



Audio Electronics-17575

MUSC-1323

RT 2022 Section 1 3 Credits 08/23/2021 to 12/12/2021 Modified 08/19/2021

Course Meetings

Course Modality

WS - Online on a Schedule

Meeting Days

Mondays and Wednesdays

Meeting Times

8AM to 10:50AM

Meeting Location

Online at <https://us02web.zoom.us/j/8632651323?pwd=VjhkUmhIU3hLVnFKY3lFeFNhN2xFdz09>

Welcome and Instructor Information

Instructor: Mr. David W Wells

Email: david.wells@hccs.edu

Office: PAC Room 440A

Phone: 713-417-0648 (personal cell)

What's Exciting About This Course

MUSC 1323 teaches a basic understanding of the electronic components and circuits used in the Audio Recording Industry. Topics include fundamentals of electricity, DC circuits, Ohm's Law, AC circuits, circuit analysis, fundamentals of sound and audio, common circuits used in audio devices, signal flow, soldering techniques, construction of cables and kits, troubleshooting and repair. Those who are interested and motivated will find that this course opens doors for them and enhances understanding of the technology we use every day.

My Personal Welcome

Welcome to Audio Electronics in the Audio Recording Program at Houston Community College!

I have been involved in many facets of the electronics industry for most of my life as a repair technician, designer and prototyper. While owning a video production company, I custom designed and modified equipment in order to enhance its versatility and functionality. I have installed and engineered both live sound setups and studios. I was the Studio Manager for the Audio Recording and Filmmaking Program at Houston Community College for over nine years prior to accepting a position as a full-time instructor.

Students seeking a career in the Audio Recording industry will greatly enhance their employment and earning potential by understanding basic electronics. Those with the ability to resolve signal flow issues, perform basic repairs and installation, have

the ability to repair and make cables, and who utilize equipment with an understanding of its internal operation increase their value to a studio owner and, for those who will own their studio, themselves.

The goal of this course is to give students the knowledge required to be hired into a higher-tier studio at a better rate of pay. This course is designed to help a student establish a successful career in the industry, not just a job. Those students who apply themselves will be more marketable, as they will stand above many others who do not have these skills.

Preferred Method of Contact

Cellphone: 713-417-0648. In case of an emergency or urgent issue, please call me on cell number listed above. I use a spam blocker, so be sure to leave a voicemail if you do not get through.

Email: david.wells@hccs.edu. I will try to respond to emails within 24 hours Monday through Thursday; I will reply to Friday/weekend messages on Monday mornings. Please note that email is not an efficient form of communication when time is critical.

Office Telephone: 713-713-5615. This is actually not a good method of contact as I am in my office on an irregular schedule. Please use the more appropriate of the two methods shown above.

Audio Recording Technology department Telephone: 713-718-5646.

Office Hours

One hour following class

Monday, Wednesday, 10:50 AM to 11:50 AM, Online or by Telephone

Other times are available by appointment only.

Course Overview

Course Description

Basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting audio problems. Topics include soldering techniques, audio electronic alignment procedures for tape machines, console maintenance, and sound reinforcement equipment maintenance.

Requisites

MUSC 1335 Commercial Music Software; MUSC 1331 MIDI I; RTVB 1321 Tv Field Production.

Department Website

<https://www.hccs.edu/programs/areas-of-study/art--design/audio-recording-technology/>

Student Learning Outcomes and Objectives

Program Student Learning Outcomes (PSLOs)

Can be found at:

<https://www.hccs.edu/programs/areas-of-study/art--design/audio-recording-technology/>

Course Student Learning Outcomes (CSLOs)

Upon completion of MUSC 1323, the student will be able to:

1. Solve circuit problems using Ohm's Law.
2. Demonstrate effective troubleshooting techniques for basic audio problems.
3. Demonstrate appropriate preventive maintenance routines in recording and sound reinforcement.
4. Utilize proper soldering techniques.

