Term Information

Effective Term   Summer 2023
Previous Value   *Autumn 2022*

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

Adding DL Approval

What is the rationale for the proposed change(s)?

This course is often taught online

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

N/A

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	History
Fiscal Unit/Academic Org	History - D0557
College/Academic Group	Arts and Sciences
Level/Career	Undergraduate
Course Number/Catalog	2701
Course Title	History of Technology
Transcript Abbreviation	History of Tech
Course Description	Survey of the history of technology in global context from ancient times.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	Yes
Is any section of the course offered	100% at a distance
Previous Value	*No*
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture, Recitation
Grade Roster Component	Recitation
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites   Prereq or concur: English 1110.xx, or completion of GE Foundation Writing and Information Literacy
                                        Course, or permission of instructor.

Previous Value   *Prereq or concur: English 1110.xx.*

Exclusions

Electronically Enforced   Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code   54.0101
Subsidy Level   Baccalaureate Course
Intended Rank   Freshman, Sophomore, Junior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
General Education course:
      Historical Study; Lived Environments
The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning   • An understanding of the evolution of technology in human history
objectives/outcomes

Content Topic List   • Technology in ancient/medieval China and Islamic world

                                      • Technology in medieval Europe

                                      • Industrialization

                                      • Transportation

                                      • Information technology

                                      • Technology and empire

                                      • Technology and gender

                                      • Technology and environment

                                      • Failure

                                      • Disaster

                                      • Biotechnology

Sought Concurrence   No

Attachments

- 2701 - DL Coversheet - Esposito signed.docx: DL Cover Sheet

  (Other Supporting Documentation. Owner: Getson,Jennifer L.)

- 2701 Syllabus DL SP23 (Esposito).docx: Syllabus DL

  (Syllabus. Owner: Getson,Jennifer L.)

- 2701 Syllabus P (Otter).docx: Syllabus P

  (Syllabus. Owner: Getson,Jennifer L.)

Comments

- Submission for 100% DL approval. Attached are: DL Syllabus, in-person syllabus and signed cover sheet approved by ODE. *(by Getson,Jennifer L. on 01/30/2023 03:20 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Getson,Jennifer L.	01/30/2023 03:21 PM	Submitted for Approval
Approved	Soland,Birgitte	01/30/2023 03:39 PM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	02/02/2023 04:40 PM	College Approval
Pending Approval	Cody,Emily Kathryn Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	02/02/2023 04:40 PM	ASCCAO Approval

THE OHIO STATE UNIVERSITY

HIS2701: HISTORY OF TECHNOLOGY
SPRING 2023 (FULL TERM)
3 CREDIT HOURS
ONLINE

Instructor

Instructor: James Esposito
Email address: Esposito.105@buckeyemail.osu.edu
Office hours: Tuesdays at 3-4pm via Zoom or by appointment

Course description:

From fire, the wheel and the stirrup and to drones, iPhones and the Anthropocene, human history is inexplicable without understanding technology. This course provides an introductory overview of the multiple ways in which technology has shaped human practices throughout history. It has two halves: the first half, running up to week 5, offers a history of technology from medieval China to the second Industrial Revolution of the late nineteenth and early twentieth century. The second half explores numerous themes in the history of technology, including war, gender, disaster, culture and the environment. Although the bulk of the course focuses on developments in Europe and the US, a global focus is maintained throughout.

Course Objectives:
- Introduce students to the basics of the history of technology
- Recognize the interconnectivity of the Western World and other regions
- Contextualize environmental, scientific, and medical events within broader political, economic, and religious history
- Synthesize various case studies to draw "big picture" conclusions
- Relate historical knowledge to our everyday lives
  Improve college-level writing skills through the drafting of short response papers

General education goals and expected learning outcomes

This course fulfills the Legacy GE category of **Historical Studies** OR the new GE Theme of **Lived Environments.**

GE Theme Lived Environments: Goals and Expected Learning Outcomes:

As part of the **Lived Environments Theme** of the General Education curriculum, this course is designed to prepare students to be able to do the following:

Goals:

1. Successful students will analyze an important topic or idea at a more advanced and in-depth level than in the Foundations component. [Note: In this context, "advanced" refers to courses that are e.g., synthetic, reply on research or cutting edge findings, or deeply engage with the subject matter, among other possibilities.]

2. Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

3. Successful students will explore a range of perspectives on the interactions and impacts between humans and one or more types of environment (e.g., agricultural, built, cultural, economic, intellectual, natural) in which humans live.

4. Successful students will analyze a variety of perceptions, representations, and/or discourses about environments and humans within them.

Expected Learning Outcomes:

Successful students are able to:

1.1. Engage in critical and logical thinking about the topic or idea of the theme.

1.2. Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.

2.1. Identify, describe, and synthesize approaches or experiences as they apply to the theme.

2.2. Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

3.1. Engage with the complexity and uncertainty of human-environment interactions.

3.2. Describe examples of human interaction with and impact on environmental change and transformation over time and across space.

4.1. Analyze how humans' interactions with their environments shape or have shaped attitudes, beliefs, values, and behaviors.

