## EE345/L: Linear Algebra and Machine Learning

## Narayana Santhanam, Fall 2023

Welcome to EE345/L!

The course is divided into a sequence of 12 modules which you can find at

https://uhm-descartes.github.io/ee345

The above github site is the class web site, NOT Laulima.

**Modules** You will find all 12 modules on github above. We will be covering a subset of the material in the modules. Each module is focused on a specific topic and is assigned a range of dates (which is subject to change). Each module usually has

- Readings, which include the part of the text that you can use to prepare, follow along, or review, as well as handouts. Notice that we do not necessarily follow the same order of the text, sometimes deemphasizing some material in the text, and sometimes adding in additional material.
- Lectures in class: these are not optional. See next part.
- Experiences primarily include problems we solve in class in groups, with my help. There is a portion of the grade assigned to this team-solving. Skipping classes will hurt your grade in this section.
  - Sometimes, they include advanced material you are not going to be tested on, but are encouraged to read, to get a feel for the "grownup" way of looking at the material;
- Assessments—typically quizzes that are released on Laulima at the beginning of the module. The quizzes are only due towards the end of the module. But they are provided at the beginning of the module so you can anticipate some highlights of the material to come.

**HW** You will turn in the solutions for the in-class problems in each module, and they will be graded. This portion is a sanity check to ensure that you understood the material.

Text The text we will use is Introduction to probability by Bertsekas and Tsitsiklis.

**Exams** There will be one midterm and a final exam.

**Grading** This is tentative, and will be updated on how the class experience goes. The breakdown of credit is as follows: quizzes (15%), in-class problems (15%), homeworks (10%), midterm (15%), final (25%). The remaining 20% is for the labs.

Office hours Office hours are Mondays before class (10:30-11:30am). If you wish to see me any other time (on MWF), please email me.