

## Course Information

**Instructor:**

Dr. Edward R. Doering

C-211, CM 110

877.8157

Ed.Doering@Rose-Hulman.Edu

[www.rose-hulman.edu/~doering](http://www.rose-hulman.edu/~doering)

Office hours: My door is usually open unless I am in class or a meeting, so please stop by or make an appointment.

**Class times, locations:**

Sec 02: MTF 8 (2:30 – 3:20 pm) in G-221

R 8-10 (2:30 – 5:10 pm) in C-115

Sec 03: MTF 9 (2:30 – 3:20 pm) in G-221

W 1-3 (8:05 – 10:45 am) in C-115

**Course catalog description:** Review of DC, time-domain and sinusoidal steady-state systems. Formal solution techniques and useful tools. Laplace transforms. s-domains system representation. Integral laboratory.

**Course summary:** ECE200 adds depth to the fundamental concepts learned in the prerequisite course ES203 (Electrical Systems). You will learn how some basic properties of circuit topology and linear systems theory can be applied in a variety of ways to efficiently analyze a circuit. In addition, you will see how Laplace transform theory can be used to easily analyze more complex circuit situations.

**Required texts:**

Eccles, William J., *Pragmatic Circuits*, published locally, 1999.

**My expectations:** ECE200 will increase your technical knowledge and skills, and also gives you an opportunity to practice the profession of engineering:

- I expect professionalism in your conduct, both in the classroom and in the lab.
- I expect professionalism in your written work; strive for neat and orderly presentation of your work.

**RHIT Honor Code in this course:**

- Work that you submit for individual grading is entirely your own effort.
- Work that you submit for group grading is the result of equally shared effort.
- Plagiarized work will result in a minimum penalty of zero credit for the work in question, and may result in a maximum penalty of a failing course grade.

**Grades:**

Mini-Exams	45 %	3.57 – 4.00	A
Final exam	30 %	3.14 – 3.57	B+
Prelabs	10 %	2.71 – 3.14	B
Labs	15 %	2.29 – 2.71	C+
		1.86 – 2.29	C
		1.43 – 1.86	D+
		1.00 – 1.43	D
		< 1.00	F

- Each of the four grade components must individually achieve a passing score (i.e.,  $\geq 1.00$ ) in order to pass the course.
- All lab work (prelabs, lab logs, lab reports) must be submitted in order to pass the course.

**Exams:**

- Exams are closed book, closed notes, and closed laptop. Bring a pen and a calculator.
- Mini-exams will be conducted at the end of the period each Friday. The lowest mini-exam score will be dropped from the course score.
- Final exam is comprehensive.

**Homework:**

- Homework problems will be assigned daily.
- Additional worked examples are available in circuits textbooks on reserve at Logan Library.

**Labs:**

- Work with the same partner throughout the quarter. Each partner must obtain a lab book.
- Do the prelab work in your lab notebook. Submit a photocopy of your prelab lab book pages at the beginning of the class day before lab (Tuesday for both sections).
- Missed lab work *must* be made up. A late penalty of 20% grade reduction per day will apply unless previous arrangements for absence have been made.
- For each lab, one partner in the lab group will do all the lab book work and the other partner will do all the experimental work. These duties will rotate for each experiment.
- Lab books will be collected at the end of the lab period.

**On-line resources:**

- [www.rose-hulman.edu/~doering/homepage/resources.htm](http://www.rose-hulman.edu/~doering/homepage/resources.htm)
- Novell class directory: G:\ECE\ECE200\doering (G: is \\SATURN\CLASS)
- *ECE Writing Guidelines*: [ecweb.rose-hulman.edu/docs](http://ecweb.rose-hulman.edu/docs)