4.2. Describe how humans perceive and represent the environments with which they interact.

4.3. Analyze and critique conventions, theories, and ideologies that influence discourses around environments.

This course fulfills these learning outcomes by studying large scale technological systems and how they have developed over time (ELO 3.2) to understand their complexity, uncertainty, and unintended consequences (ELO 3.1). Students will examine how environmental stresses shaped the evolution of technological systems in the first three weeks of the course (ELO 4.1, 4.2) and how technological

systems have in turn placed stresses on the environment in weeks 10, 11, 13 in particular (ELO 3.2). In the last weeks of the course, students will be particularly invited to consider how humans have and have not paid close attention to the consequences of rapid urbanization, industrial pollution, and travel by railroad all of which stem from the rise of a fossil-fuel economy, for example, in weeks 6 and 7 (ELO 4.2)

Course readings are selected to highlight various theoretical approaches to the study of the history of technology (ELO 1.2, 4.3). Students write essays in which they engage in critical thinking and writing about large patterns in technological systems and synthetize major course themes (ELO 1.1, 1.2, 2.1, 2.2).

<u>Legacy GE Historical Studies: Goals and Expected Learning Outcomes:</u>

As part of the **Historical Studies** category of the Legacy General Education curriculum, this course is designed to prepare students to be able to do the following:

Goals

Students recognize how past events are studied and how they influence today's society and the human condition.

Expected Learning Outcomes

1. Students construct an integrated perspective on history and the factors that shape human activity.
2. Students describe and analyze the origins and nature of contemporary issues.
3. Students speak and write critically about primary and secondary historical sources by examining diverse interpretations of past events and ideas in their historical contexts.

In this course, students will study the history of technological systems and the ways technologies have influenced human life from the earliest stone tools to modern computing and geoengineering (ELO 1, 2). To practice historical analysis students will read primary and secondary sources that expand upon the lectures each week and write critically about these sources as the basis for their four essays which invite them to write critically about the large-scale consequences of the development of increasingly complex technological systems (ELO 3).

HOW THIS ONLINE COURSE WORKS

<u>Mode of delivery:</u> This course is 100% online. There are no required sessions when you must be logged in to Carmen at a scheduled time.

<u>Pace of online activities:</u> This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a **3-credit-hour course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

While the time spent will differ between students, you can expect one week to follow these approximate guidelines:

>1) Direct instruction: lecture videos (2 hours), additional media (15 minutes), and weekly discussions (45 minutes)

>2) Indirect instruction: course readings (2 hours), review/studying slides (1 hour), working on essays or other major assignments (2 hours)

Attendance and participation requirements: Because this is an online course, your attendance is based on your online activity and participation. The following is a summary of students' expected participation:

- **Participating in online activities for attendance**:
  You are expected to log in to the course in Carmen every week. (During most weeks you will probably log in many times.) If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible.*

- **Office hours:**
  I will be available to meet for office hours between 3-4pm on Tuesdays via Zoom. Please email me to schedule an appointment.

- **Participating in discussion forums**:
  As part of your participation, each week you can expect to post at least twice as part of our substantive class discussion on the week's topics.

COURSE MATERIALS AND TECHNOLOGIES

Readings:

There is no required textbook for this class. All course material will be uploaded on our Carmen page. Although not required for this class, students should consider renting or purchasing any available edition of Mary Lynn Rampolla's *A Pocket Guide to Writing in History*.

Course technology

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help

- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Technology skills needed for this course

- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings)
- Recording a slide presentation with audio narration (go.osu.edu/video-assignment-guide)
- Recording, editing, and uploading video (go.osu.edu/video-assignment-guide)

Required equipment

- Computer: current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required software

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at go.osu.edu/office365help.

Carmen access

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:
- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (go.osu.edu/add-device).
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (go.osu.edu/install-duo) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

GRADING AND FACULTY RESPONSE

How your grade is calculated

ASSIGNMENT CATEGORY	PERCENTAGE
Discussion Posts due according to the schedule below	20%
Response Paper 1	20%
Response Paper 2	20%
Response Paper 3	20%
Final Paper	20%
Total	**100**

See course schedule below for due dates.

Grading scale

The grading used in this class will be based on a traditional scale, listed below. The instructor reserves the right to curve grades upwards and to offer extra credit opportunities as needed. Final grades will be rounded to the nearest integer.

A	≥ 93%	C+	≥ 77%
A-	≥ 90%	C	≥ 73%
B+	≥ 87%	C-	≥ 70%
B	≥ 83%	D	≥ 60%
B-	≥ 80%	E	<60%

MAJOR COURSE ASSIGNMENTS

Discussion Posts:
Each week there will be a Carmen discussion board to mimic in-class discussions. These are due at the same time every week according to the course schedule. Access to the discussion board will end after that time and no late posts will be accepted, except in the case of documented medical or family emergency. I will prompt discussion on these boards with the first post, after which point students should engage in genuine conversation – engaging with my original post, replying to others' thoughts, posing your own questions, etc. This means **you must respond to a previous student's post within your own post in order to receive full points**, unless you are the first student to post within the board. You may agree with a previous student's point, but you must explain why and provide your own examples, rather than simply stating you agree. If you disagree with another student, explain why, but

do so respectfully and with evidence. Disrespectful comments will not be tolerated on these threads. Posts should be 100 - 200 words and be thoughtful, original (not just repeating the same point made by others), and based on class materials (lectures, readings) to receive full points. **All discussion posts will be due by 11:59 pm on Fridays unless otherwise specified.**

Academic integrity and collaboration: Your written assignments, including discussion posts, should be your own original work. You are encouraged to ask a trusted person to proofread your assignments before you turn them in but no one else should revise or rewrite your work.

Response Papers:
Response papers will be submitted in weeks **6**, **11,** and **13**. They are effectively take-home essay exams that should be approximately 2-3 pages in length. For each of these, you will be given a choice of questions based on the lectures and reading. You choose one question and answer it. More details will be provided in a study guide which I will distribute along with the first paper.

