ECE202 Circuit Theory Applications
Course Syllabus for Spring 2021

Class time: TH 2:00-3:15 via Zoom
Office hours: via Zoom, listed on Canvas, or as individually arranged

Instructor: Olivera Notaros, olivera@colostate.edu
Lab TAs: John Crowell, jcrow83@rams.colostate.edu
Kailee Mitsuyasu, kaimits@rams.colostate.edu
Class Assistant: Nick Daly, nickdaly@rams.colostate.edu

- Please send questions to instructor, TAs and CA via email; do not send messages through Canvas, as replying to Canvas messages is tedious.

Recitations (optional): Fri 5:00 – 6:15 (+/-); Zoom link is posted on Canvas
Math Foundations lectures (optional): Mon 12:00-12:50

Connect for 6th edition of the textbook: recommended for your personal learning, but not required

Rough outline of the topics taught and most important dates:
1/19 First class
   First-order circuits and step response (ch.7), LSM1
   Second-order circuits and step response (ch.8), LSM1
   Sinusoids and phasors (ch.9), LSM2
   Sinusoidal steady-state analysis (ch.10), LSM2
   AC power analysis (ch.11), LSM3A
   Three-phase circuits (ch.12), LSM3B
   Magnetically coupled circuits (ch.13), LSM4
   Frequency response (ch.14), LSM5
   Filters (ch.14), LSM6
   Laplace transform and convolution (ch.15), LSM7
   Use of Laplace transform and convolution to solve circuits (ch.16), LSM7

asap, by 1/31 Team members’ names and project title, if known, due (e-mail instructor)
Subject of an email: ECE202: Team members info
1/31 Preliminary project proposal due (one upload to Canvas per team)
2/1-2/14 Meet w/ assigned EIR Mentor
3/7 Mid-project report due (one upload to Canvas per team)
3/11 Attend KI-1 lecture in ECE202 2:00-3:15
3/11 Attend KI-1 lecture in ECE303 3:30-4:45
4/19-4/25 Meet w/ assigned EIR Mentor
4/28 Virtual course project demos, time tbd
4/29 Course project report due (one upload to Canvas per team)
5/4 Attend KI-2 lecture in ECE202 2:00-3:15
5/4 Attend KI-2 lecture in ECE303 3:30-4:45

Dates of LSM quizzes: 2/11, 2/25, 3/16, 3/25, 4/6, 4/22 (monitor Canvas for potential changes)
Final exam: 5/11, 9:40-11:40, extended (based on CSU exam schedule)
Grading policy:
20% Lab
10% Homework
35% LSM quizzes
20% Final exam
10% Course project
5% Knowledge Integration (KI)
2% course bonus for Math Foundation (extra credit)

Late work policy:
One day late: -50%
More than one day late: no credit

Passing ECE202 laboratory is mandatory! You must attend all labs, turn-in all lab assignments, and get an overall-passing grade.

Labwork grading policy:
30% Preparedness for lab sessions and participation (lab work)
70% Lab report

Homework:
Homework must be submitted to Canvas on time and in presentable condition. Solutions with no work shown will be assumed wild guesses and therefore receive no credit. Late homework may be submitted within 24 hours from the assigned due time for (-50%) of the earned grade.
Please use highlighter or colored pencil to color-in/mark numbers of problems you have worked on.

Homework grading policy:
50% will be based on the number of questions attempted; shown work must make sense
50% will be based on the correctness of the questions chosen by instructor for grading

Course project should be completed in groups of two or three students. It will be discussed in detail during first lecture and more info will be posted on Canvas before second lecture.

Course project grading policy:
20% Proposal and Mid-project report
15% Creativity and design
15% Meetings w/EIR Mantor
25% Final report
30% Demo
Project grade total: 105%

Knowledge integration (KI)
KI grade consists of three components: pre-work, video presentation, and self-reflection. Video presentations are peer-assessed. The KIs are performed with ECE 303.

Math foundation
Math foundation extra credit consists of two components: attending lectures and solving problem sets.
- 1% extra credit for any student who attends at least seven math foundation lectures,
- 1% extra credit for any student who receives an average grade of 85% or more on math foundation problem sets.

