

Eastern Illinois University
New Course Proposal
HIS/AET 2225G, Technology, History and Human Societies

Banner/Catalog Information (Coversheet)

1. **New Course** or **Revision of Existing Course**
2. **Course prefix and number:** HIS/AET 2225G
3. **Short title:** History and Technology
4. **Long title:** Technology, History and Human Societies
5. **Hours per week:** 3 Class 0 Lab 3 Credit
6. **Terms:** Fall Spring Summer On demand
7. **Initial term:** Fall Spring Summer Year: 2017
8. **Catalog course description:** This course will provide students with an in-depth overview of the complex interactions between selected human societies, their environments and technologies from the Stone Age to the 21st century. Students will research and present case studies, debating the impact of technological change in the past and considering its implications for the global future.
9. **Course attributes:** Social Behavioral Sciences
 Cultural Diversity Writing Active
10. **Instructional delivery:** Face-to-face
Type of Course:
 Lecture Lab Lecture/lab combined Independent study/research
 Internship Performance Practicum/clinical Other, specify: _____
Mode(s) of Delivery:
 Face to Face online Study Abroad Hybrid
11. Course(s) to be deleted from the catalog once this course is approved. NONE
12. **Equivalent course(s):** NONE
 - a. **Are students allowed to take equivalent course(s) for credit?** Yes No
13. **Prerequisite(s):** NA
 - a. **Can prerequisite be taken concurrently?** Yes No
 - b. **Minimum grade required for the prerequisite course(s)?**
 - c. **Use Banner coding to enforce prerequisite course(s)?** Yes No
 - d. **Who may waive prerequisite(s)?** NA
 No one Chair Instructor Advisor Other (specify)
14. **Co-requisite(s):** NA

15. Enrollment restrictions

a. Degrees, colleges, majors, and levels, classes which may take the course: ALL

b. Degrees, colleges, majors, levels, classes which may not take the course: NA

16. Repeat status: X May not be repeated ___ May be repeated once with credit

17. Enter the limit, if any, on hours which may be applied to a major or minor: NA

18. Grading methods: X Standard ___ CR/NC ___ Audit ___ ABC/NC

19. Special grading provisions: NA

___ Grade for course will not count in a student's grade point average.

___ Grade for course will not count in hours toward graduation.

___ Grade for course will be removed from GPA if student already has credit for or is registered in:

20. Additional costs to students:

Supplemental Materials or Software _____

Course Fee X No ___ Yes, Explain if yes _____

21. Community college transfer:

___ A community college course may be judged equivalent.

X A community college may not be judged equivalent.

Note: Upper division credit (3000+) will not be granted for a community college course, even if the content is judged to be equivalent.

Rationale, Justifications, and Assurances (Part I)

1. Course is required for the major(s) of _____

___ Course is required for the minor(s) of _____

___ Course is required for the certificate program(s) of _____

X Course is used as an elective

2. Rationale for proposal:

The impact of technological changes on our world is among the most important issues, perhaps the most important issue, confronting human societies in the second decade of the 21st Century and yet no course currently offers students an overview of its parameters and problems with an approach integrating long-term, in-depth historical perspective and up-to-date technological analysis. This innovative team-taught course, drawing on the expertise and existing resources of the School of Technology and the History Department (CAH), will challenge students to discover, interpret, compare and debate technological turning points in global history in order to analyze and evaluate the challenges going forward. Only a truly interdisciplinary course is capable of accomplishing this goal.

3. Justifications for (answer N/A if not applicable)

Similarity to other courses: N/A

Prerequisites: N/A

Co-requisites: N/A

Enrollment restrictions: N/A

Writing active, intensive, centered: WA. Mastery of content will be evaluated by two midterm tests, the first covering earlier societies (prehistory to 1200), the second developing societies of the medieval and modern periods (1200 to 1950). The midterm tests will be at least 50% essay; the final will be a reflective comparative essay (100% essay).

