https://qiriro.com/epe2165/

What will you learn in this course?

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What EPE2165?

- The course will give a broad grounding in the principles and practice of modern microelectronics.
- How to design and analyze circuits using both intuition and mathematical analysis (i.e., how to think like an engineer)
- Compare the measurements of the circuit variables with the behavior predicted by mathematical models and explain the discrepancies if any
- Given an electronic circuitry (e.g., with diode, transistors and op-amps) drawing, be able to derive appropriate equations from the schematic, and know how to solve those equations.
- You wil learn various circuit design techniques and how to apply them in making tradeoffs in choosing the right design given real-world constraint.
- Ability to express your design in oral and written forms

What to expect from me?

- I want you to succeed—both in this course but also, and most importantly, in life after you graduate
- I am prepared to help you understand the course material and help you pass your homework, quizzes and exams. My job is to help you, so let me know what I can do to help you succeed. If there is something that you would like me to do differently, please, let me know. I am happy to work with you to make class the best it can be.
- I am convinced that each one in this class is intelligent and have potential to transform the future of this nation —Remember: only the brightest students get a chance to enroll in this university.
- Fairness—I am a fair man. And fairness obliges me not to give preferential treatment to anyone.

What do I expect from you?

- Preparation—come to class prepared by doing the work and going to office hours when you need help.
- Discipline—do not be disruptive. If you need to take a call or text someone, take it outside.
- Time commitment—Expect to spend more time reading assigned reading material, doing revision of the lecturer and completing assignments.
- Professionalism—I will do my best to guide you. However, you are adults and I will treat you as such.
- Communication You can send me an email or call me to schedule an appointment. I prefer email to phone calls. You can also come to my office for questions. It is your responsibility to ask me questions if there is anything you do not understand.

Course website

The course has two websites where I host all the materials

- The UR e-learning platform
    - This is the official website. When in doubt, consult this first
    - Everyone must register here
    - All quizzes will be conducted on this platform
    - https://elearning.ur.ac.rw/
- Personal website
    - https://qiriro.com/epe2165/
    - It should be used as a backup because the official web platform is often inaccessible —especially at peak time

Course organization

- **Weekly lectures** —There will be one 3 hours lecture every Friday (2-5pm)
- **Weekly quiz**
    - Quizzes will be based on the the previous week's lecture.
    - The quizzes will be online and will be taken on the UR's e-learning platform.
    - The weekly quiz will be open *from 5:00PM and close at 11:59PM of every Thursday*. However, the quiz will last for only 15 minutes
    - Missed quizzes will result in a zero. There is no re-sit for any missed quizzes
- **Homework**
- **Circuit design project**

Evaluation standards

- Exams —UR's policy will be applied
- Homework
    - Homework questions will be geared to test your theoretical understanding of lecture material.
    - Collaboration on homework is encouraged, but the work should be your own.
    - ADVICE: Please try to work on this assignment early and ask questions if needed.
- Homework—small groups homework will be given at then end of each chapter
- Design and simulation projects—will be done in small groups as well

NOTE If you do not understand homework questions odds are you will fail the exam exams and ultimately fail this class. Please make sure you understand what's on the homework and solve yourself the programming assignments. (and not memorizing them! It won't help.)

ADVICE —How to study for this course

- Do the suggested exercises and make sure you write some code along the way. Review the course website and materials you received on the first day.
- Read the assigned materials ahead of time.
- We will be moving at a much fast pace. I will expect that you understand more deeply the concepts I teach in this course. Thus, please ask questions when you do not understand anything.

ADVICE —How to study for this course

- The purpose of university learning is to force the student to think his/her way to a conceptual understanding of the material. You are expected to be proactive about your success in the course.
- Ask questions: I might not know if a particular student is struggling with the course unless he/she tells me so.
- Because of the nature of blended and online teaching, I will not slow down to accommodate the lagging student since I may not notice that you are lagging. If there is any material you do not understand, please let me know before it is too late.
- This course do not expect you to memorize definitions to repeat on an exam, or use your multiple guessing skills to do well on a test. Exams in this course expect that you will exercise your problem solving skills.

The end