Syllabus
ELE 292 - Linear Systems Lab, 25 Spring

1. Contact Information

Lab Instructor: Yue Cao   ycao70@syr.edu

Lab TA: Nandan Sriranga   nsrirang@syr.edu

(Begin all email subject lines with [ELE292], thanks)

Lab Room: CST 3-211

Cao's Office hours: Monday 4-5 pm, at CST 2-179
or drop by Cao's another lab during Monday 2-3 pm, Wednesday 2-3 pm at CST 3-217

2. About the Lab

2.1 Lab Website

This class will use the Blackboard learning management system to post the syllabus, announcements, course content, and grades. Note when submitting materials that the University's Blackboard Learning Management System is on Eastern Time.

2.2 Corequisite

ELE 251 - Fundamentals of Linear Systems

2.3 Required Supplies

A laptop with 2 available USB ports.

3. Learning Outcomes

A student who successfully fulfills the course requirements will have demonstrated:

* An ability to understand the time domain and frequency domain in linear systems.

* An ability to use Analog Discovery to obtain time-domain and frequency domain response.

* An ability to measure impulse/step/sin response of first and second order systems.

* An ability to connect basic electronics on a breadboard.

* An ability to integrate Arduino's IO with linear systems.

* An ability to conduct data analysis via Python pandas.

* An ability to write lab reports in Jupyter Notebook.

4. Lab Format

4.1 Deliverables

The deliverables of the lab include:

- Prelab:
  Prelab exercises are assigned to a lab to assess the knowledge of individual students and are provided in the beginning part of all lab documents.

  Prelabs must be completed individually.
  Prelabs must be submitted on Blackboard.
  Prelabs will be due at 11:59pm on the evening prior to the lab date.
  Prelabs will not be accepted after the due.

- In-lab Task:
  In the scheduled lab sessions, students will work in group to complete the lab tasks.
  Students need to check results with lab staff, verify the check-points and sign at the end.

- Lab Report:
  After lab sessions, students are expected to individually do a detailed writeup of their lab experiments using data collected while in lab.

  Lab Reports must be completed individually.
  Lab Reports must be submitted in .pdf format on Blackboard.
  Lab Reports will be due at 11:59pm on the evening prior to the next lab date.
  Lab Reports can be accepted after the due with a late penalty.

4.2 Groups

Students are expected to work in a group of 2 persons during the lab sessions.
While there is no fixed group assignment, it is encouraged to collaborate with a student from a different major.
All group members must be present when verifying check-points.

** If the enrollment number is odd (such as 19/21/…), there will be a group of 3 persons. The arrangement for this group will be as follows:
For Labs 0-3, the group will work together.
For Labs 4-7, the group will rotate responsibilities. Two students will work together, and one student will work individually on three of the labs. For example, in a group with students A, B, and C, the rotation could be: Lab 4 - all three work together; Lab 5 - A and B together, C works alone; Lab 6 - A and C together, B works alone; Lab 7 - B and C together, A works alone. Repeat the cycle for the rest of labs.

5. Grade

5.1 Grade Policy

In order to pass ELE 292, students must:

i.Perform and report ALL experiments

Perform all experiments: it is determined by the signature on the check-point sheet.

Report all experiments: it is determined by the deliverable submission on Blackboard.

ii.Achieve an aggregate passing grade

5.2 Grade Breakdown

The grade determination breakdown for ELE 292 is as follows:

Prelab: 30%

Lab Report: 70%

5.3 Grade Scale

94-100	A
90-93.99	A-
87-89.99	B+
83-86.99	B
80-82.99	B-
77-79.99	C+
73-76.99	C
70-72.99	C-
60-69.99	D
Below 60	F

** There is no extra curve adjustment to the final grade.

6. Late Policy

- With Orange Success notification: email the instructor for situation-based delay.
- Without Orange Success notification:
  - prelab: will not be accepted
  - lab report: -10% per business day. After 5 business-day-delay, grade will be zero.

7. Attendance

Attendance in classes is expected in all courses at Syracuse University. It is a federal requirement that faculty promptly notify the university of students who do not attend or cease to attend any class. Faculty will use Early-Semester Progress Reports and Mid-Semester Progress Reports in Orange SUccess to alert the Registrar and Financial Aid Office on non-attendance. For more information visit:

https://registrar.syr.edu/students/non-attendance/

If a student is unable to participate in-person or virtually for an extended period of time (48 hours or more), the student may request an absence notification from their home school/college Dean's Office or through Student Outreach and Support office. Instructors will be notified via the "Absence Notification" flag in Orange SUccess.

A student who misses a lab is required to make it up at an alternative time and have lab results verified by the TA.

