

GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and paste **current** course information from [Class Search/Course Catalog](#).

College/School	College of Liberal Arts and Sciences	Department/School	School of Historical, Philosophical and Religious Studies
Prefix: HST	Number: 302	Title: Studies in History (Energy Transitions and Sustainability)	Units: 3

Course description:

Is this a cross-listed course? No If yes, please identify course(s): _____

Is this a shared course? No If so, list all academic units offering this course: _____

*Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of **each** department that offers the course is required for **each** designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.*

Is this a **permanent-numbered** course with topics? Yes

If **yes**, each topic requires **an individual submission**, separate from other topics.

Requested designation: *Historical Awareness (H)*

Mandatory Review: Yes

*Note- a **separate** proposal is required for each designation.*

Eligibility: Permanent numbered courses **must** have completed the university's review and approval process. For the rules governing approval of omnibus courses, contact Phyllis.Lucie@asu.edu.

Submission deadlines dates are as follow:

For Fall 2021 Effective Date: October 2, 2020

For Spring 2022 Effective Date: March 5, 2021

Area proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study. It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines.

Checklists for general studies designations:

Complete and attach the appropriate checklist

- [Literacy and Critical Inquiry core courses \(L\)](#)
- [Mathematics core courses \(MA\)](#)
- [Computer/statistics/quantitative applications core courses \(CS\)](#)
- [Humanities, Arts and Design core courses \(HU\)](#)
- [Social-Behavioral Sciences core courses \(SB\)](#)
- [Natural Sciences core courses \(SQ/SG\)](#)
- [Cultural Diversity in the United States courses \(C\)](#)
- [Global Awareness courses \(G\)](#)
- [Historical Awareness courses \(H\)](#)

A complete proposal should include:

- Signed course proposal cover form
- [Criteria checklist](#) for General Studies designation being requested
- Course catalog description
- Sample syllabus for the course
- Copy of table of contents from the textbook and list of required readings/books

It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.

Contact information:

Name Marissa Timmerman E-mail Marissa.R.Timmerman@asu.edu Phone 480-727-4029

Department Chair/Director approval: (Required)

Chair/Director name (Typed): Richard Amesbury Date: 2/26/2021

Chair/Director (Signature): 

Arizona State University Criteria Checklist for

HISTORICAL AWARENESS [H]

Rationale and Objectives

Recent trends in higher education have called for the creation and development of historical consciousness in undergraduates now and in the future. History studies the growth and development of human society from a number of perspectives such as—political, social, economic and/or cultural. From one perspective, historical awareness is a valuable aid in the analysis of present-day problems because historical forces and traditions have created modern life and lie just beneath its surface. From a second perspective, the historical past is an indispensable source of identity and of values, which facilitate social harmony and cooperative effort. Along with this observation, it should be noted that historical study can produce intercultural understanding by tracing cultural differences to their origins in the past. A third perspective on the need for historical awareness is that knowledge of history helps us to learn from the past to make better, more well-informed decisions in the present and the future.

The requirement of a course that is historical in method and content presumes that "history" designates a sequence of past events or a narrative whose intent or effect is to represent both the relationship between events and change over time. The requirement also presumes that these are human events and that history includes all that has been felt, thought, imagined, said, and done by human beings. The opportunities for nurturing historical consciousness are nearly unlimited. History is present in the languages, art, music, literatures, philosophy, religion, and the natural sciences, as well as in the social science traditionally called History.

The justifications for how the course fits each of the criteria need to be clear both in the application tables and the course materials. The Historical Awareness designation requires consistent analysis of the broader historical context of past events and persons, of cause and effect, and of change over time. Providing intermittent, anecdotal historical context of people and events usually will not suffice to meet the Historical Awareness criteria. A Historical Awareness course will instead embed systematic historical analysis in the core of the syllabus, including readings and assignments. For courses focusing on the history of a field of study, the applicant needs to show both how the field of study is affected by political, social, economic, and/or cultural conditions AND how political, social, economic, and/or cultural conditions are affected by the field of study.

Revised October 2015

Proposer: Please complete the following section and attach appropriate documentation.

ASU--[H] CRITERIA			
THE HISTORICAL AWARENESS [H] COURSE MUST MEET THE FOLLOWING CRITERIA:			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. History is a major focus of the course.	Syllabus: Course Description and Course Learning Outcomes
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The course examines and explains human development as a sequence of events influenced by a variety of factors.	Syllabus: Course Description, Assignment Details, Course Schedule. Course Readings: Table of Contents.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. There is a disciplined systematic examination of human institutions as they change over time.	Syllabus: Course Description and Course Schedule. Course Readings: Table of Contents
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. The course examines the relationship among events, ideas, and artifacts and the broad social, political and economic context.	Syllabus: Course Description, Assignment Details, Course Schedule. Course Readings: Table of Contents
		THE FOLLOWING ARE NOT ACCEPTABLE:	
		• Courses that are merely organized chronologically.	
		• Courses which are exclusively the history of a field of study or of a field of artistic or professional endeavor.	
		• Courses whose subject areas merely occurred in the past.	

