Instructor: Dr. Bruce Whisler
Office: Brooks 114
Phone: 656-0172
Hours: 1:30-2:30 MWF, 9:30-10:30 TTH, or by appointment
E-mail: bwhisle@clemson.edu

Texts:


*Technology Matters: Questions to Live With*, by David E. Nye, MIT Press

Learning Outcomes:

The overall goal of this course is for students to learn the many ways that sound-related technologies have impacted individuals specifically and society collectively. Specific outcomes will include the following:

1. Students will be able to explain how the telegraph, telephone, and radio revolutionized communications.
2. Students will articulate how the development of commercial radio made music and news more accessible and immediate.
3. Students will demonstrate awareness of how sound technologies have affected the political campaign process through an oral report on recorded statements from the 1908 presidential elections. An analogy of these statements with current issues is required.
4. Students will articulate how recording, editing, overdubbing, and amplification have enabled new musical and performance styles.
5. Students will discuss the impact of sound recording in the workplace, and how “taking dictation” was one of the first office positions commonly filled by women.
6. Students will describe various military uses of sound technology, and how military R & D propelled the technology.
7. Students will write a research paper analyzing the online distribution of music. The paper will examine the changes to the business model of the music industry from about the year 2000 to the present day. The students will be required to take a position on acquiring music (or other intellectual property) through other than legal means.
8. Students will discuss whether technology has had the effect of homogenizing society, or whether technology has allowed for greater individualization.
Grading:
- Discussion log: 20%
- Presentation: 10%
- Paper: 20%
- Oral Report: 5%
- Midterm Exam: 15%
- Final Exam: 20%
- Participation: 10%
- Points For CT Test: ???

Scale:
- 90-100=A
- 80-89.9=B
- 70-79.9=C
- 60-69.9=D
- Below 60% is an F

Attendance:
- For an A: Not more than three absences
- For a B: Not more than six absences
- For a C: Not more than nine absences
- For a D: Not more than twelve absences
- For an F: Twelve or more absences

Four tardies will equal one absence.

Any exam that was scheduled at the time of a class cancellation due to inclement weather will be given at the next class meeting unless contacted by the instructor. Any assignments due at the time of a class cancellation due to inclement weather will be due at the next class meeting unless contacted by the instructor. Any extension or postponement of assignments or exams must be granted by the instructor via email or within 24 hours of the weather related cancellation.

General Education Competencies:

1. **Science in Technology** - The “Science and Technology in Society” Gen. Ed. competency is satisfied by this course, which is the following specified competency:

   Demonstrate an understanding of issues created by the complex interactions among science, technology, and society.

   The written paper should qualify as an STS artifact.

2. **Critical Thinking**

   Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity,
accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.

CT2 Requirements

Many of the topics we will cover in this class require the application of critical thinking skills. As we examine advancements in technologies, we will routinely analyze the ways that people have incorporated these into their lives and what desires have driven the choices and applications of technologies. The following activities are specifically targeted at addressing critical thinking skills.

You will be required to take the California Critical Thinking Skills Test at the beginning of the semester and again near the end of the semester. You will receive a report of your score upon completion.

You will give a class presentation summarizing one of the recorded statements from the CD Debate '08 (1908). You will summarize the position of the candidate (Taft or Bryan) and compare/contrast this position with candidates of the same party in recent election cycles.

You will submit a final paper in which you will be required to take a position on acquiring media and software (intellectual property) without paying for it. This may include streaming services. Although they are legal, their payout to the content creators is typically minimal.

You will participate in a class discussion on whether the technologies in our lives have homogenized society or allowed for greater individualization. There is an assigned reading on this topic from the book Technology Matters by David Nye. You will be required to submit thoughts from the reading in advance of the class discussion.

Participation: Ten percent of your final grade is based on participation. Your grade for this category will start at 90%. Active participation in class (commenting, asking questions) will raise this grade. Inappropriate behavior, such as sleeping, texting, or web browsing, will lower this grade.