Response Paper Rewrite: All students have the opportunity to revise and resubmit **one** of their response papers to be regraded by the instructor. All submissions must be received by the instructor by **April 24th, 2023 at midnight**.

Final Paper:
Your final paper will be submitted at the end of week **14**. You can write this paper on ***any aspect of the history of technology***, including things which are not covered on the course. Your paper will be 10 pages in length.
You will submit an outline, complete with a reading list, by the beginning of week **11**.
Further instructions will be provided on Carmen. **Due MONDAY, April 24th 11:59 pm**
The submission window will close after this point and NO late exams will be accepted.
If you experience a technological issue with Carmen, the essay should instead be emailed to your grading instructor by the same due date and time.

Academic integrity and collaboration: Your written assignments should be your own original work. In formal assignments (such as the response papers and final paper), you should follow the *Chicago Manual of Style* to cite the ideas and words of your research sources. You are welcome to ask a trusted person to proofread your assignments before you turn them in, but no one else should revise or rewrite your work. "TurnItIn," the Carmen tool intended to help you prevent plagiarism, will be used on your submitted paper.

Late assignments:

Access to discussion posts end immediately after the due date and time. No late submissions will be accepted except in the case of a documented medical or family emergency. For written assignments (papers assigned for this course), **10% will be deducted for each day an assignment is late**, in addition to any point reductions for quality of work, except in the case of a documented medical or family emergency. "Day" will be defined by the **date** and not the time of day, so an assignment turned in at 6:00 am following the 11:59 pm due date would receive a 10% deduction even though a full 24

hours has not passed. **No written assignments will be accepted more than 96 hours after the due date, except in the case of documented medical or family emergency.**

A Note on Lectures:

Lecture material will be a large component of the weekly discussion posts and the final exam essay. Lectures will be composed of multiple short (~25 minute), pre-recorded PowerPoints with audio, presented in video format. We will also use some videos from YouTube and other Internet sources. International students who have trouble accessing any of these videos outside of the US should communicate these issues with their grading instructor so accommodations can be made.

Instructor feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-4357(HELP)** at any time if you have a technical problem.)

Grading and feedback: For large weekly assignments, you can generally expect feedback within **7 days**.

Email: I will reply to emails within **24 hours on days when class is in session at the university**. **Discussion board:** I will check and reply to messages in the discussion boards every **24 hours on school days**.

OTHER COURSE POLICIES

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style**: While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics.
- **Tone and civility**: Let us maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm does not always come across online.
- **Citing your sources**: When we have academic discussions, please cite your sources to back up what you say. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.
- **Backing up your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Academic integrity policy

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct **http://studentlife.osu.edu/csc/**.

If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the university's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- Committee on Academic Misconduct web page (go.osu.edu/coam)
- Ten Suggestions for Preserving Academic Integrity (go.osu.edu/ten-suggestions)

Student Services and Advising

University Student Services can be accessed through BuckeyeLink. More information is available here: https://contactbuckeyelink.osu.edu/

Advising resources for students are available here: http://advising.osu.edu

Copyright for instructional materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources. If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

Commitment to a diverse and inclusive learning environment

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Land Acknowledgement

We would like to acknowledge the land that The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. I/We want to honor the resiliency of these tribal nations and recognize the historical contexts that has and continues to affect the Indigenous peoples of this land.

More information on OSU's land acknowledgement can be found here:

https://mcc.osu.edu/about-us/land-acknowledgement

Your mental health

As a student you may experience a range of issues that can cause barriers to learn, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand resources are available at go.osu.edu/ccsondemand. You can reach an on-call counselor when CCS is closed at 614- 292-5766, and 24-hour emergency help is also available through the 24/7 National Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org. The Ohio State Wellness app is also a great resource available at go.osu.edu/wellnessapp.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting accommodations

The University strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Accessibility of course technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Canvas accessibility (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- CarmenZoom accessibility (go.osu.edu/zoom-accessibility)
- Collaborative course tools

COURSE SCHEDULE

Refer to the Carmen course for up-to-date assignment due dates.

Week	Dates	Topics, Readings, Assignments, Deadlines
1	1/9/2023– 1/13/2023	**Class Introductions, Basic Questions and Concepts** David Nye, "Can We Define Technology?" and "How Do Historians Understand Technology?" in Technology Matters: Questions to Live With (Cambridge, Mass: MIT Press, 2007), 1-15, 49-66. ***Week 1 discussion due Friday, January 13th, at 11:59 pm**
2	1/17 – 1/20	**Fire to Farming: Human Technology from Earliest Times to the Neolithic** Richard Wrangham, "The Cooking Hypothesis," in Catching Fire: How Cooking Made us Human (New York: Basic Books, 2009), 1-14.