Learning Objectives

Students will:

- 1.1 Describe the atomic properties involved with electricity and how this relates to conductors and insulators.
- 1.2 Demonstrate proper use of terminology associated with basic electronics such as voltage, current, and power.
- 1.3 Construct circuits using series and parallel connections.
- 1.4 Calculate voltage, current, and resistance within circuits by using Ohm's law.
- 2.1 Describe current flow and voltage drops within a DC circuit.
- 2.2 Simplify a DC circuit for analysis.
- 2.3 Define properties of AC signals such as amplitude, frequency, and phase.
- 2.4 Describe common AC signal measurement techniques.
- 2.5 Describe common passive circuit elements such as resistors, capacitors, inductors, and transformers.
- 2.6 Summarize units of measurement for passive components and coding schemes for values.
- 2.7 Explain the effect a diode has on DC and AC signals in a given circuit.
- 2.8 List common components found in power supplies and describe their operation.
- 3.1 Identify common measurement devices.
- 3.2 Demonstrate awareness of the potential dangers when using electricity and follow proper safety procedures when connecting or analyzing electronic circuits.
- 3.3 Demonstrate proper choice of components used in electronic devices based on their values and ratings.
- 3.4 Demonstrate proper use of a multimeter and oscilloscope.
- 4.1 Demonstrate proper use of soldering tools.
- 4.2 Demonstrate the ability to solder and de-solder connectors, wires, cables, printed circuit boards and components.
- 4.3 Describe the proper wiring scheme for various cable types.

Departmental Practices and Procedures

Program-Specific Student Success Information

Equipment Orientation

In order to succeed in the Audio Recording Program, students should take advantage of the equipment and resources available for checkout and use.

ALL students must complete an Equipment Orientation for their classes EVERY SEMESTER in order to access the equipment and other resources like computers/editing labs.

Further information about the dates and availability of the Orientation are found in this syllabus, but if you have any questions, you can discuss with your Instructor or with the Studio Manager Misty Barham at misty.barham@hccs.edu.

You must complete the Orientation by the deadline and fill out the Audio Recording Lab Agreement online at the end of the orientation or you will not be able to use the studios, audio equipment or computer labs for the entire semester!

Instructional Materials

The [HCC Online Bookstore \(https://hccs.bnccollege.com/shop/hccs-central/page/find-textbooks\)](https://hccs.bnccollege.com/shop/hccs-central/page/find-textbooks) provides searchable information on textbooks for all courses. Check with your instructor before purchasing textbooks because the book might be included in your course fees.

Understanding Basic Electronics

(the publisher of this text does not participate in Inclusive Access at this time)

- **Author:** Walter Banzhaf
- **Publisher:** American Radio Relay League
- **Edition:** Second (ONLY)
- **ISBN:** 978-0-87259-082-3
- **Availability:** Campus Bookstore,
- **Availability:** Amazon at [Understanding Basic Electronics \(Softcover\): ARRL Inc., Walter Banzhaf WB1ANE: 9780872590823: Amazon.com: Books](#), (includes Kindle edition)
- **Availability:** Publisher (American Radio Relay League) at [ARRL :: Technical :: Understanding Basic Electronics](#) (includes Kindle edition)
- **Price:** around \$32.95

ETCAI Circuit Challenge Software

Circuit Challenge software is provided by the school under license from ETCAI, Inc. This software helps you understand basic mathematical concepts used by circuits of various types, helps you learn how to troubleshoot faulty circuits and satisfies the lab requirements for our online course. It is available for you to download from the Files section of our Canvas course. More specific information and installation instructions will be covered in class.

- **Availability:** Download from the Files section of our Canvas course shell
- **Price:** Free to enrolled students, you are covered by the site license purchased by the college.

Scientific Calculator

A true-algebraic-entry scientific calculator is extremely beneficial for navigating the math in this course. The TI-30XIIS is strongly recommended, as it is inexpensive and will make your calculations much simpler and faster than most others. If you wish to use an app on your phone, tablet or laptop, be sure it emulates the TI-30XIIS. If you heed these words, you will thank me; if not, you are likely to struggle with some of the math,

You will need access to a Windows-based PC for homework and some quizzes!

If you do not have one available, the HCC Library can issue a laptop to you for the duration of the semester. Check with the library for information and availability.

Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
Assigned Circuit Challenges	30%		When an assigned Challenge is completed, the student will screen capture or take a picture of their Certificate of Completion. The captured certificate will be saved ONLY as a png or bmp file and uploaded into Canvas as credit for that assignment. Capture or photograph ONLY the Certificate window showing all the information. Unreadable or improperly cropped images that do not show the full certificate information will receive no credit.

