



Science and Technology in World History

Dr. Elizabeth Green Musselman

History 16-093-01 & 02 / Environmental Studies 49-093-01 & 02 | Spring 2008

additional class materials and updated copies of this syllabus available on Segue:

<https://segue.southwestern.edu/sites/HIS1609301-w08>

This course explores how humans globally have understood and manipulated nature from prehistory to the present. We will investigate questions like: What needs and desires have humans fulfilled through understanding and manipulating nature? What has led different cultures to perceive the natural world in such divergent ways? Is science a uniquely European invention, or have other cultures independently developed scientific traditions? By what standards should we judge the value of natural knowledge systems that bear little resemblance to modern science? Has technological sophistication historically required scientific sophistication, and vice versa?

Depending on which catalog your degree plan follows, successful completion of this course fulfills the

- Other Cultures and Civilizations POK *or*
- one of the two Humanities Division Area Two requirements and the Intercultural Perspectives requirement.

History majors and minors can take this course to fulfill the Group A world history requirement.

Course goals:

Students who work diligently in this course will learn:

- the large-scale continuities and changes in world history, as viewed through the specific lens of science and technology;
- to understand the development of science and technology not just as a series of technical developments but also as the product of specific cultural and environmental settings;
- to appreciate African, Asian, Middle Eastern, Native American, and Pacific technologies and ideas about nature both as worthy of historical study in their own right, as well as contributory to our contemporary scientific practices and technologies;
- how to read historical texts not just for information, but also to evaluate existing and construct original arguments; and
- the basic tools for doing original historical research.

contact information

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I generally only respond to e-mail messages between the hours of 9 a.m. and 5 p.m., Monday through Friday. See me during my office hours for issues that are better discussed face-to-face.

office telephone: 863.1595

office hours: Mon. 2-3 p.m., Thurs. 12-2 p.m., or by appointment

schedule

Any readings that are followed by “(pdf)” can be found on password-protected electronic reserve at: <https://segue.southwestern.edu/sites/HIS1609301-w08>

date	topic	prepare
unit 1: prehistory (ca. 10000–3500 BCE)		
14 Jan (M)	Introductions <i>We will discuss our learning goals, the syllabus, and what’s exciting about the world history of science and technology.</i>	---
16 Jan (W)	Learning to see nature through different eyes	<ul style="list-style-type: none">• Aveni, pp. vii-ix, 1-46• <i>question to think about as you read:</i> What did you find unexpected about this reading? How is it like or unlike what you expected to read in a course on the world history of science?
21 Jan (M)	MLK Day – class does not meet	---
23 Jan (W)	Cosmologies of the earliest humans	<ul style="list-style-type: none">• Aveni, pp. 46-91• <i>question to think about as you read:</i> Choose and explain an example from chapter 2 or 3 that you believe best helps us to avoid falling “irretrievably deep into the chasm of cultural self-centeredness” when evaluating the early history of science (viii).

28 Jan (M)	What prehistoric humans needed to know about plants and animals	<ul style="list-style-type: none"> • Aveni, pp. 93-146, 177-193 • <i>question to think about as you read:</i> What do you think the best explanation is as to <i>why</i> ancient Britons and Mayans saw the heavens so differently than modern science sees them?
30 Jan (W)	Early human technologies	<ul style="list-style-type: none"> • Gamble, “A Prehistory of Human Technology” (pdf) <i>Remember to print a copy of all pdf readings to mark up as you read and to bring with you to class.</i> • <i>question to think about as you read:</i> In the library’s collection, find a description of an interesting technological innovation that predates 3000 BCE. Your description must come from the library’s collection (books or journals, printed or full-text/on-line), not the internet. Bring a copy of the description with you to class. Be prepared to describe in class what your research has revealed about this technology and its importance to that culture. Also be prepared to discuss how Gamble’s article helps you better understand the specific technological case you focused on. A few research tips: (1) try using <i>archaeology</i> along with <i>technology</i> as search terms; also try <i>Paleolithic</i> and <i>Neolithic</i> as well as the more generic <i>prehistory</i> and <i>prehistoric</i>; (2) rather than flail around with Academic Search Premier, which can be very difficult to use when faced with specific research questions, instead try just going to the book stacks at the library and browsing through the sections on archaeology, especially call number ranges 913 and 930, or on the history of technology, call number range 609.
unit 2: classical societies (ca. 3500 BCE–500 CE)		
4 Feb (M)	What early settled societies needed from nature	<ul style="list-style-type: none"> • Lloyd, pp. 1-20 <i>(Lloyd’s book is denser reading than Aveni’s, so you should allot more time for this reading than you would have for 20 pages of Aveni’s book.)</i>
6 Feb (W)	Prediction	<ul style="list-style-type: none"> • Lloyd, pp. 21-43 • Aveni, pp. 147-176