Week	Dates	Topics, Readings, Assignments, Deadlines
		Henry Hodges, "The Spread of Farming and the Emergence of Embryonic Cities and of Writing (5000-3000 B.C.)," in Technology in the Ancient World (New York: Barnes and Noble, 1970), 53-90. ***Week 2 discussion due Friday, January 20th, at 11:59 pm**
3	**1/23 - 1/27**	**Technology in the Ancient World** Brian Campbell. Rivers and the Power of Ancient Rome (University of North Carolina Press, 2012), excerpts. ***Week 3 discussion due Friday, January 27th, at 11:59 pm**
4	**1/30- 2/3**	**Technology in the Medieval World** Arnold Pacey, "An Age of Asian Technology," and "Movements West," in *Technology Civilization* (Cambridge, Mass: MIT Press, 1990), 1-19, 38-57. Joseph and Frances Gies, "The Technology of the Commercial Revolution," in *Cathedral, Forge and Waterwheel: Technology and Invention in the Middle Ages* (New York: Harper Collins, 1994), 105-166. ****RESPONSE PAPER 1 HANDED OUT** ***Week 4 discussion due Friday, Feb 3rd, at 11:59 pm**
5	**2/6 – 2/10**	**The Renaissance and War (I) Military Revolution** Jonathon Sawday. Engines of the Imagination : Renaissance Culture and the Rise of the Machine (New York : Routledge, 2007), excerpts. Geoffrey Parker, "The Military Revolution Revisited," in The Military Revolution: Military Innovation and the Rise of the West, 1500-1800, 2nd ed. (Cambridge: Cambridge University Press, 1996), 6-44. ***Week 5 discussion due Friday, February 10th, at 11:59 pm**
6	**2/13-2/17**	**The Industrial Revolution (I) and the Railways** Lewis Mumford, "The Paleotechnic Phase," in *Technics and Civilization* (Orlando: Harvest, 1963), 151-211. Ben Marsden and Crosbie Smith, "Building Railway Empires: Promises in Space and Time," in *Engineering Empires: A Cultural History of Technology in Nineteenth-Century Britai* (New York: Palgrave MacMillan, 2005), 129-177. ****RESPONSE PAPER 1 HANDED IN** ***Week 6 discussion due Friday, February 17th, at 11:59 pm**

Week	Dates	Topics, Readings, Assignments, Deadlines
7	2/20-2/24	**The Industrial Revolution (II): Electricity, Systems, Flight** Vaclav Smil, "The Great Inheritance," in *Creating the Twentieth Century: Technical Innovations of 1867-1914 and their Lasting Impact* (Oxford: Oxford University Press, 2005), 3-33. ****RESPONSE PAPER 2 HANDED OUT** ***Week 7 discussion due Friday, February 24th, at 11:59 pm**
8	2/27-3/3	**Global Communication Networks** Claude S. Fisher, "The Telephone In America" in *America Calling: A Social History of the Telephone to 1940* Nicole Starosielski. *The Undersea Network* (Durham: Duke University Press, 2015), excerpts. ***Week 8 discussion due Friday, March 3rd at 11:59 pm**
9	3/6-3/10	**Gender and Technologies of Domesticity** Ruth Schwartz Cowan, "An Introduction: Housework and Its Tools," and "Household Technology and Household Work Between 1900 and 1940," in *More Work for Mother: The Ironies of Domestic Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983), 3-16, 151-191. ***Week 9 discussion due Friday, March 10th, at 11:59 pm**
10	3/13-3/17	**SPRING BREAK – No Class Assignments**
10	3/20-3/24	**Petroleum and the Rise of Car Culture and the History of Alternative Energies** James Flink, "The Automotive Idea," "Fordism," and "Diffusion," in *The Automobile Age* (Cambridge, Mass: MIT Press, 1988), 1-14, 40-55, 129-157. Gijs Mom, "Substituting for the Horse, Choosing Propulsion," and "Alternative Technologies and the History of Tomorrow's Car," in *The Electric Vehicle: Technology and Expectations in the Automobile Age* (Baltimore: Johns Hopkins University Press, 2004), 1-13, 275-302. *****RESPONSE PAPER 2 HANDED IN** ***Week 10 discussion due Friday, March 24th, at 11:59 pm**

Week	Dates	Topics, Readings, Assignments, Deadlines
11	3/27-3/31	**War (II): Technology and European Expansion, c.1800-1900 and War (III): The Twentieth Century** Daniel Headrick, "Technology, Imperialism and History,""The Suez Canal," and "The Submarine Cable," in *Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (Oxford: Oxford University Press, 1981), 3-15, 150-164. Thomas J. Misa, "The Means of Destruction, 1936-1990," in *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present* (Baltimore: Johns Hopkins University Press, 2004), 190-225. ****SUBMIT FINAL PAPER OUTLINE** ****RESPONSE PAPER 3 HANDED OUT** *** Week 11 discussion due Friday, March 31st, at 11:59 pm**
12	4/3-4/7	**Information Systems, Cybernetics, and the Cold War** Thomas Hughes, "Technology as Controls, Systems and Information," in Hughes, *Human-Built World: How to Think about Technology and Culture* (Chicago: Chicago University Press, 2004), 77-110. Ronald Kline, "Where are the Cyborgs in Cybernetics?" Social Studies of Science Vol. No. 3. *** Week 12 discussion due Friday, April 7th, at 11:59 pm**
13	4/10-4/14	**Technosphere and Anthropocene: What Have Humans Built?** Will Steffen, Paul Crutzen, and John McNeil. "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?" *Ambio*, 36:8, December 2007. *****RESPONSE PAPER 3 HANDED IN** *** Week 13 discussion due Friday, April 14th, at 11:59 pm**
14	4/17-4/21	**No Class Lectures – Work on Those Essays!** *****SUBMIT FINAL PAPER DUE MONDAY, April 24th 11:59 pm**

HISTORY 2701: HISTORY OF TECHNOLOGY
Semester/Year
Room/Building
Date/Time

Instructor: Chris Otter
Office: Dulles Hall 263
Email: otter.4@osu.edu
Office Hours: XXXX

Course Description and Goals

Today, the environment we inhabit on a daily basis is primarily technological in nature. This course provides an in-depth history of technology from the earliest hominin stone tools and the taming of fire through to the vast technological environment that envelops and sustains us. The course is broken into five modules:

The class is organized into 5 modules:

1. The deep history of technology from 3.3 million years ago to the seventeenth century
2. The industrial revolution and large technological systems
3. Technologies of everyday life
4. The history of energy and its alternative forms
5. Computing, communication, and the technosphere

This course fulfills the general requirements and expected learning outcomes for GE themes:

GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

ELO 1.1: Engage in critical and logical thinking about the topic or idea of the theme.