Type	Weight	Topic	Notes
Quizzes	50%		There are routine quizzes scheduled. If we have 20 or more quizzes, the lowest four quiz grades will be dropped.
Attendance	10%		Attendance is part of your final grade and will be reduced for each absence from class. Three tardies or departures prior to the end of class will count as an absence. Students will not receive attendance credit if absent for more than half a class session.
Discussion Participation	10%	Weekly	Students are required to participate in the Canvas Discussion each week. A minimum of three posts (or replies) each week is required for full credit.

Grading Formula

Grade	Range	Notes
A	90 to 100	
B	80 to 89	
C	70 to 79	
D	60 to 69	
F	59 and below	

* Instructor's Practices and Procedures

Incomplete Policy

Incompletes are allowed only at the instructor's discretion under the most extreme circumstances and with the prior approval of the Department Chair. At least 90% of the work in the course must have been completed. Regardless of your course average, an incomplete will automatically become an F if the missing work is not submitted by the end of the following semester.

Missed Assignments/Make-Up Policy

Assignments will not be accepted after their due date. There are not make-ups for a missed assignment or quiz.

Academic Integrity

Academic Dishonesty will not be tolerated. The first instance will result in no credit for the assignment or quiz. The second instance will result in withdrawal from the course. All instances of Academic Dishonesty will be referred to the Dean of Students for appropriate disciplinary action.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>
[\(https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/\)](https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/)

Attendance Procedures

Students who fail to attend by the Date of Record will be dropped from the course automatically by the System. Students who disrupt class and make it difficult for other students to learn the material will be dropped from the course by the instructor.

Except as stated above, the instructor may drop at student only at that student's specific request. Students who are failing the course are responsible for withdrawing themselves, should they wish to do so.

DO NOT SIMPLY STOP ATTENDING CLASS AND FAIL TO WITHDRAW! A grade of FX is required in that case, which can result in an increase in your tuition for later classes.

The last day to drop a course in this 16-week semester is October 29, 2021.

Student Conduct

Any student who inhibits learning by disrupting the class will be required to leave. Repeated disruptions may result in being dropped from the course and will be referred to the Dean of Students for disciplinary action.

Also, please read the information at the following link: [HCCS Drugs and Alcohol Policy \(https://learning.hccs.edu/faculty/david.wells/musc1323/Drug%20Alcohol%20Abuse%20Prevention%20Notice%20Mach%202021.pdf/view\)](https://learning.hccs.edu/faculty/david.wells/musc1323/Drug%20Alcohol%20Abuse%20Prevention%20Notice%20Mach%202021.pdf/view)

Instructor's Course-Specific Information

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students before and after class as required

Devices

In a regular face-to-face class, use of any device for any purpose other than legitimate class requirements are prohibited. However, this is an online course and it is impossible to enforce the rule in this environment. Therefore,

Students must devote their attention to the instruction during class and avoid distractions which would compromise their ability to absorb the material. You should keep your microphone muted except when you wish to speak in order to minimize disruptions for the rest of the class. In Zoom, you can use the spacebar as a push-to-talk button, holding it down while speaking, and releasing it when not speaking so it is muted. Please do not keep your microphone open all the time.

Faculty Statement about Student Success

To be successful in Audio Electronics, it is your responsibility to:

- Attend class in person
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams on time
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Attain a raw score of at least 50% on the departmental final exam
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#)

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)) to supplement in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

HCC Policies and Information

HCC Grading System

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
A	Excellent (90-100)	4
B	Good (80-89)	3
C	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0
AUD	Audit	0
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0
COM	Completed. Given in non-credit and continuing education courses.	0

Link to Policies in Student Handbook

Here's the link to the HCC Student Handbook <https://www.hccs.edu/resources-for/current-students/student-handbook/> (<https://www.hccs.edu/resources-for/current-students/student-handbook/>) In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search

- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Link to HCC Academic Integrity Statement

<https://www.hccs.edu/resources-for/faculty/student-conduct-resources-for-faculty/> (<https://www.hccs.edu/resources-for/faculty/student-conduct-resources-for-faculty/>)

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

<https://www.hccs.edu/departments/police/campus-carry/> (<https://www.hccs.edu/departments/police/campus-carry/>)

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID \(https://www.hccs.edu/resources-for/current-students/student-e-maileagle-id/\)](https://www.hccs.edu/resources-for/current-students/student-e-maileagle-id/) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<https://www.hccs.edu/departments/institutional-equity/> (<https://www.hccs.edu/departments/institutional-equity/>))

