

ELE 215 – LINEAR CIRCUITS LABORATORY

Spring 2025

Catalog Description: DC measurements, natural and step response of first- and second-order circuits, AC measurements, impulse and frequency response, operational amplifier circuits.

Schedule: Recitation Fridays 2:00-2:50 in Edwards Auditorium – in case of snow, a link for a zoom session will be sent via email.

Lab sessions are Mondays and Fridays in Bliss 320 or 380

Prerequisites: ELE 202, credit or concurrent enrollment in ELE 212

Instructor: Prof. Peter F. Swaszek, 492 Fascitelli Center, swaszek@uri.edu
Office hours: M & F 10-11 or by appointment

Materials: The ELE 202 electronics kit will be useful for the op amp exercises

Course Website: <http://www.ele.uri.edu/~swaszek/ele215> I will post relevant class materials here including recitation slides, info on our bench equipment, lab instructions, and lab summary pages. The site has access limits; when requested to login, use ID and password.

Recitation Schedule:

Date	Topic	Date	Topic
1/24	Intro; basic equipment	3/7	cancelled
1/31	Lab 2 circuit; soldering	3/21	More Bode plots
2/7	MatLab	3/28	Parasitics
2/14	More MatLab	4/4	More op amps
2/23	Op amps	4/11	"Black Box"
2/28	Bode plots	4/18 & 25	cancelled

Lab Schedule:

Dates	Topic	Dates	Topic
1/27, 1/31	Lab 1	3/17, 3/21	Lab 8
2/3, 2/7	Labs 2 & 3	3/24, 3/28	Lab 9
2/10, 2/14		3/31, 4/4	Lab 10
2/19, 2/21	Lab 4	4/7, 4/11	Lab 11
2/24, 2/28	Lab 5 & 6	4/14, 4/18	Lab 12
3/3, 3/7	Lab 7	4/21, 4/25	

Due Dates and Grading:

Due Date	Time	Late Date	What's Due	Points	How Submitted	Type
1/31	5 PM	none	PreLab 1	10	online	Individual
2/5	5 PM	2/12	Summary 1	40	Brightspace	Pair
2/19	9 AM	none	PreLab 4	25	online	Individual
2/19	5 PM	2/26	Summary 2	50	Brightspace	Individual
2/26	5 PM	3/5	Summary 4	50	Brightspace	Pair
3/5	5 PM	3/19	Summary 5	75	Brightspace	Pair
3/17	5 PM	none	Summary 6 - v and i	20	online	Individual
3/17	5 PM	none	Summary 6 - simulation	55	Brightspace	Individual
3/17 or 21	in lab	none	Lab 8 Bode plot	10	in lab	Pair
3/19	5 PM	3/26	Summary 7	75	Brightspace	Pair
3/24	9 AM	none	PreLab 9	20	online	Individual
3/24 or 28	in lab	none	Lab 9 Bode plot	10	in lab	Pair
3/26	5 PM	4/2	Summary 8	90	Brightspace	Pair
3/31 or 4/4	in lab	none	Lab 10 Bode plot	10	in lab	Pair
4/2	5 PM	4/9	Summary 9	70	Brightspace	Pair
4/7	9 AM	none	PreLab 11	20	online	Individual
4/7 or 111	in lab	none	Lab 11 Bode plot	10	in lab	Pair
4/9	5 PM	4/16	Summary 10	90	Brightspace	Pair
4/16	5 PM	none	Program for Lab 3	75	Brightspace	Individual
4/16	5 PM	4/23	Summary 11	70	Brightspace	Pair
4/21	9 AM	none	Lab 12 initial check	25	online	Pair
4/30	5 PM	none	Lab 12 report	100	Brightspace	Pair

The total is 1000 points.

Late submissions, if accepted, are penalized 40%.

Final grades typically are:

900-1000 = A, 800-899 = B, 700-799 = C, 630-699 = D, < 630 = F

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please be in touch with Disability Services for Students Office at 330 Memorial Union, 401-874-2098.