EE231
Fall, 2018

Instructor: R. Arechiga
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Office Hours: TBD

Course Description:
This course develops on a basic understanding, design, and implementation of digital systems. Topics include number systems, Boolean algebra, logic gates, and truth tables. Sequential digital design via finite state machines. Lab provides exposure to computer-aided design, simulation and implementation of digital systems using Verilog HDL.

Co-requisites: *EE 251 or CSE 113 or ES 111*

Place in Curriculum: This course is open to majors and non-majors. The EE 231 is a pre-requisite to the *EE 382* Intro to Design course.

Course Learning Outcomes: The student should be familiar with basic digital design, and should be able to design and analyze digital circuits in Verilog HDL.

Program Learning Outcomes: The ability to conduct experiments in digital electronics, and an ability to function on multidisciplinary teams.

Course Requirements:

Textbook: Fundamentals of Digital Logic with Verilog Design, Third Edition by Stephen Brown and Zvonko Vranesic

Grading (Tentative):

Homework assigned regularly: 15 %
Quizzes given regularly on Fridays: 5%
Two Partial exams: 30%
Final comprehensive exam: 20%
Laboratory: 30% (Note: Lab has to have a passing grade in order to pass the course)

Counseling and Disability Services:

Reasonable Accommodations
New Mexico Tech is committed to protecting the rights of individuals with disabilities. Qualified individuals who require reasonable accommodations are invited to make their needs known to the Office of Counseling and Disability Services (OCDS) as soon as possible. To schedule an appointment, please call 835-6619.

Counseling Services
New Mexico Tech offers mental health and substance abuse counseling through the Office of Counseling and Disability Services. The confidential services are provided free of charge by

licensed professionals. To schedule an appointment, please call 835-6619.

Academic Honesty: New Mexico Tech's Academic Honesty Policy for undergraduate students is found starting on page 79 of the NMT 2017-2018 Course Catalog.

https://www.nmt.edu/registrar/2017-2018%20Course%20Catalog%20FINAL.pdf

You are responsible for knowing, understanding, and following this policy.

Respect Statement: New Mexico Tech supports freedom of expression within the parameters of a respectful learning environment. As stated in the New Mexico Tech Guide to Conduct and Citizenship: "New Mexico Tech's primary purpose is education, which includes teaching, research, discussion, learning, and service. An atmosphere of free and open inquiry is essential to the pursuit of education. Tech seeks to protect academic freedom and build on individual responsibility to create and maintain an academic atmosphere that is a purposeful, just, open, disciplined, and caring community."