Physics 225: Electronic Circuits
Spring Semester 2016
TTh 8:00-9:15am, MPH 203

Course Description: This course will cover basic elements of analog and digital circuit design. The emphasis will be on obtaining practical experience in designing, building, and troubleshooting practical circuits for applications to physics experiments. The course will also introduce

Prerequisites: Physics 208, Math 172, Math 308, Math 221

Course Content: 2 Lectures per week (TTh 8:00-9:15am); Lab at various times (see below)

Course Objectives: By the conclusion of this course, students should:
- Have a basic understanding of electronics and circuit design
- Have some understanding of systematic and random noise and error in electronic circuits
- Be able to use some electronic instrumentation and test equipment
- Be able to demonstrate knowledge of good electronic construction techniques

Logistics

Lecturer: Prof. D. DePoy (depoy@physics.tamu.edu)
Office: MIST420
Office number: 979-862-2082 (rarely answered)
Office hours: TTh 10:00-11:30am; please email or call to request an appointment at any time.
Textbooks: “The Art of Electronics”, Second Edition by Horowitz & Hill; "Laboratory Manual for TAoE" by Horowitz & Robinson (or the "Student Manual for TAoE" by Hayes & Horowitz)
Lectures: Tuesdays and Thursdays 8:00-9:15am in MPHYS 203
Labs: T or Th 2:20-5:10pm in MPHYS 330B; W 1:10-4:40pm in MPHYS 330B
TAs: William Baker (williambaker@tamu.edu)
TA office hours: TBA
Class Website: http://people.physics.tamu.edu/depoy/phys225.html

Grading

Grades will be calculated as follows:
- In-class/homework assignments (20%): There will be homework/in-class assignments during the semester. Anything turned in late receives no credit.
- Laboratory Exercises (65%):
- Final Exam (15%)

Approximate Grading Scale:
A (>90%), B (80–89%), C (70–79%), D (60–69%), F (<60%)
Your Responsibilities
Texas A&M University assumes that all students enroll in its programs with a serious learning purpose and expects them to be responsible individuals who demand of themselves high standards of honesty and personal conduct. All students are expected to behave at all times with respect and courtesy toward their fellow students and instructors and are to have the highest standards of honesty and integrity in their academic performance. Any behavior that disrupts the classroom learning environment or any attempt to present work that the student has not actually prepared as their own work, or to pass an examination by improper means, is regarded as a serious offense.

The minimum penalty for such an offense is a failing grade for this course. Aiding and abetting the above behavior is also considered a serious offense resulting in equally severe penalties. The Honor Code sets Texas A&M apart from other universities, and you should be proud of this standard. I expect that you will abide by the Aggie Academic Integrity Statement and Policy:

An Aggie does not lie, cheat, or steal or tolerate those who do.

Further information regarding the Honor Council Rules and Procedures may be found on the web at http://www.tamu.edu/aggiehonor.

ADA Policy
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.