CSU Student Conduct Code and the Academic Integrity Policy should be followed. Working with the group of classmates is highly encouraged in our course. In order to avoid any misunderstandings, always
list names of colleagues you have worked with, and any resources you may have used to complete the assignment (write this information below your name on the first page of the assignment). Use of solution manual is strictly forbidden. If cheating or plagiarism is found on exams or assignments, a zero will be given to the exams or assignments.

**Quizzes** will be executed through Canvas. Calculators are allowed. Our course topics are divided into seven Learning Studio Modules (LSM). Demonstrating competency in each LSM is required. Competency is assessed through LSM-quizzes. Students who do not demonstrate competency in an LSM will be notified after the corresponding exam and will be given the opportunity to gain competency by completing remedial course-related work, assigned by the instructor. Completing the remedial work in a satisfactory fashion establishes student's competency in the corresponding LSM, but does not affect student's grade. However, if the remedial work is not completed in a satisfactory fashion, student will automatically receive grade F in the course.

**Grades** will be assigned from A through F, with plus or minus categories (no C-, D+, and D-)

- F: 0-60;
- D: 60-70;
- C: 70-77;
- C+: 77-80;
- B-: 80-83;
- B: 83-87;
- B+: 87-90;
- A-: 90-93;
- A: 93-97;
- A+: 97 and up
ECE202, Spring 2021
Lab Procedures and Expectations

Spring 2021 will have two modalities of Lab offering: face-to-face and online. All students will be working on the same lab assignments, regardless whether they are face-to-face or online. All students are expected to show-up for that week’s face-to-face or online session. Anyone missing a lab session due to justified reasons, must email TA and arrange for alternate plans and submission dates.

**Face-to-face lab sessions are offered on:**
Mon 2:00-4:50
Tue 8:00-10:50
Wed 9:00-11:50
Wed 5:00-7:50
Thu 8:00-10:50

**Online lab sessions will be held on Friday, via Zoom.**
As of now, proposed times are:
Fri 10am – 12, noon MST
Fri 7pm – 9pm, MST

In order to avoid confusion, all students should attend session they have registered for. Any student registered for face-to-face session that can not show-up due to health or other reasons, need to reach out to their TA at the earliest convenience.

**Timeline for each lab:**
- Lab assignment will be posted well in advance.
- Students need to download the assignment and finish Pre-lab section before coming to the Lab. This is important, to prepare students for lab work
- Read lab assignment and steps before lab session
- You may choose to work on parts of the lab even before session starts, and come to your lab session to collaborate with other students and get help from TA
- Showing TA your connected circuit and results is mandatory. Students that do not show for lab session will be marked as absent, and receive no credit, even if they submit report.
- Lab report will be due on Thursday of the following week, midnight.

**Below is one example of the calendar representing a random lab:**
Students must attend one of the Mon-Fri lab sessions
Lab report is due on Canvas the following Thursday at midnight
Last-minute TA help Thursday 5-6pm
**Office hours:**

**Instructor (Olivera):**
Instructor will be available during Tuesday and Thursday class time to answer questions. Any students wishing to talk to the Instructor during other times should send an email to arrange a different meeting time.

**Class Assistant (Nick):**
Nick’s primary goal is to help students follow academic content of the course: help with understanding material taught in class, help with homework assignments and preparation for the exam.

Any homework and class-related questions should be emailed to Olivera and Nick, in a single email.

**Teaching Assistants (Kailee, John):**
TAs are primarily responsible for Labs. If you have any lab-related questions, please email your TA.

**Virtual BC-Infill Hours:**
In the past, before-covid times, students used to gather in the BC-Infill area to meet other class mates and work on the assignments.
Given these covid-times, we have decided to create a *Virtual BC-Infill* for our class. *Virtual BC-Infill* is a Zoom link that will allow students to log-in, even if Instructor, CA and TAs are not present. The purpose of this link is that students join, meet classmates, work on homework assignments together, and help each other learn.
Instructor, CA and TAs may join you during these times. Exact schedule of Instructor, CA and TAs joining *Virtual BC-Infill* will be announced in class and posted on Canvas.