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1: Identify, describe, and synthesize approaches or experiences as they apply to the theme.

ELO 2.2: Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

This course fulfills the specific requirements for the Lived Environments GE theme:

GOAL 1: Successful students will explore a range of perspectives on the interactions and impacts between humans and one or more types of environment (e.g. agricultural, built, cultural, economic, intellectual, natural) in which humans live.

ELO 1.1 Engage with the complexity and uncertainty of human-environment interactions.

ELO 1.2 Describe examples of human interaction with and impact on environmental change and transformation over time and across space.

GOAL 2: Successful students will analyze a variety of perceptions, representations and/or discourses about environments and humans within them.

ELO 2.1 Analyze how humans' interactions with their environments shape or have shaped attitudes, beliefs, values and behaviors.

ELO 2.2 Describe how humans perceive and represent the environments with which they interact.

ELO 2.3 Analyze and critique conventions, theories, and ideologies that influence discourses around environments.

The following tables explain how this course will satisfy the GE theme: Lived Environments:

Themes: General		
Goals	**Expected Learning Outcomes**	**Notes**
GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.	**Successful students are able to …** **1.1** Engage in critical and logical thinking about the topic or idea of the theme.	This ELO will be satisfied by the first module and first response paper, which will focus particularly on questions of determinism v social construction.
	1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme.	This ELO will be addressed in all response papers.

	2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.	This ELO is fulfilled in the final module, discussion, and written exercise. This module allows students to incorporate both the intellectual approaches they have learned in the class and their own experience to analysis of digital media and/or the technosphere.
GOAL 2: GOAL: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.	**2.2** Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.	This ELO is fulfilled in two ways. First, in a class discussion and questionnaire in week 10, in which students reflect on what they have learned so far. Second, in the final module, in which students reflect and assess their own relationship to vital technologies in their life today. Students will thus be better equipped to reflect on the role of technology in their lives.

Theme: Lived Environments:		
Goals	**Expected Learning Outcomes**	**Related Course Content ELOs**
GOAL 1: Successful students will explore a range of perspectives on the interactions and impacts between humans and one or more types of environment (e.g. agricultural, built, cultural, economic, intellectual, natural) in which humans live.	**Successful students are able to …** **1.1** Engage with the complexity and uncertainty of human-environment interactions.	This ELO will be tackled during the second module and response paper. Here, students are introduced to the concept of "large technological systems" and understand their complexity and uncertainty, exploring such ideas as risk, accidents, and unintended consequences.
	1.2 Describe examples of human interaction with and impact on environmental change and transformation over time and across space.	This ELO will be particularly addressed during the fourth module, in which students read about, discuss, and assess the manifold effects of the shift to a fossil-fuel economy.
GOAL 2: Successful students will analyze a variety of perceptions, representations and/or discourses about environments and humans within them.	**2.1** Analyze how humans' interactions with their environments shape or have shaped attitudes, beliefs, values and behaviors.	This ELO is particularly addressed in modules 2 and 5, in which the major theme of extractionism is introduced and analyzed.
	2.2 Describe how humans perceive and represent the environments with which they interact.	This ELO is addressed in module 2. Students will explore some of the intellectual, literary, and artistic consequences of the shift to steam power, in particular by exploring phenomena such as rapid urbanization, industrial pollution, and travel by railroad.
	2.3 Analyze and critique conventions, theories, and ideologies that influence discourses around environments.	This ELO is addressed in module 3, when students learn about the relationships between race, gender and technology.

Course Readings

There is no required textbook for this course. All readings will be posted on Carmen.

Course Papers and Assignments

1. **Attendance and Class Participation (10%)**. Students are expected to attend every class. Each lecture will include periods where the material is opened up to discussion and there will be some classes which are discussion-only. The best learning takes place when students participate, so students will receive credit for comments, observations, answers and questions.

2. **Module 1 Response Paper (10%)**. In week 3, students are given their first response paper. They are given a series of questions on technology up to around 1600. They

choose one and answer it. The paper must refer to lectures and class readings. It will be 4-5 pages long and correctly formatted.

3. **Module 2 Response Paper (20%).** In week 6, students receive their second response paper on industrialization and large technological systems.

4. **Module 3 Response Paper (20%)**. In week 9, students receive their third response paper on technology and everyday life.

5. **Module 4 Response Paper (20%)**. In week 12, students receive their fourth response paper on energy and technological choice.

6. **Module 5 Response Paper (20%)**. In week 14, students receive their final response paper on technology past, present and future.

Attendance Policy

Students are expected to attend every lecture. If you can't make a lecture, please contact me in advance with a valid excuse. More than 2 unexcused absences will result in a grade of 0 for attendance and class participation.

Grading Scale

A (93-100), A- (90-92), B+ (87-89), B (82-86), B- (80-82), C+ (77-79), C (73-76), C-(70-72), D+ (67-69), D (63-66), E (below 63).

Grades will be rounded up. For example, a 92.3 will become a 93.