Ability Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <https://www.hccs.edu/support-services/ability-services/> (<https://www.hccs.edu/support-services/ability-services/>)

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of

EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu (<mailto:Institutional.Equity@hccs.edu>)

<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/> (<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>)

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/> (<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>)

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Canvas Learning Management System

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

HCC Online Information and Policies

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: <https://www.hccs.edu/online/> (<https://www.hccs.edu/online/>)

Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <https://eagleonline.hccs.edu/login/ldap> (<https://eagleonline.hccs.edu/login/ldap>)

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students during office hours, and before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook \(https://www.hccs.edu/resources-for/current-students/student-handbook/\)](https://www.hccs.edu/resources-for/current-students/student-handbook/)

Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

EGLS3

The EGLS³ ([Evaluation for Greater Learning Student Survey System \(https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/\)](https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

<https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/> (<https://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>)

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Student Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services \(https://www.hccs.edu/resources-for/current-students/tutoring/\)](https://www.hccs.edu/resources-for/current-students/tutoring/) website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines,

newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <https://library.hccs.edu> (<https://library.hccs.edu>).

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <https://www.hccs.edu/resources-for/current-students/supplemental-instruction/> (<https://www.hccs.edu/resources-for/current-students/supplemental-instruction/>).

Resources for Students:

<https://www.hccs.edu/resources-for/current-students/communicable-diseases/resources-for-students/>
(<https://www.hccs.edu/resources-for/current-students/communicable-diseases/resources-for-students/>)

Basic Needs Resources:

<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/> (<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/>)

Student Basic Needs Application:

https://hccs.co1.qualtrics.com/jfe/form/SV_25WyNx7NwMRz1FH
(https://hccs.co1.qualtrics.com/jfe/form/SV_25WyNx7NwMRz1FH)

COVID-19

Here's the link to the HCC information about COVID-19:

<https://www.hccs.edu/resources-for/current-students/communicable-diseases/> (<https://www.hccs.edu/resources-for/current-students/communicable-diseases/>)

Instructional Modalities

In-Person (P)

Safe, face-to-face course with scheduled dates and times

Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

Online Anytime (WW)

Traditional online course without scheduled meetings

Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

Course Calendar

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Course Calendar (tentative)

WEEK	DATES	TOPICS / WHAT'S DUE
1	08/23 - 08/29	Introduction, Syllabus, Challenge Instructions
2	08/30 - 09/05	Silicon Valley video, Atomic Physics/Ohm's Law, Quiz 1 & 2 due
3	09/06 - 09/12	Circuit Analysis basics, Resistors in Series, Quiz 3 & 4 due
4	09/13 - 09/19	Circuit Analysis basics, Resistors in Parallel, Quiz 5 due
5	09/20 - 09-26	Circuit Analysis basics, Resistors in Series and Parallel, Quiz 6 due
6	09/27 - 10/03	Troubleshoot Series, Troubleshoot Parallel Circuits, Quiz 7, 8, & 9 due
7	10/04 - 10/10	Troubleshoot Series-Parallel Circuits, Quiz 10 due
8	10/11 - 10/17	Introduction to AC, Audio/Sound, Voltage Conversions, Quiz 12 & 13 due
9	10/18 - 10/24	Theory and Use of Oscilloscopes, Quiz 13 due
10	10/25 - 10/31	Reactance, Low Pass and High Pass Filters, Quiz 14 due
11	11/01 - 11/07	Resonance, Quiz 15 due
12	11/08 - 11/14	Bipolar Junction Transistors, Small Signal Amplifiers, Quiz 16 due
13	11/15 - 11/21	Audio Power Amplifiers, Operational Amplifiers, Quiz 17 due
14	11/22 - 11/28	Power Supplies, Quiz 18 due
15	11/29 - 12/05	Digital Logic, Fundamentals of Computers, Quiz 19 due
16	12/06 - 12/12	Computer Components and Architecture, Quiz 20

NOTE: There is one additional quiz planned that will be announced in class in November.

Additional Information

Audio Recording Technology

[Audio Recording \(https://www.hccs.edu/programs/areas-of-study/art--design/audio-recording-technology/\)](https://www.hccs.edu/programs/areas-of-study/art--design/audio-recording-technology/)

Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair.

Michael Cohn

Michael.cohn@hccs.edu / 713.718.6523