ME132 is an introductory course on dynamic system and feedback for undergraduate students in Engineering and Science majors, and maybe more... The principal goal of the course is to introduce basic concept of feedback control systems, as well as the mathematical tools for system analysis and controller design.

Teaching Staff

Instructor: Dr. George Anwar (ganwar@berkeley.edu (mailto:ganwar@berkeley.edu)), 120 Hesse Hall (Will be on Zoom) Office hours are:

> - **Tuesday, 10:00AM-12:00PM**
> - **Thursday, 10:00AM-12:00PM**
> - **or whenever you set an appointment by email**

Occasionally, these will need to be changed. We will post announcements on weekends, alerting you to any changes in office hours in the upcoming week.

GSI: Jinge Wang (jinge@berkeley.edu), Office hours : TBD

Course Format

ME 132 consists of classroom lectures, weekly homework assignments, 1 midterm exam, a final exam, discussion sections. Faculty instructor delivers lectures, while graduate student instructor (GSI) supervises discussion sections.

I. CLASS/DISCUSSION SCHEDULE

Four and half hours of lectures and one and a half hour of laboratory/discussion per week.

Lectures: Tu/Th, 12:30PM-3:00PM, Location: **Online**

Discussion sections: Fri 9:00 AM - 10:30 AM, Location: **Online**

II. ASSIGNMENTS

(1) Homework

Homework will be posted on bCourses. No late homework will be accepted. Homework will be submitted onto bCourses.

Homework solutions will be posted on bCourses after the due date. Comments on graded homework will be posted on bCourses the following week after it is due.

III. MIDTERMS AND FINAL EXAM

How we execute the exams will be discussed in class.

Midterm 1: Tuesday, July 9, 12:30-2:50 PM (online).

Final: Thursday August 13, 12:30-2:50 PM. (online).

Course Text and Requirements

We will use PowerPoint slides and Control System Engineering by Norman S. Nise 7th Edition.

There is a good book, "Feedback Systems", by Karl Astrom and Richard Murray. You can purchase the book, or obtain a pdf-version free-of-charge. Check the wiki for more information: **http://www.cds.caltech.edu/~murray/amwiki/index.php/Main_Page (http://www.cds.caltech.edu/~murray/amwiki/index.php/Main_Page)**

In ME132, we are going to use Matlab extensively, as well as learn how to use Simulink and the Control System Toolbox. **Please install Matlab on your personal computer**, using the license available to all UC Berkeley registered students, which can be obtained at **https://software.berkeley.edu/matlab (https://software.berkeley.edu/matlab)**

Academic Honesty

It is acceptable to discuss with your classmates the material contained in the homework assignments, online-quizzes and laboratory assignments. *However, we require that your submissions represent your own work.* Copying someone else's work or allowing your work to be copied constitutes cheating, and will result in zero credit for the entire assignment. In addition, Berkeley students who are found to cheat in assignments or exams will be referred to Student Judicial Affairs. For details, see the website of the **Berkeley Center for Student Conduct (http://sa.berkeley.edu/conduct)** .

Honor Code

The student community at UC Berkeley has adopted the following Honor Code**: "As a member of the**

UC Berkeley community, I act with honesty, integrity, and respect for others." Your ME 132 instructors join you in pledging to adhere to this code.

Grades and Grading

The course grade will be assigned based on the following percentages:

- 30% Homework
- 30% Midterm (July 9th)
- 40% Final (August 13)

If you find any discrepancies between the issued grades and the grades posted on bCourses, please bring them to the attention of GSI immediately. In general, the course is curved, to College and Department guidelines, with a 3.0-3.1 GPA. I will say more about this in the first lecture.