Statement on Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

Statement on Disability

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as

soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Statement on Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Statement on Violence and Sexual Harassment

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Statement on Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Class Schedule and Readings

MODULE 1

THE DEEP HISTORY OF TECHNOLOGY

Week 1

Basic Questions and Concepts

David Nye, "Does Technology Control Us?" and "How Do Historians Understand Technology?" in *Technology Matters: Questions to Live With* (Cambridge, Mass: MIT Press, 2007), 17-32, 49-66.

Handaxes, Fire and Farming: Human Technology from Earliest Times to the Neolithic

Richard Wrangham, "The Cooking Hypothesis," in *Catching Fire: How Cooking Made us Human* (New York: Basic Books, 2009), 1-14.
Henry Hodges, "The Spread of Farming and the Emergence of Embryonic Cities and of Writing (5000-3000 B.C.)," in *Technology in the Ancient World* (New York: Barnes and Noble, 1970), 53-90.

Week 2

Technology in the Ancient Near East and Mediterranean

Steven Mithen, "A Watery Paradise in Petra," and "Building Rivers and Taking Baths," in *Thirst: Water and Power in the Ancient World* (London: Phoenix, 2013), 104-149.

Technology in Medieval Asia

Arnold Pacey, "An Age of Asian Technology," and "Movements West," in *Technology in World Civilization* (Cambridge, Mass: MIT Press, 1990), 1-19, 38-57.

Week 3

Technology in Medieval Europe

Lynn White, Jr., "Stirrup, Mounted Shock Combat, Feudalism and Chivalry," in *Medieval Technology and Social Change* (Oxford: Oxford University Press, 1962), 1-38.

The Printing Press, the Scientific Revolution, and the Military Revolution

Thomas J. Misa, "Technologies of the Court, 1450-1600," in *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present* (Baltimore: Johns Hopkins University Press, 2004), 1-32.

Geoffrey Parker, "The Military Revolution Revisited," in *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, 2nd ed. (Cambridge: Cambridge University Press, 1996), 6-44.

RESPONSE PAPER ONE HANDED OUT

MODULE 2
INDUSTRIALIZATION AND LARGE TECHNOLOGICAL SYSTEMS

<u>Week 4</u>

The First Industrial Revolution: Coal, Iron, and Mechanization

Lewis Mumford, "The Paleotechnic Phase," in Technics and Civilisation (Orlando: Harvest, 1963), 151-211.

Large Technological Systems: The Steam Railway

Ben Marsden and Crosbie Smith, "Building Railway Empires: Promises in Space and Time," in *Engineering Empires: A Cultural History of Technology in Nineteenth-Century Britain* (New York: Palgrave MacMillan, 2005), 129-177.

RESPONSE PAPER ONE HANDED IN

<u>Week 5</u>

The Second Industrial Revolution: Large Technological Systems, Electricity, and Flight

Vaclav Smil, "The Great Inheritance," in Creating the Twentieth Century: Technical Innovations of 1867-1914 and their Lasting Impact (Oxford: Oxford University Press, 2005), 3-33.

Material Transition: Plastics, Synthetics, Light Metals

Smil, "New Materials and New Syntheses," in *Creating the Twentieth Century*, 153-198.

<u>Week 6</u>

Risk, Disaster and Large Technological Systems

Charles Perrow, "Introduction," and "Aircraft and Airways," in *Normal Accidents: Living With High-Risk Technologies* (New York: Basic Books, 1984), 3-14, 123-169.

War in the Age of Large Technological Systems

> Thomas J. Misa, "The Means of Destruction, 1936-1990," in *Leonardo to the Internet: Technology and Culture from the Renaissance to the Present* (Baltimore: Johns Hopkins University Press, 2004), 190-225.

RESPONSE PAPER TWO HANDED OUT

MODULE 3
TECHNOLOGY AND EVERYDAY LIFE

<u>Week 7</u>

Technology and Gender (1): Domestic Technologies

> Ruth Schwartz Cowan, "An Introduction: Housework and Its Tools," and "Household Technology and Household Work Between 1900 and 1940," in *More Work for Mother: The Ironies of Domestic Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983), 3-16, 151-191.

Technology and Gender (2): Women and Computing

> Marie Hicks, "Data Processing in Peacetime: Institutionalizing a Feminized Machine Underclass, 1946-1955," in *Programmed Inequality: How Britain Discarded Women Technologists and Lost its Edge in Computing* (Cambridge, Mass: MIT Press, 2017), 59-98.

RESPONSE PAPER TWO HANDED IN

<u>Week 8</u>

Technology, Race, and Imperialism

> Daniel Headrick, "Technology, Imperialism and History," "The Suez Canal," and "The Submarine Cable," in *Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (Oxford: Oxford University Press, 1981), 3-15, 150-164.

Biotechnology and Reproductive Technologies

> Elaine Tyler May, "Mothers of Invention," and "The Population Bomb," in *America and the Pill: A History of Promise, Peril and Liberation* (New York: Basic Books, 2011), 11-56.

<u>Week 9</u>

Class Discussion on Sex, Gender, Race and Technology

RESPONSE PAPER THREE HANDED OUT

No class: work on response paper

<u>Week 10</u>

Class Discussion on Where We Have Come So Far, Plus Self-Reflection Questionnaire

RESPONSE PAPER THREE HANDED IN

MODULE 4
OIL, CARS, AND ALTERNATIVE ENERGY

Petroleum and the Rise of Car Culture

> James Flink, "The Automotive Idea," "Fordism," and "Diffusion," in *The Automobile Age* (Cambridge, Mass: MIT Press, 1988), 1-14, 40-55, 129-157.