		<ul style="list-style-type: none"> • <i>questions to think about as you read:</i> Why does Lloyd make his subject the history of <i>prediction</i> instead of the history of <i>science</i>? How does this emphasis on prediction help us understand Aveni's approach to the Inca ceques?
11 Feb (M)	Technologies and the language of natural knowledge	<ul style="list-style-type: none"> • Lloyd, pp. 69-125 • <i>question to think about as you read:</i> Historians have traditionally credited the Greeks with inventing philosophy, abstract knowledge, knowledge for its own sake. This traditional historiography (or approach to history) says that by contrast, other societies at that time (like the Chinese) may have devised admirable practical knowledge and technology but not pure learning. How does Lloyd challenge this perspective?
13 Feb (W)	Numbers	<ul style="list-style-type: none"> • Lloyd, pp. 44-68 • <i>question to think about as you read:</i> What were the ways that numbers mattered to the classical Greeks and Chinese, and how does that compare to what you know about modern mathematics?
18 Feb (M)	Where natural knowledge gets made	<ul style="list-style-type: none"> • Lloyd, pp. 126-147 • <i>question to think about as you read:</i> Using only books and articles in SU's collection (on-line, full-text articles OK), find an article or book chapter that describes a natural phenomenon (e.g., weather, planetary motion, animal behavior) that the ancient Chinese tried to explain. (The time period you're looking for is anywhere between 1500 BCE and 500 CE. The dynasties during this period were the Shang, the Zhou, and the Han.) Bring a copy of your book chapter or article to class with you. Be prepared to describe in class both how the ancient Chinese thought about this natural phenomenon and how well your article or book chapter follows Lloyd's example of culturally sensitive history of science.
unit 3: postclassical societies (ca. 500–1500 CE)		
20 Feb (W)	Introduction to the Scientific Revolution question and	<ul style="list-style-type: none"> • Lindberg, "The Medieval Church Encounters the Classical Tradition" (pdf)

	postclassical natural knowledge	<ul style="list-style-type: none"> • <i>question to think about as you read:</i> How was medieval European natural philosophy like and unlike Greek thinking about nature?
25 Feb (M)	Midterm exam due – class does not meet	<ul style="list-style-type: none"> • due: midterm take-home exam in my office (MB 216) by 11 am • exam questions available on Segue on 18 Feb.
27 Feb (W)	Arabic science and the Mediterranean network	<ul style="list-style-type: none"> • Huff, “Arabic Science & the Islamic World” (pdf) • Saliba, “Islamic Scientific Tradition... I” (pdf) • <i>question to think about as you read:</i> Huff and Saliba have very different views of about the origins and fate of science in the postclassical Islamic world. What seems to be the basis for their deep disagreement on these questions?
3 Mar (M)	Institutional and legal changes in Europe	<ul style="list-style-type: none"> • Saliba, “Islamic Scientific Tradition... II” (pdf) • <i>question to think about as you read:</i> TBA
5 Mar (W)	Science and civilization in China	<ul style="list-style-type: none"> • Bray, “Technics and Civilization in Late Imperial China” (pdf) • <i>question to think about as you read:</i> Think of an example from our own culture of a technology that does not meet the “standard view” of technology (as described on pp. 11-12) but does meet Bray’s expanded definition. What are the implications of including your artifact within the definition of technology?
10 Mar (M)	Why didn’t the Scientific Revolution happen in...?	<ul style="list-style-type: none"> • Sivin, “Why the Scientific Revolution Did Not Take Place in China – Or Didn’t It?” (pdf) • <i>question to think about as you read:</i> Choose Huff, Saliba, or Bray, and be prepared to discuss to what extent and how that author agrees with the approach laid out in Sivin’s article for today.
unit 4: the emerging world system (ca. 1500-1800 CE)		
12 Mar (W)	How global trade changed the world history of science	<ul style="list-style-type: none"> • Carney, “Landscapes of Technology Transfer” (pdf) • <i>question to think about as you read:</i> TBA