4. General education assurances (answer N/A if not applicable)

Curriculum: As a new interdisciplinary course, learning goals and methodologies overlap components indicated as appropriate for social and behavioral sciences and for humanities. This course is conceived within the framework of general education with the goal of attracting into the same classroom humanities students with a weak understanding of applied science and technology students with little grasp of historical thinking. In the process of providing a long-term perspective it would develop their critical understanding of historical methodology, and foster their ability to analyze and debate the ethical as well as the objective dimensions of decisions involving technology. Its goal is to bridge a significant curricular gap between what C.P. Snow, eminent scientist and educator, once termed the “two cultures” of science and the humanities.

Instruction: The case-studies designated to be researched and presented to the class by student teams will provide a hands-on introduction to scientific methodologies, typically involving anthropology, archaeology, study of paleo-environments, socio-economics and statistical analysis, and their application to understanding and debating the historical and ethical consequences of technological change in past societies. The case studies will be chosen to reflect the diversity of global cultures in the past, and emphasis will be placed on the practical and ethical consequences, for environmental stewardship and for democratic values and institutions, of technological decisions being made or contemplated today. To ensure active and vigorous class participation enrollment will be limited to 25.

Assessment: Emphasis in the course will be on collaborative student researched presentations, balanced with short analytical case study reports designed to inform roundtable discussions. Mastery of content will be evaluated by two midterm tests, the first covering earlier societies (prehistory to 1200), the second developing societies of the medieval and modern periods (1200 to 1950). The midterm tests will be at least 50% essay; the final will be a reflective comparative essay (100% essay).

Evaluation Grid:

2 Midterm Tests	= 30%
Final	=10%
2 Student Group Presentations	=30%
2 Case Study written reports	=20%
Overall Participation, especially in Roundtables	=10%

100%

5. Online/Hybrid delivery justification & assurances of instruction interaction and integrity (answer N/A if not applicable) NA

Model Syllabus (Part II)

1. Course number and title: HIS/AET 2225G
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3. Learning objectives.

Upon completion of this course, students will be able to:

 - A) Describe how technological developments affect society by examining the impact of technology on selected human societies in different historical periods and global contexts from the Stone Age to the present. (CT-1, CT-3, CT-4, CT-5, WR-2, WR-4, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, QR-1, RC-1, RC-2, RC-3)
 - B) Correlate technological innovations with environmental history, societal changes, public policy implementations, political power, religion, global trade, communication systems and democratic, decision-making. (CT-1, CT-3, CT-4, CT-5, WR-2, WR-4, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, QR-1, RC-2, RC-3, RC-4)
 - C) Analyze current scientific debates regarding the future of technology and the ethical concerns involving such issues as global warming, energy, biotechnology, genetic engineering, healthcare, and nanotechnology. (CT-3, CT-4, CT-5, CT-6, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, SL-7, QR-1, RC-2, RC-3, RC-4)
4. Course Materials

Technology & Society: Issues for the 21st Century and Beyond by L.S.Hjorth, B.A. Eichler, A.S. Khan, and J.A. Morello, 3rd edition, Prentice Hall, 2008 = **T&S**

- **Technology: A World History**, by Daniel Headrick, Oxford U Press 2009 =**Headrick**
- Websites, movies provided by the instructors

