papers on most weeks. If you must miss a quiz, please let me know before hand and we will arrange appropriate accommodations, otherwise you receive a zero for that quiz.

**Grading** Grading breakdown in table at bottom of page. If you fail to submit an assignment you will fail the course. Unexcused late assignments will have a single letter grade deducted per 2 days late. The maximum grade for any tardy assignment is a B.

**Attendance** We will not take attendance, but it may factor into your participation score. Participation score is multifaceted. We will discuss this during the first class.

**Office hours** We will arrive at an appropriate schedule during the first class. Expect 1 or 2 hours per week. Additional hours by appointment.

**Google group** Expect communication via this Google group. Be sure to select to receive all emails when you sign up.  
[groups.google.com/a/curro.cc/d/forum/curro-cgml-2019](https://groups.google.com/a/curro.cc/d/forum/curro-cgml-2019)

Grading	
Assignments	30%
Projects	30%
Quizzes	30%
Participation	10%