17-19 Mar	Spring break – class does not meet	---
24 Mar (M)	Voyages of exploration, 1500-1700	<ul style="list-style-type: none"> • Cañizares-Esguerra, “Iberian Colonial Science” (pdf) • Chaplin, “Technology vs. Idolatry?” (pdf) • <i>question to think about as you read:</i> TBA
26 Mar (W)	Voyages of exploration in the 18 th century	<ul style="list-style-type: none"> • Neill, “Buccaneer Ethnography” (pdf) • Schiebinger, “Feminist History of Colonial Science” (pdf) • <i>question to think about as you read:</i> Schiebinger says that eighteenth-century botany - and we can extend this to science generally – “was a matter of state, important strategically for emerging nation states vying for land and resources” (236). How did state interests shape the science produced by eighteenth-century European expeditions, as described in these two articles?
31 Mar (M)	Science, savagery, and civilization	<ul style="list-style-type: none"> • Adas, “The Ascendancy of Science” (pdf) • Du Halde, “Teaching Science to the Manchu Emperor” (pdf) • <i>question to think about as you read:</i> In the library, research some of the context for the du Halde document above. It will help you to know that du Halde (1674-1743) was a French Jesuit historian who wrote a compendium of Chinese culture based on other Jesuit missionaries' reports. What can you learn about du Halde himself, the Jesuits and their scientific pursuits in Europe and China, and/or the Manchu court's scientific interests that can help you better understand the document above? (You do not need to explore all of these elements of this document's context. Just choose one.) Be prepared to summarize your research findings and explain how they help you to contextualize the du Halde excerpt. Research tip: check Adas' footnotes for sources that might be useful. Bring a copy of your research materials, or at least a full reference to the source(s) you used.

2 Apr (W)	Class does not meet – professor presenting at a conference on Native American and South African historical interactions with their environments	---
7 Apr (M)	Creole science	<ul style="list-style-type: none"> • McCook, “Building Creole Science” (pdf) • <i>question to think about as you read:</i> TBA
9 Apr (W)	Industrialization	<ul style="list-style-type: none"> • Elman, “The Rise of Imperial Chinese Manufacturing and Trade” (pdf) • Bose, “Science and Technology in India” (pdf) • <i>question to think about as you read:</i> TBA
14 Apr (M)	The high age of European imperialism	<ul style="list-style-type: none"> • Grove, “The Origins of Western Environmentalism” (pdf) • Headrick, “Botany, Chemistry, and Tropical Development” (pdf) • <i>question to think about as you read:</i> Whereas Grove emphasizes colonial science’s crucial role in birthing modern environmentalism, Headrick stresses science’s part in degrading colonial environments and economies. How can we make sense of the apparent disagreement between these two arguments?
16 Apr (W)	Adapting western science and technology in the late- and post-colonial period	<ul style="list-style-type: none"> • Leslie and Kargon, “Exporting MIT” (pdf) • <i>question to think about as you read:</i> TBA
21 Apr (M)	Ethnoscience	<ul style="list-style-type: none"> • Ascher, “Models and Maps” (pdf) • Coombs, “Hard as Pi” (pdf) • <i>question to think about as you read:</i> In the library, find another ethnoscientific study (e.g., ethnoastronomy, ethnobotany, ethnomathematics), using only scholarly sources from the physical collection or the full-text journal collection in the library. (An ethnoscientific study considers the nonscientific knowledge and beliefs about nature of - typically - a non-Western culture.) Be prepared to describe the methods the author used (how did they

		<p>collect their information? what sources did they use? what difficulties did they encounter?) and one of his/her most interesting findings. Also be prepared to evaluate the value and merit of such research, in light of what you have read in Ascher and Coombs.</p> <p>Bring a copy of your research materials, or at least a full reference to the source(s) you used.</p>
26 Apr (W)	Class does not meet – reading day	<ul style="list-style-type: none"> begin reading Edgerton, <i>Shock of the Old</i>
28 Apr (M)	Technology and modern global history	<ul style="list-style-type: none"> continue reading Edgerton, <i>Shock of the Old</i> question to think about as you read: TBA
30 Apr (W)	Technology and modern global history (continued); course wrap-up	<ul style="list-style-type: none"> finish Edgerton, <i>Shock of the Old</i> question to think about as you read: TBA
5 May (M)	Final exam due	<ul style="list-style-type: none"> Take-home final exam due in Dr. GM’s office (MB 216) by 2 p.m. exam questions available on Segue on 28 April

assignments

1. IN-CLASS WRITING (40% OF FINAL GRADE)

You will notice that on most days in the schedule, there is a question that I have asked you to think about as you read that day’s texts. On unannounced days, I will ask you to spend the first 15 minutes of class time writing your response to that question. We will use these responses as a launching point for our subsequent class discussion. Even on those days when I do not have you write a response to the “question to think about,” that question will serve as the launching point for our class discussion.