5. Weekly outline of content. (Face-to-Face Modality)

Meeting day (TH)	TOPICS & Assignments	ACTIVITIES
Week 1	Introduction: History of Technology T&S Part I, Ch 1-4 Headrick: Stone Age Technology, Ch 1	Lecture Organize research groups
Week 2	Technology, Society & Environment T&S Part I, Ch 5-8 & Internet exercise Headrick, Hydraulic Civilizations, Ch 2	Lecture Environmental impacts in early societies
Week 3	Technology and War (premodern) Headrick, Iron, Horses and Empire, Ch 3	Short paper #1 & Roundtable: Case study of game-changing technology in a pre-modern society
Week 4	Technology and War (modern) T&S Part VI, Ch 41-45 Internet sources TBA	Student Group presentations #1 & discussion: War & Progress?
Week 5	Review class and TEST # 1: Technology and Early Societies	TEST # 1
Week 6	Technology, Productivity and Energy 1 Headrick, Medieval Revolutions, Ch 4 Internet sources TBA	Lecture Technology & Medieval/Early Modern Revolutions
Week 7	Technology and Global Trade 1: emergence of the early modern world system Headrick, Age of Global Interactions, Ch 5 Internet sources TBA	Short paper #2 & Roundtable: Case studies of Medieval revolutions
Week 8	Technology, Productivity and Energy 2 Headrick, The First Industrial Revolution, Ch 6 Internet sources TBA	Lecture Trade & early modern globalization
Week 9	Technology and Global Trade 2: colonialism and national rivalries of “developed nations” Headrick, Ch 7 Acceleration of Change 1 (to World War 1) Internet sources TBA	Student Group presentations #2 & discussion: Technology and the Western World-System (pre-1914)
Week 10	Technology & the 20 th Century World Headrick, Ch 7 Acceleration of Change 2 (through World War 2)	Lecture Technology transforms global societies (to 1950s)
Week 11	Review Class and TEST # 2: Technology and Developing Societies, ca. 1200-1950	TEST # 2
Week 12	Technology & Post-Industrial World (1950-present) Headrick, Ch 8 Toward a Post-Industrial World T&S Part III	Lecture Post-Industrial Revolutions & the Information Age
Week 13	Technology Today & Tomorrow 1: Food & Energy in the Post-Industrial Age	Roundtable presentations & discussion 1: food and energy

	T&S Part VI	
Week 14	Technology Today & Tomorrow 2: Information systems, communications, security T&S Part IV	Roundtable presentations & discussion 2: information systems and security
Week 15	Technology Today & Tomorrow 3: Health, privacy, ethics T&S Part IX, X	Roundtable presentations & discussion 3: health, privacy, ethics
Final Ex	Reflective essay	

6. Assignments and evaluation, including weights for final course grade.

2 Midterm Tests @ 15 pts each	=30 Points (30%)
Final @ 10 pts	=10 Points (10%)
2 Student Group Presentations @ 15 pts each (10 group + 5 individual)	=30 Points (30%)
2 Case Study written reports @ 10 pts each	=20 Points (20%)
Overall Participation, especially in Roundtables	=10 Points (10%)
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	= 100 Points (100%)

7. Grading scale.

A: >90% B: 80%-90% C: 70%-90% D: 60%-70% F: <60%

8. Correlation of learning objectives to assignments and evaluation.

A) Describe how technological developments affect society by examining the impact of technology on selected human societies in different historical periods and global contexts from the Stone Age to the present.

B) Correlate technological innovations with environmental history, societal changes, public policy implementations, political power, religion, global trade, communication systems and democratic, 3 decision-making.

C) Analyze current scientific debates regarding the future of technology and the ethical concerns involving such issues as global warming, energy, biotechnology, genetic engineering, healthcare, and nanotechnology.

Objective	Group Presentations 30%	Midterm 1 15%	Midterm 2 15%	Final Exam 10%	Written reports 20%	Round Table discussions 10%
A Describe how technological developments affect society by examining the impact of technology on selected human societies in different historical periods and global contexts from the Stone Age to the present. (CT-1, CT-3, CT-4, CT-5, WR-2, WR-4, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, QR-1, RC-1, RC-2, RC-3	X	X		X	X	X
B Correlate technological innovations with environmental history, societal changes, public policy implementations, political power, religion, global trade, communication systems and democratic, 3 decision-making. (CT-1, CT-3,	X		X	X	X	X

CT-4, CT-5, WR-2, WR-4, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, QR- 1, RC-2, RC-3, RC-4						
C Analyze current scientific debates regarding the future of technology and the ethical concerns involving such issues as global warming, energy, biotechnology, genetic engineering, healthcare, and nanotechnology. (CT-3, CT-4, CT-5, CT-6, WR-5, WR-6, WR-7, SL-1, SL-2, SL-3, SL- 7, QR-1, RC-2, RC-3, RC-4)	X			X	X	X

Date approved by the department or school: AET: 10/20/16 ; HIST: 11/2/16

Date approved by the college curriculum committee: LCBAS: 1/20/17; CAHCC 11/16/16

Date approved by CAA: 2/9/17