Discussion Log: For each assigned reading you are to send me a paragraph of comments for discussion via e-mail. This needs to be sent no later than 10:00 am the day of class. I would like for this to be more than a summary of the reading, a thought or response to the reading is desired. I would define a paragraph as being at least five sentences, but some readings may require more for full credit. The chapters in the Nye book are longer, and one short paragraph is often not adequate to cover these.

Paper: Your paper will discuss the digital distribution of intellectual property online. You need to summarize what kinds of content are distributed/shared and the means (both
legal and illegal) by which it is distributed. Finally, you need to take a position on acquiring intellectual property without paying for it, and discuss how this adversely affects the creators of the content.

**Presentation:** You are to make a presentation to the class on a particular audio technology. You need to turn in an outline (or Power Point) and a bibliography of five sources, one of which may be one of your texts. Include citations to your sources in your outline/Power Point.

**Oral Report:** You are to summarize an argument from a set of Edison cylinders from the Taft/Bryan recordings for the 1908 presidential election. Each cylinder is about two minutes. I will provide mp3s in Blackboard, as well as printed transcripts of the recordings.

**Waiting Policy:** Students should wait 15 minutes in the event that I am late.

**Disability Accommodations:**
Students with disabilities who need accommodations should make an appointment with Dr. Arlene Stewart, Director of Disability Services, to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when they meet with instructors. Student Disability Services is located in Suite 239 Academic Success Building (656-6848; sds-l@clemson.edu). Please be aware that accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.

**Academic Integrity:**
As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a “high seminary of learning.” Fundamental to this vision is a mutual commitment to truthful-ness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

**Topical Outline:**

**Week 1:**
- **August 19**  Introduction
- **August 21**  California Critical Thinking Skills Test – Bring a computer

**Week 2:**
- **Aug. 24 - 28**  Morton Chs. 1-3, beginning of recording
- **Aug. 28**  Player Pianos
- **Oral Report Prep**

**Week 3:**
- **8/31 – 9/4**  Oral Reports

**Week 4:**
- **Nye Ch. 3, Is Technology Predictable?**
Sept. 7 - 11  Morton Ch. 4, The Introduction of Discs

Week 5:  Morton Ch. 5, Recording in the Business World
Sept. 14 - 18  Morton Ch. 6, The Heyday of the Phonograph

Week 6:  Morton Ch. 7, The Talkies
Sept. 21 - 25  Morton Ch. 8, Records and Radio in the US

Week 7:  Morton Ch. 9, The Crucial 1930s
Sept. 28 – Oct. 2  1. Bing Crosby and crooning

Week 8:  Morton Ch. 10, Recording in World War II
October 5 - 9  Wednesday October 8th – Midterm Exam

Week 9:  Morton Ch. 11, The Postwar Scene
Oct. 14 - 16  1. Bing Crosby and Ampex
Morton Ch. 12 – Hi Fi

Week 10:  Tape Demonstration
Oct. 29 - 23  Morton Ch. 13, Revolution in the Studio
1. Processing and editing
2. Les Paul and Mary Ford, multi-track recording

Week 11:  Morton Ch. 14, Mobile Sound
Oct. 26 - 30  Nye Ch. 4 – How do Historians Understand Technology
Week 12:  Morton Ch. 15, Cassette to CD, up to page 180
Nov. 2 - 6  Morton p. 180 to end
Friday Nov. 6 – Paper Research Assistance

Week 13:  Nye Ch. 5, Cultural Uniformity or Diversity?
Nov. 9-13  Retake California Critical Thinking Skills Test – bring computer

Week 14
Nov. 16 - 20  Presentations

Nov. 23  No Class – Paper Assistance Available
Nov. 25  Papers Due by 8 am

Week 15:
Nov. 30 – Dec. 4  Presentations

Final Exam  Tuesday December 8, 9:00 – 10:30 am