Each of your written responses should have the following elements:

- It should have a specific argument that is clearly stated, preferably at the beginning of your written response. The specific argument should be a direct response to the question. The rest of the response should focus on elaborating and evidencing that specific argument.
- It should reference and analyze at least one specific example from that day’s readings. You will be able to look over your texts as you write. If you wish to discuss a quote from the reading, you do not need to copy out the quotation. Simply give me the first few words and

last few words of the passage, the author and page number, and then launch into your discussion of how that evidence supports your argument.

- As much as possible, it should cite specific pages in the readings to support your claims. Use basic, in-text annotation at the end of the sentence, like this: (Hamilton 49-50).
- It should fill at least the front and back of a page.
- It should follow the same conventions as a regular paper, e.g., use correct grammar, spelling, complete sentences, and logical organization.

If you wish, you may bring a laptop to class and type your responses. You may only do this if your laptop has the ability to tap the building's wireless network, because I will ask you to e-mail me your document as soon as I tell the class to stop writing. If you know that your handwriting is difficult to read, you will need to make arrangements to type your responses.

Students who have documentation from the Center for Academic Success that they need additional time on in-class assignments must come to see me during the first week of the semester so that we can make appropriate arrangements.

In my evaluation of these written responses, I will certainly take account of the fact that you wrote these responses under time constraints. That said, you need to carefully prepare the reading each day so that you are fully ready to respond to the day's question in class. What follows are some helpful techniques for preparing in advance for these in-class writing assignments.

- Read the texts at least 24 hours before our class meeting. This will give your mind a chance to process more thoroughly what you have read.
- Carefully mark your texts and/or take notes. Mark or write down in your own words what each author's main point is. Mark passages that speak directly to that day's "question to think about." Star examples that you think provide especially strong evidence for the argument you want to make.
- Think about how you would answer the day's "question to think about." Jot down a few notes for yourself about how you would respond, and particularly what your main argument will be.
- If there is more than one text assigned for a particular day, think about, mark up, and take some notes on how those texts reinforce, complement, and/or disagree with each other.
- Think about how any readings, issues and discussions from earlier in the course might usefully be raised in your response to that day's question. Again, jot down some notes on this for yourself.

You will notice that on some days in the schedule, you are asked to do some outside research in advance and bring the materials that you find to class. The "question to think about" for that day will require that you have read those additional materials that you bring to class. Your written response in class will need to make specific reference both to the research that you bring in as well as the common, required readings.

There are no make-ups for the in-class writing assignments. I will exempt you from that day's writing assignment only if you have a written excuse. (Students who are absent for university-sponsored trips like athletic events need to notify me in advance of absences, but do not need to

produce any written documentation beyond what the university sends out. Do not schedule job interviews during class time.) Students who miss class on a day we had an in-class writing assignment but have no legitimate, written excuse will receive a zero for that assignment.

Evaluation criteria

(See the last page of the syllabus for the grading rubric, which provides a more detailed elaboration of the following criteria.)

- depth and originality of analysis
- focused and appropriate response to the question asked
- use of specific, appropriately cited evidence
- ability to synthesize insights from a variety of different texts
- quality of your writing and mechanics

2. MIDTERM & FINAL TAKE-HOME EXAMS (45% OF FINAL GRADE: 20% FOR MIDTERM + 25% FOR FINAL)

There are two take-home exams in this course. When writing these exams, you may consult your class notes texts. However, you may not discuss these exams with anyone else. (The two exceptions to this rule are that you may ask me for clarification of the question and you may take your exam to the Writing Center for a consultation.)

You must support each argument that you make with evidence from the course's required readings. While you are welcome to voice your opinions in these exams, you must *support those views with evidence*. I expect you to grapple with as many texts as are relevant to the questions you answer; in other words, unless specified in the question, do not just rely on one text to answer a question. Use MLA in-text citation style to cite evidence for your arguments, like this: (Graves 136-137). Note that in MLA style, the citation goes outside the "quotation marks but inside the period, like so" (Simpson 48).