Course Prefix	Number	Title	General Studies Designation
HST	302	Energy Transitions and Sustainability	[H]

Explain in detail which student activities correspond to the **specific** designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checklist)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
1.	Course covers historical energy transitions and their relation to sustainability from the Industrial Revolution to the present. Historical methods include considering historical context, change over time, multiplicity of perspectives and historical periodization.	Each module/lecture/assignment in this course concerns change over time, the most significant historical process. Two assignments that demonstrate this focus are the Book Review and Anthropocene Essay. The book review asks students to consider the author's argument of the economic transformations created by the shift to the mineral economy from an earlier energy system bound by organic fuels. Student's connect the arguments laid out by E.A. Wrigley to not only develop historical context, but to explain the significant shift in human experience after the Industrial Revolution. With this foundation, students then consider the twentieth century through the themes of development and "the Great Acceleration." They locate their own current energy dependency using sources from the EPA and the Department of Energy. They then reflect on the historical developments of the twentieth century that shape their own lives in relation to travel, lodging and lifestyle. These two assignments demonstrate the long arc of historical developments that persisted from the first Industrial Revolution to the present, which is the scope of the course.
2.	Using energy and sustainability as a guide, this course examines and explains human development as a sequence of events influenced by a variety of factors. Energy transitions are highlighted in relation to the social changes that occur once a significant number of people adopt a specific energy source. Within these energy regimes, various possibilities and limits develop in relation to dominant social, economic and political contexts. Furthermore, the readings direct the students towards sources that describe	Although this is a common theme in the course, the development module most demonstrates the complexity of human development as a sequence of events influenced by a variety of factors. The first module focuses on primary energy and its impact on social development so the students are prepared to recognize the transformations brought about by electrification and hydropower in this module. For the first week, students consider the "war of the currents" in relation to the inventors, engineers and boosters who created the modern electricity systems. They then consider the growth and spread of electrified zones in terms of development. In particular, the Tennessee Valley

	<p>the deep historical context of how energy regimes and society change over time. Finally, sustainability issues are highlighted through assignments and weekly topics that ask the students to consider the trade-offs associated with different energy regimes. The most stark difference being between the organic and mineral energy regimes.</p>	<p>Authority is examined in terms of rural electrification. DB #3 then asks students to identify how modern electrified zones impact social behaviors by tracing the connection between procurement, conversion and end use. They are required to consider raw materials, harvesting technology, secondary fuels (energy currency), distribution technology, service technology (appliances, technology, etc.) and service (how it is used) to make their arguments. The second weekly topic that demonstrates human development in relation to a sequence of events influenced by a multiplicity of factors includes Issue Essay #3 that asks students to reflect on their reading of Richard White's text. Here, students consider the transformation of the Columbia River from one used for millennium by indigenous peoples to its twentieth century transformation into a source of power supply for large regions of the Pacific Northwest. They consider these changes in relation to New Deal development programs that include the Tennessee Valley Authority and Colorado River development by the Bureau of Reclamation. The issue essay prompts ask students to compare and contrast the different regional developments while explaining the benefits and costs to adaptive vs. top-down centralized use of river resources.</p>
<p>3.</p>	<p>This course also offers a disciplined systematic examination of human institutions as they change over time. It includes social, economic and political institutions related to energy at each stage of historical development. Some examples of social institutional change include labor regimes in relation to dominant energy sources; the gendered division of social and professional roles in the context of dominant energy regimes; and specific cultural developments associated with various groups along the energy supply chain that includes procurement, production, delivery and consumption. Institutional economic exchange is considered in relation to the rise of Industrial Capitalism and the British Great Divergence, both well underway by the mid-19th century. Monopoly power is considered through the vertical and horizontal integration of large energy companies that include, but are not limited to Standard Oil and British Petroleum. Ultimately, political institutions are also highlighted</p>	<p>Again, each of the modules/assignments contain elements of this course objective. Two clear examples come from the final module modelled off of "the Anthropocene" as articulated by the historian J.R. McNeil. Here, students consider post-WWII history through the concept of "the Great Acceleration," increased energy use and population growth after WWII. In the final two weeks, they contrast energy abundance through post-WWII nuclear power development and oil supply with threats to that abundance beginning with the 1970s oil shocks and carrying through to climate change today. This involves specific national and international institutions. For example, students consider the relation of the Department of Energy to the Atomic Energy Commission. They develop arguments in relation to the impact of regulatory agencies and energy policies as related to their own use in Part II of the Anthropocene Essay. Part III of that essay has students explore contemporary issues related to past energy transitions and the current "renewable" transition as understood by international institutions that include the International Energy Agency, Intergovernmental Panel on Climate Change and UN Sustainable Development goals. They then end the final essay</p>

