ME 41100 System Dynamics and Control
Dr. B. Wang

Homework 0

Note: This homework is meant to ensure that you understand the course information and course policies, and have everything set up before the first real homework. As such, it is worth much less than normal homework. Additionally, it is not eligible to be a dropped homework.

Class information:

- The class website is: https://bwang-ccny.github.io/ME41100.html

- The main textbooks for the course will be:

  - G. F. Franklin, J. D. Powell, A. Emami-Naeini, *Feedback Control of Dynamic Systems*, Pearson.
    (The most up-to-date edition of this book is the 8th edition. Previous editions should, for the most part, be fine, as the material will not be substantially different.)
  - K. Ogata, *System Dynamics*, 4th ed., Pearson Prentice Hall.

- Office hours: Mon/Wed 2:00 PM - 3:00 PM, Steinman 247

I, _____, understand and will follow the following policies of this course.

- **Policy on Lateness and Absence.** Students are expected to attend every class session of each course in which they are enrolled and to be on time. A WU grade will be assigned to a student by the instructor for excessive absence. Students should note that **an instructor may treat lateness as equivalent to absence**. **No distinction is made between excused and unexcused absences.** The number of hours absent may not exceed twice the number of contact hours the course meets per week.

- **Grading Policy.** The grade will be assigned roughly according to the following percentages: Weekly homework: 20%, Lab reports: 10%, Midterms: 30%, Final exam: 40%. **No late homework will be accepted.** If answers are not accompanied by satisfactory explanations (e.g., all intermediate steps, clearly readable handwriting), no credit will be given.

- **Exam Policy.** Exams will be **closed books** and **closed notes**. No phone or laptop is allowed to be used in the exams. During exams, you will be allowed to use **one** reference sheet. Reference sheet must be on a Letter-size paper. Both sides may be used, and the reference sheet must be **hand-written**.

- **Academic Integrity.** All students are subject to the university's academic integrity policies. Academic dishonesty will **not** be tolerated in any form. The lecturer will strongly adhere to the CUNY Policy on Academic Integrity, should the need arise. Instances of academic dishonesty include, but are not limited to

  - Copying solutions from other students during homework or during exams.
  - Solutions from previous years: It is forbidden to look at or copy solutions for homework from previous years.

- **Copyright Policy.** All course materials (class lectures and discussions, handouts, examinations, web materials) and the intellectual content of the course itself are protected by United States Federal Copyright Law. Students (and all other persons) are forbidden from recording lectures or discussions and from distributing or selling lecture notes and all other course materials without the prior written permission of the instructor. Students are permitted to make notes solely for their own private educational use. Exceptions to accommodate students with disabilities may be granted with appropriate documentation.

Problem 1. I would like to ensure you have a good way to scan your homework. For Problem 1, draw the following block diagram.
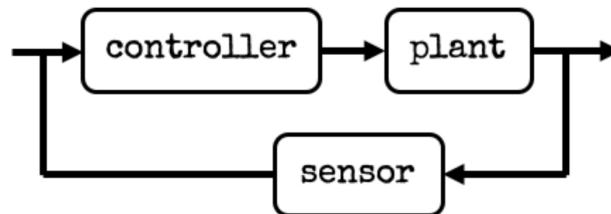

Figure 1: The object of study for this semester.

Scan your drawing with your name, email, and EMPL ID. Attach it to this **signed** homework file, and submit it to `Brightspace` as a **single PDF**. The filename should be "ME 41100 - HW0 - [Your Name].pdf".