Your exam answers will be relatively short (about 5 pages for each exam), so I expect you to choose your words very carefully. Write as though you were writing a paper, not a timed, in-class exam.

The **evaluation criteria** are the same as those for the in-class writing assignments, except that I will expect your exams to make more extensive use of examples, put stronger emphasis on synthesizing insights between multiple texts, have even more diligent citation of evidence, and devote more careful attention to mechanical and organizational issues.

3. CLASS PARTICIPATION (15% OF FINAL GRADE)

The educational experience of this course relies heavily on in-class discussion. I firmly believe that we only truly learn that which we have discussed aloud or in writing. I cannot deposit what is most worth knowing into your brain. My role, instead, is to guide you to a place of deeper understanding. And yes, I do realize that makes me sound like Yoda... but wise, he was.

I use the following rubric when I grade oral participation:

- **A:** Student participated meaningfully in every or nearly every class discussion by offering analysis of the readings and course issues that moved well beyond obvious, surface observations (and did this without monopolizing class time away from other students); engaged thoughtfully with the other students' and professor's own contributions to class discussions; and attended every class session or only had one unexcused absence.
- **B:** Student excelled in most of the above ways, but fell somewhat short on one or two of the criteria (e.g., had more than a few days of no oral participation, *or* about a third of the time made comments that reflected only a surface-level reading of the text, *or* had two unexcused absences, etc.).
- **C:** *Either* the student excelled in some ways but failed in others (e.g., great contributions in class but had two weeks of unexcused absences), *or* the student performed merely adequately on all the above criteria (e.g., only sometimes participated in class discussions and had two unexcused absences).
- **D:** Student mostly failed to meet the above criteria, but did perform adequately on some.
- **F:** Student completely fails to engage with the ideas and assignments during class meetings.

Another factor that will have some (though not massive) impact on your participation grade is your level of experience in college, in the discipline of history, and in courses that are writing- and discussion-intensive. If you are a junior or senior history major, I will expect the quality of your oral participation to kick in more immediately than if you are an English or philosophy major. And from that latter group, I will again expect a more immediate warming up to the skills of in-class participation than I will expect from biology majors or first-year students who may have less experience with writing qualitative analysis and discussion-heavy courses.

By about the third week of class, though, I expect even inexperienced students to show marked improvement in this area. In other words, less-experienced students will be allowed a short grace period to climb the steep learning curve, but in the end are evaluated according to the same criteria.

policies

- **attendance:** I expect you to attend every class except for those days on which you have a documented medical or other legitimate emergency. Every absence will harm your final grade, since you will not have participated fully in discussions and will not have heard all the lectures. I also factor multiple, unexcused absences into your participation grade. For more information, see my explanation of how I grade participation under "assignment instructions."
- **disabilities:** Southwestern University will make reasonable accommodations for students with documented disabilities. To arrange accommodations students should contact Kimele Carter, the Academic Services Coordinator within the Office of Academic Services (Cullen Building, 3rd floor; phone 863-1536; e-mail carterk@southwestern.edu). Students seeking accommodations should notify the Academic Services Coordinator at least two weeks before services are needed. It is the student's responsibility to discuss any necessary accommodations with the appropriate faculty member.

Students who have documentation from the Center for Academic Success that they need additional time on in-class assignments must come to see me during the first week of the semester so that we can make appropriate arrangements.

- **honor code:** You must *hand-write* and sign the full honor code on each assignment in this class. You may not write P.I.F. or any other variant of the honor code. On all assignments for this class (except quizzes if we have any), you may consult your course materials (including books, notes, journals); other scholarly sources; and the Debby Ellis Writing Center. On all assignments (*except the midterm and final exams*), you may also discuss ideas with others, but you must do the actual research and writing yourself. If you borrow someone else's idea – including a fellow student's idea heard in conversation – cite it appropriately.
- **internet sources:** You may not cite internet sources in any of the written assignments in this course. The following are exceptions to this rule and may be used, since they are clearly of a scholarly nature: articles from full-text databases like JSTOR and Project Muse; online primary sources (texts written by historical actors that have been re-published on the web); internet pages that I have approved well in advance of your turning in the assignment.

late assignments: I do not accept late assignments except under the following limited circumstances. If you have a *documented* medical excuse or other genuine emergency, you may discuss special arrangements with me as long as you do so in a timely fashion. If you know in advance that you will be away for a legitimate reason (e.g., a university-sponsored trip), you must notify me in a timely way of your pending absence and turn in your assignment *in advance* of the due date. All other late assignments will receive a 0.

