ENG-SCI/APMTH 158: Feedback Control Systems: Analysis and Design

• **Term:** Fall 2017-2018

Course Instructors: Na Li. (nali@seas.harvard.edu)
Meeting Time: Tuesday, Thursday 11:30am - 12:59pm

• Classroom: Cruft 309 (SEAS)

- **Course Description:** This course provides an introduction to feedback and control in physical, biological, engineering, information, financial, and social sciences. The focus is on the basic principles of feedback and its use as a tool for altering or inferring the dynamics of systems under uncertainty. Key themes throughout the course will include linear system analysis, state/output feedback, reference tracking, frequency response, transfer function, Bode plot, root locus, PID controller, loop shaping, and limit of performance. This includes both the practical and theoretical aspects of the topic. Please see the detailed Syllabus.
- **Notes:** Engineering Sciences 158 is also offered as Applied Mathematics 158. Students can not take both for credit.
- Here is <u>course schedule.</u> Please check it often for the lecture notes, homework assignments and other additional readings.