

Digital Electronics Class Expectations

Welcome to Digital Electronics at Troy High School. I hope you are looking forward to the new challenges of this unique course. We at Troy High School view Digital Electronics as a corner stone course in the Troy Tech Program. The material covered in this course will give you a solid foundation for any technology base course you take in the future. This course will introduce you to the basic concepts and skills of electronic computing devices. You will use Integrated circuits (IC's) to wire and demonstrate microcomputers operations and Boolean Algebra to learn about internal information and logic control in computer and machine language to bridge the gap between computer hardware and software. We will also investigate the use of different number base systems (i.e., binary, octal and hex), K-maps, counters and different memory applications. You will build and design circuits (with IC's using AND, OR, NAND, XOR and invertors gates) that perform simple task to various digital systems including calculators and/or data transmission systems.

This class is a prerequisite to the Advance Placement Computer Science (APCS) next year. Your success in APCS is closely associated to your success in ICT and Fundamentals of Programming (FOP), therefore, to be eligible to enroll in APCS next year, you must earn a grade of A in both classes (ICT and FOP)

Hopefully you will find these topics rewarding, interesting and challenging. Now a little more about the course.

Semester Objective: To cover the entire text and approximately 22 labs.

Text: Roger L. Tokheim, Digital Electronics
Glencoe, Macmillan/McGraw-Hill

Behavior I will follow the schools policies for each of these. In addition:
 Trady's If you are not in your seat when the bell STARTS to ring, then you are tardy.
 Attendance Your attendance is very important to your success in this class. If you miss a day, you
 Absences & are responsible to make-up all assignments you missed during your absences. You will
 Make-up work be allowed to turn in any missed assignments up to the test date.
 If you are truant, you will not be allowed to make-up any work, including tests.

Class Rules

- No food (includes gum) or drink of any kind in the classroom.
- No radios are allowed in the classroom. Any radios found in my classroom will be turned into the office.
- You will treat every one and every thing (desk, lab equipment, etc.) in the class with respect at all times.
- Troy HS student expectations; include having book, pencil and paper ready at the beginning of class. Failure of any student to do so implies that they are tardy to class.

GRADING Grading will be based on several factors including chapter tests, major and minor quizzes, homework, final exams, lab assignments, and possible in-class lab assignments. Points will be awarded for each of these, and a percentage of all points will determine your grade. No curve will be used! The Grade/Percentage breakdown is as follows:

A: 89.5% and up B: 79.5% C: 64.5% D: 54.5% F: < 54.5%

GRADING (cont.)

Chapter Test There will be Several Chapter tests through the semester. Each test may cover one or more chapters. A written Final Exam will be given at the end of the semester. I do not believe it is my job to teach you how to do every question on the test. But I do believe it is my job to teach you all the skills necessary to solve all problems on the test.

Major Quizzes Through each chapter there may be Major Quizzes. These quizzes will be announced and any material covered in class is fair game.

Minor Quizzes At any time during the semester, you may be rewarded with an unannounced in class quiz. These quizzes are to be viewed as a learning experience, and therefore worth approximately 3-10 points. A word of warning, if the class does poorly on a Quiz, be prepared for another chance to redeem yourselves.

Homework: There will be a Homework (HW) assignment every day. You will generally have class time to start and possibly finish the assignment. Late HW will be severely frowned upon, and will be graded down 50%, and will not be accepted after completion of the chapter test. All late assignments must be complete to receive any credit.

Labs A main learning tool of this class is the lab experiments that you will be required to complete. You and a (ONE) partner will complete a series of labs through out the semester. Each project will involve building a circuit and answering several questions. To earn full credit for each project, you must neatly answer all questions. A tool of some sort (i.e., an electronics template or other software applications) is also required to correctly draw the required symbols. If your paper is not neat and professional looking, you will lose points.

In-class lab To further test your knowledge and understanding in-class lab tests may be given. The students will be solely responsible for building the specified circuit and answering a few questions. These labs will be finished in that class period.

Cheating If you are caught cheating, you will receive a zero (0) on that assignment. In addition, your grade may be lowered one entire grade. In addition, you will **not** receive an A grade.

*Cheating I expect that each student will **always** turn in their own work. If you share your work (through email, on disk, etc.) with others, you are also guilty of cheating.

INSTRUCTOR

Name	Phone Number	Email address
Don Allen	none	alleninterns@gmail.com
Kent Goodman	626-4560	kgoodman@fjuhsd.net
Mike Reid	none	reid@troyhigh.com
Joe Coglianese	none	mr.coglianese@gmail.com

Digital Electronics Lab rules - Room 401

- 1) **Language:** No improper language will be allowed at any time for any reason. You are to refer to all students, faculty members, assignments and equipment with respect. Name calling of any sort will **NOT** be tolerated.
- 2) **Food and Radios:** No food or radios are allowed in the classroom. Food is to be discarded before entering the classroom and radios are to be left at your home. I do **NOT** want to see food or radios in the Digital Electronics lab at any time. (Please leave your valuable belongings at home.)
- 3) **Trainers:** Each Lab group will be responsible for their own trainer. Lockers will be assigned for storage of trainer while not in use. The trainers are **NOT** to leave the classroom, and all work must be done during class or other predetermined hours.
- 4) **Supplies and Equipment:** All materials (wire, LCD, IC's, etc.) used to construct your digital system are to be treated with care. Nothing is to be thrown, hammered or forced. You will need to reuse your equipment for later labs, and I will need to reuse them for the next group of classes. In addition, you will **NOT** put any items (i.e. wires) into the electrical outlets!
- 5) **Tools:** The lab has a supply of tools needed to construct your digital systems. You may bring in your own tools if you wish. Your name must be permanently on all personnel tools and Troy H.S. and I assume no responsibility for the lost or theft of personnel tools.
- 6) **Work:** Each lab group is responsible for their own work. You may not share trainers between groups. Failure to comply with this rule is subject to the consequence of the Academic Honesty Policy.
- 7) **Extra Lab Time:** The instructor(s) will open the lab for student use on specific days either before school, after School and/or at lunchtime. The rules stated above will apply. In addition, all students must be engaged in productive lab work related to Digital Electronics.

I have read both the Academic Honesty Policy and ICT Lab Rules. I (the student) have discussed these expectations with the instructor and understand the grading system, and behavior expectation.

Students signature

Parent or guardian's signature