<u>Week 11</u>

The History of the Electric Car

> Gijs Mom, "Substituting for the Horse, Choosing Propulsion," and "Alternative Technologies and the History of Tomorrow's Car," in *The Electric Vehicle: Technology and Expectations in the Automobile Age* (Baltimore: Johns Hopkins University Press, 2004), 1-13, 275-302.

The History of Alternative Energies: Solar, Wind, Geothermal, Nuclear

> Alexis Madrigal, "The Wind and the West," "The Solar Home of the 1950s," and "The Solar Energy Research Institute," *Powering the Dream: The History and Promise of Green Technology*, 79-98, 164-207.

<u>Week 12</u>

Class Debate: How and Why Did Western and Global Society End Up Running on Fossil Fuels?

RESPONSE PAPER 4 HANDED OUT

No Class: Work on 4th Response Paper

<u>Week 13</u>

MODULE 5
COMPUTATION, COMMUNICATION AND THE TECHNOSPHERE

Calculation and Computing from the Abacus to Today

Thomas Hughes, "Technology as Controls, Systems and Information," in Hughes, *Human-Built World: How to Think about Technology and Culture* (Chicago: Chicago University Press, 2004), 77-110.

Communication from the Beacon to the Internet
Claude S. Fisher, "Educating the Public," in *America Calling: A Social History of the Telephone to 1940* (Berkeley: University of California Press, 1994), 60-86.
Jon Agar, "Save the Ether," "The Nordic Way," and "Cars, Phones and Crime," in *Constant Touch: A Global History of the Mobile Phone* (London: Totem Books, 2005), 16-27, 44-51, 129-142.

RESPONSE PAPER 4 HANDED IN

<u>Week 14</u>

Digital Media in Historical Context

Sherry Turkle, "The Flight from Conversation," in *Reclaiming Conversation: The Power of Talk in a Digital Age* (New York: Penguin Books, 2015), 19-57.
Adam Alter, "The Rise of Behavioral Addiction," in *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked* (New York: Penguin, 2017), 13-45.

The Technosphere: Planetary Systems and Technology Out-of-Control?

Jan Zalasiewicz, et al. "Scale and Diversity of the Physical Technosphere: A Geological Perspective," *The Anthropocene Review*, 4:1, 2017, 9-22.

RESPONSE PAPER 5 HANDED OUT

<u>Week 15</u>

Class Discussion on Digital Media and the Technosphere in Deep Historical Context

No Class – work on 5th response paper

RESPONSE PAPER 5 HANDED IN

Distance Approval Cover Sheet
For Permanent DL/DH Approval | College of Arts and Sciences

Course Number and Title: History 2701: History of Technology

Carmen Use

When building your course, we recommend using the [ASC Distance Learning Course Template](#) for CarmenCanvas. For more on use of [Carmen: Common Sense Best Practices](#).

☑ A Carmen site will be created for the course, including a syllabus and gradebook at minimum.

If no, why not?

Syllabus

☑ Proposed syllabus uses the ASC distance learning syllabus template, includes boilerplate language where required, as well as a clear description of the technical and academic support services offered, and how learners can obtain them.

☑ Syllabus is consistent and is easy to understand from the student perspective.

☑ Syllabus includes a schedule with dates and/or a description of what constitutes the beginning an end of a week or module.

☑ If there are required synchronous sessions, the syllabus clearly states when they will happen and how to access them.

Additional comments (optional):

Instructor Presence

For more on instructor presence: [About Online Instructor Presence](#).

Students should have opportunities for regular and substantive academic interactions with the course instructor. Some ways to achieve this objective:

☑ Regular instructor communications with the class via announcements or weekly check-ins.

☑ Instructional content, such as video, audio, or interactive lessons, that is visibly created or mediated by the instructor.

THE OHIO STATE UNIVERSITY

☑ Regular participation in class discussion, such as in Carmen discussions or synchronous sessions.

☑ Regular opportunities for students to receive personal instructor feedback on assignments.

Please comment on this dimension of the proposed course (or select/explain methods above):

Class updates will be posted in Carmen�’s Announcements weekly.

Students participate in discussion forums over the course of the term, where they are required to not only make an original post but also to make two responses to their peers to facilitate dialogue about the course content.

The instructor not only provides detailed feedback on essays, but is available to read a paper's thesis and conclusion not later than 48 hours before the due date

Delivery Well-Suited to DL/DH Environment

Technology questions adapted from the Quality Matters rubric. For information about Ohio State learning technologies: Toolsets.

☑ The tools used in the course support the learning outcomes and competencies.

☑ Course tools promote learner engagement and active learning.

☑ Technologies required in the course are current and readily obtainable.

☑ Links are provided to privacy policies for all external tools required in the course.

Additional technology comments (optional):

No special technologies are required for this course but the course intentionally uses a wide variety of media (lectures videos, documentaries, podcasts) that are readily obtainable with direct URLs.

Which components of this course are planned for synchronous delivery and which for asynchronous delivery? (For DH, address what is planned for in-person meetings as well.)

This is an asynchronous course. Students will watch instructor-provided videos and other multimedia provided through Carmen in weekly modules. All synchronous content, such as office hours, is optional and are solely for the purposes of review/reinforcement for students who need extra direct support from the instructor.

If you believe further explanation would be helpful, please comment on how course activities have been adjusted for distance learning (optional):

THE OHIO STATE UNIVERSITY

Workload Estimation

For more information about calculating online instruction time: ODEE Credit Hour Estimation.

☑ Course credit hours align with estimated average weekly time to complete the course successfully.

☑ Course includes direct (equivalent of "in-class") and indirect (equivalent of "out-of-class)" instruction at a ratio of about 1:2.