Barnes Center at the Arch (Health, Counseling, etc.) staff will not provide medical excuse notes for students. When Barnes Center staff determine it is medically necessary to remove a student from classes, they will coordinate with Student Outreach and Support case management staff to provide appropriate notification to faculty through Orange Success. For absences lasting less than 48 hours, students are encouraged to discuss academic arrangements directly with their faculty.

8. Academic Integrity and Artificial Intelligence

As a pre-eminent and inclusive student-focused research institution, Syracuse University considers academic integrity at the forefront of learning, serving as a core value and guiding pillar of education. Syracuse University's Academic Integrity Policy provides students with the necessary guidelines to complete academic work with integrity throughout their studies. Students are required to uphold both course-specific and university-wide academic integrity expectations such as crediting your sources, doing your own work, communicating honestly, and supporting academic integrity. The full Syracuse University Academic Integrity Policy can be found by visiting class.syr/edu, selecting, "Academic Integrity," and "Expectations and Policy."

Upholding Academic Integrity includes the protection of faculty's intellectual property. Students should not upload, distribute, or share instructors' course materials, including presentations, assignments, exams, or other evaluative materials without permission. Using websites that charge fees or require uploading of course material (e.g., Chegg, Course Hero) to obtain exam solutions or assignments completed by others, which are then presented as your own violates academic integrity expectations in this course and may be classified as a Level 3 violation. All

academic integrity expectations that apply to in-person assignments, quizzes, and exams also apply online.

Students found in violation of the policy are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered. Students may not drop or withdraw from courses in which they face a suspected violation. Any established violation in this course may result in course failure regardless of violation level.

Syracuse's academic integrity expectations extend to the fast-growing realm of artificial intelligence (AI). Based on the specific learning outcomes and assignments in this course, artificial intelligence is permitted on the following**: 1) checking spelling and grammar, 2) generating Latex/Word code for math equations, 3) rephrasing lab report sentences with caution, 4) checking how to use Python pandas.** Any AI use beyond that which is detailed in course assignments is explicitly prohibited except when documented permission is granted.

9. Disability Syllabus Statement

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. There may be aspects of the instruction or design of this course that result in barriers to your inclusion and full participation in this course. I invite any student to contact me to discuss strategies and/or accommodations (academic adjustments) that may be essential to your success and to collaborate with the Center for Disability Resources (CDR) in this process.

If you would like to discuss disability-accommodations or register with CDR, please visit Center for Disability Resources. Please call (315) 443-4498 or email disabilityresources@syr.edu for more detailed information.

The CDR is responsible for coordinating disability-related academic accommodations and will work with the student to develop an access plan. Since academic accommodations may require early planning and generally are not provided retroactively, please contact CDR as soon as possible to begin this process.

10. Discrimination or Harassment

Federal and state law, and University policy prohibit discrimination and harassment based on sex or gender (including sexual harassment, sexual assault, domestic/dating violence, stalking, sexual exploitation, and retaliation). If a student has been harassed or assaulted, they can obtain confidential counseling support, 24-hours a day, 7 days a week, from the Sexual and Relationship Violence Response Team at the Counseling Center (315-443-8000, Barnes Center at The Arch, 150 Sims Drive, Syracuse, New York 13244). Incidents of sexual violence or harassment can be reported non-confidentially to the University's Title IX Officer (Sheila

Johnson Willis, 315-443-0211, titleix@syr.edu, 005 Steele Hall). Reports to law enforcement can be made to the University's Department of Public Safety (315-443-2224, 005 Sims Hall), the Syracuse Police Department (511 South State Street, Syracuse, New York, 911 in case of emergency or 315-435-3016 to speak with the Abused Persons Unit), or the State Police (844-845-7269). I will seek to keep information you share with me private to the greatest extent possible, but as a professor I have mandatory reporting responsibilities to share information regarding sexual misconduct, harassment, and crimes I learn about with the University's Title IX Officer to help make our campus a safer place for all.

11. Faith Tradition Observances

Syracuse University's Religious Observances Policy recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their traditions. Under the policy, students are given an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance, provided they notify their instructors no later than the academic drop deadline. For observances occurring before the drop deadline, notification is required at least two academic days in advance. Students may enter their observances in MySlice under Student Services/Enrollment/My Religious Observances/Add a Notification.

12. Health & Wellness Considerations

Mental health and overall well-being are significant predictors of academic success. As such it is essential that during your college experience you develop the skills and resources effectively to navigate stress, anxiety, depression, and other mental health concerns. Please familiarize yourself with the range of resources the Barnes Center provides (https://ese.syr.edu/bewell/) and seek out support for mental health concerns as needed. Counseling services are available 24/7, 365 days, at 315-443-8000.

13. Emergency Situations

In the event of an emergency, please use one of the following numbers to reach ORANGE ALERT:

From any phone: 315.443.2224

From your cell phone: #78 (#SU)

Campus landline: 711