There are no make-ups for the in-class writing assignments. I will exempt you from that day's writing assignment only if you have a written excuse. (Students who are absent for university-sponsored trips like athletic events need to notify me in advance of absences, but do not need to produce any written documentation beyond what the university sends out. Do not schedule job interviews during class time.) Students who miss class on a day we had an in-class writing assignment but have no legitimate, written excuse will receive a zero for that assignment.

in-class writing assignment evaluation rubric: Science & Technology in World History

1. depth & originality of analysis (25 possible points) _____

- a. Do you think carefully and independently about the implications of the reading / your research, or do you merely summarize or state the most obvious points about the texts? Do you take some risks in your thinking, while still remaining true to what you can back up with evidence?
- shows very careful thought about the readings; shows real independence of thought, takes analytical risks while remaining true to the evidence (13)
 - some original insights into the texts but also some surface-level analysis and mere repetition of author's points without thinking through their implications on your own; response takes few risks or takes risks that are unwarranted by the evidence (9)
 - engages entirely or almost entirely on surface-level analysis; provides little or no independent insight into the texts or the question (5)
- b. Do you portray the texts accurately?
- depiction of readings entirely accurate (12)
 - depiction of readings mostly accurate, with few minor exceptions *or* 1 major exception (9)
 - depiction of readings contain multiple accuracies, though occasionally reports their arguments correctly (6)
 - depiction of readings entirely or almost entirely inaccurate (3)
-

2. focused & appropriate response to question (25 possible points) _____

- a. Is it clear what your main argument is?
- main argument clearly stated in the response's first paragraph (10)
 - main argument clearly stated elsewhere in the response (8)
 - main argument implied but never stated outright (6)
 - no main argument clearly emerges (2)
- b. Does your main argument directly respond to the question?
- main argument responds directly to the question (10)
 - main argument related to question, but not entirely centered on it (6)
 - main argument does not directly respond to the question (2)
- c. Do you answer the question as fully as possible given the space limitations? Does your entire written response focus on elaborating and supporting your main argument?
- response tightly argued such that a great deal is said in a small space; wisely chooses focused perspective that allows you to answer the question without being overwhelmed (5)
 - does 1 of following: sometimes diverts into tangents *or* is repetitive *or* tries to do too much (3)
 - response does 2 or more of the above (1)
-

3. specific, appropriately cited evidence (20 possible points) _____

- a. Do you discuss at least one specific, well-chosen example from the texts?
- yes – and you either give more than one specific example or you choose your one example particularly; this example / these examples sufficient to support your main argument (10)
 - yes – and your example is adequate for the task, though there are better ones you could have chosen *or* it is not enough to make the main argument convincing (6)
 - no – your example is either too vague, *or* there are no examples offered, *or* the example is entirely insufficient to support the main argument (2)

- b. Do you convincingly demonstrate that those examples support your argument?
- yes – example followed by your own analysis of how example supports your argument (5)
 - you make an attempt at analysis to show that the example supports your argument, but it is incomplete or unconvincing (3)
 - no – example mistakenly left to “speak for itself,” with no analysis from you showing how it supports your argument (1)
- c. Do you cite your evidence not only when you quote directly, but also when you paraphrase an author’s ideas or information?
- yes, completely (5)
 - most of the time (3)
 - insufficiently (1)
-

4. synthesize insights from variety of texts (15 possible points) _____

- a. If there are multiple texts assigned that day, have you thought about how they reinforce or complement or conflict with each other?
- convincing, thoughtful connections made *or* criterion does not apply in this case (9)
 - both texts for that day mentioned, but no real comparative analysis made (6)
 - only one text discussed when multiple texts assigned for that day (3)
- b. As the course progresses, do you make connections between how the present text reinforces or challenges something we have read or discussed previously?
- uses the day’s texts to develop further the ideas from a previous text or discussion *or* criterion does not apply in this case (6)
 - makes no serious connections to previous material in the course (3)
-

5. quality of writing; mechanics (15 possible points) _____

- a. Does the paper have a logical organization?
- yes (5)
 - no (1)
- b. Do you carefully choose your words in order to communicate clearly?
- meaning unambiguous throughout (5)
 - some lapses in clarity (3)
 - meaning frequently unclear (1)
- c. Is your writing legible and free of grammatical, spelling, and typographical errors?
- yes (5)
 - with a few exceptions (3)
 - serious problems with legibility *and/or* errors (1)

total points: _____