Provide a brief outline of a typical course week, categorizing course activities and estimating the approximate time to complete them or participate:

Direct instruction includes lecture videos (2 hours), additional media (15 minutes), and weekly discussions (45 minutes)

Indirect instruction includes: Completing the course readings (2 hours), review/studying slides (1 hour), working on essays or other major assignments (2 hours)

☑ In the case of course delivery change requests, the course demonstrates comparable rigor in meeting course learning outcomes.

Accessibility

For more information or a further conversation, contact the accessibility coordinator for the College of Arts and Sciences. For tools and training on accessibility: Digital Accessibility Services.

☑ Instructor(s) teaching the course will have taken Digital Accessibility training (starting in 2022) and will ensure all course materials and activities meet requirements for diverse learners, including alternate means of accessing course materials when appropriate.

☑ Information is provided about the accessibility of all technologies required in the course. All third-party tools (tools without campus-wide license agreements) have their accessibility statements included.

Description of any anticipated accommodation requests and how they have been/will be addressed.

I have taken and will continue to take the Digital Accessibility training and will continue to ensure that activities provide opportunities to be successful to a diverse set of learners, including, as in the case above, of providing alternative means of accessing course materials when appropriate.

THE OHIO STATE UNIVERSITY

Additional comments (optional):

Academic Integrity

For more information: Academic Integrity.

☑ The course syllabus includes online-specific policies about academic integrity, including specific parameters for each major assignment:

☑ Assignments are designed to deter cheating and plagiarism and/or course technologies such as online proctoring or plagiarism check or other strategies are in place to deter cheating.

Additional comments (optional):

Frequent, Varied Assignments/Assessments

For more information: *Designing Assessments for Students.*

Student success in online courses is maximized when there are frequent, varied learning activities. Possible approaches:

☑ Opportunities for students to receive course information through a variety of different sources, including indirect sources, such as textbooks and lectures, and direct sources, such as scholarly resources and field observation.

☑ Variety of assignment formats to provide students with multiple means of demonstrating learning.

☑ Opportunities for students to apply course knowledge and skills to authentic, real-world tasks in assignments.

THE OHIO STATE UNIVERSITY

Comment briefly on the frequency and variety of assignment types and assessment approaches used in this course (or select methods above):

Although this is a history course, the material and grading scheme should be accessible to students across multiple disciplines given the wide-reaching scope of the technology history field. The course offers interdisciplinary/synergistic assignments that allow multiple talents and personalities to shine while also fostering skills vital to historians as well as general professionals.

Community Building

For more information: Student Interaction Online.

Students engage more fully in courses when they have an opportunity to interact with their peers and feel they are part of a community of learners. Possible approaches:

- ✔ Opportunities for students to interact academically with classmates through regular class discussion or group assignments.

- ✔ Opportunities for students to interact socially with classmates, such as through video conference sessions or a course Q&A forum.

- ✔ Attention is paid to other ways to minimize transactional distance (psychological and communicative gaps between students and their peers, instructor, course content, and institution).

Please comment on this dimension of the proposed course (or select methods above):

Students participate in weekly discussion forums over the course of the semester where they are required to not only make an original post but also to make responses to their peers to facilitate dialogue about the course content.

Transparency and Metacognitive Explanations

For more information: *Supporting Student Learning.*

Students have successful, meaningful experiences when they understand how the components of a course connect together, when they have guidance on how to study, and when they are encouraged to take ownership of their learning. Possible approaches:

- ✔ Instructor explanations about the learning goals and overall design or organization of the course.

- ✔ Context or rationale to explain the purpose and relevance of major tasks and assignments.

THE OHIO STATE UNIVERSITY

✔ Guidance or resources for ancillary skills necessary to complete assignments, such as conducting library research or using technology tools.

✔ Opportunities for students to take ownership or leadership in their learning, such as by choosing topics of interest for an assignment or leading a group discussion or meeting.

✔ Opportunities for students to reflect on their learning process, including their goals, study strategies, and progress.

✔ Opportunities for students to provide feedback on the course.

Please comment on this dimension of the proposed course (or select methods above):

Course learning objectives are laid out early in the syllabus to demonstrate how particular aspects of the course (both topics and assignments) serve to advance the particular learning objectives of the course.

The instructor has posted to Carmen a writing guide during the first week of class to help you with papers as well as other resources available on campus to assist students to succeed in the course (e.g., the use of the Writing Center).

The final paper is designed for students to explore more deeply a subject of personal interest to them to allow them to take ownership of their learning in the course.

Additional Considerations

Comment on any other aspects of the online delivery not addressed above (optional):

Syllabus and cover sheet reviewed by *Jeremie Smith* on 01/27/2023

Reviewer Comments:

I have three small recommendations that I think will improve the course design, add clarity to the syllabus, and support a successful review by the faculty curriculum committee:
- The syllabus is consistent about this being a full-term course, but page 3 of the DL Cover Sheet suggests this is a 6-week offering. Though the dept need not provide examples of syllabi for all possible lengths of offering, I recommend making the Cover Sheet consistent with the DL Cover Sheet you submit to the faculty panels.

- The instructor delineates the estimated workload in the Cover Sheet. I recommend adding some of this to the "How This Online Course Works" section of the syllabus to provide students a better idea of the weekly rhythm of the course.

- The faculty panels may want to see more information about student expectations for the Response Papers. I recommend including more information about these assignments in the syllabus.

Additional resources and examples can be found on ASC's Office of Distance Education website.

THE OHIO STATE UNIVERSITY