	<p>throughout as policy decisions, often based on sustainability concerns are related to and often developed and carried out by institutions that include the US Department of Energy or the International Energy Agency.</p>	<p>with an analysis of how historical energy transitions shape the possibilities and limits of change while also considering the contemporary potentials and pitfalls of the contemporary energy transition. For example, with electric vehicle development and alternative energy sources.</p>
<p>4.</p>	<p>The course examines the relationship among events, ideas and artifacts and the broad social, political and economic context. The social, political and economic context was discussed above. There are also relationships to significant events, ideas and artifacts throughout the course. Many formative events like the invention and development of the steam engine are highlighted as world historical moments. Others include electrification beginning in the late nineteenth century, development of the internal combustion engine, splitting of the atom, dropping of the nuclear bombs, etc. Many ideas are also highlighted that include considering the concept of sustainability and its many different interpretations, the concept's of the Anthropocene, Capitalocene and "Mineral Economy," as put forward by E.A. Wrigley. Some historical ideas related to energy and sustainability include the Jevon's paradox, Tesla's advent of alternating current, nuclear physics, environmental stewardship and many more. Finally, this class is particularly well suited to considering artifacts. For example, Module 3 compares and contrasts the steam engine and internal combustion engine in relation to the Industrial Revolution and automobile age. Students explore the impact of these "industrial revolutions" through issue essays and discussion boards on the topic. Other significant artifacts that are considered include various industrial pieces like the steam ship and steam locomotive, large-scale electric power infrastructure that ranges from power grids to hydroelectric dams and nuclear power plants. Industrial technology that includes blast furnaces and cement kilns. Students are also encouraged to consider the way that large-scale infrastructure both reflects the history</p>	<p>Since energy is central to the human experience, this course is also related to this course objective in countless ways. I will focus on two specific examples of how artifacts are described and a significant event to demonstrate the fulfillment of this requirement. This is by no means an exhaustive list. For example, in Issue Essay #2 students compare and contrast the steam engine and internal combustion engine in relation to the centrality of prime movers to industrial change as discussed by E.A. Wrigley and William Stanley Jevons. They are asked to demonstrate, using sources from the course textbook and those provided in the week 3 folder on the automobile age to describe the social dimensions of the adaptation and use of different prime movers. They then describe how each were adapted to specific uses, like with the steam ship and steam locomotive, how that created new possibilities for connecting cities to peripheries, and, finally, the technological lock-in that resulted. Most students choose the creation of the modern automobile transportation network as an example of technological lock-in that is in itself an artifact and related to a prime mover. The most significant event that we consider is the shift from the organic economy to the mineral economy in weeks one and two. Issue Essay #1 has students identify pre-industrial technology and limits using primary sources that include excerpts from Thomas Malthus' "Essay on the Principle of Population." They then articulate the various ways that organic energy regimes faced limits to sustained growth. DB#1 brings the students back together and asks them to analyze Wrigley's description of how the mineral economy freed industrial society from such limits. It asks the provocative question "is coal sustainable?" Students then use the sources from the first two weeks to articulate their working definition of sustainability and the trade-offs associated with organic and mineral energy. They are essentially considering the role of energy in one of the most transformative events in human history, the Industrial Revolution.</p>

Historical Awareness [H]

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	<p>of energy possibilities and shapes their current existence. The most glaring example of this phenomenon includes automobile infrastructure in relation to EV production and use. This is but a small sampling of the many different ways this course fulfills the historical awareness criteria.</p>	
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Course Catalog Description: Survey of the history of energy and sustainability from the Industrial Revolution to the present with a particular focus on energy transitions and socio-technical systems.

Arizona State University – iCourse

Energy Transitions and Sustainability (HST 302)

Fall 2021 B Session (CNL#: 84043/90014)

Instructor: Travis J. Cook

Email: tjcook5@asu.edu (include a subject heading).

Credit Hours: 3

Format: Online

Course Dates: 10/13/21-12/3/21

Office: Coor 4563

Office Hours: Available through email or Zoom by appointment

Course Description: Survey of the history of energy and sustainability from the Industrial Revolution to the present with a particular focus on energy transitions and socio-technical processes. The course is split into three modules that demonstrate broad trends in the co-evolution of energy systems and society. Each module contains weekly lessons that consider sustainability issues related to supply, delivery and consumption at every stage of energy transitions. The first module relies on historian E.A. Wrigley’s description of the shift from organic to mineral energy regimes as human, biomass, animal, and water power was increasingly supplemented by subterranean energy sources during the Industrial Revolution. Through the weekly topics of the “organic economy,” “mineral economy” and “industrial revolutions and their consequences,” students consider the relation of primary energy sources to sustained economic, demographic, and urban growth while exploring the particularities of various energy transitions in relation to their potentials and pitfalls. The second module is built around the theme of “development.” Here, students consider electrification and hydropower in relation to regional development, energy dependency and economic/demographic growth. The third module considers energy abundance and scarcity following WWII through the lens of “the Anthropocene,” a proposed geological epoch where humans have an inordinate impact on earth systems. Here, students consider energy abundance related to nuclear energy and post-WWII oil supply as well as possible limits to growth related to resource depletion, environmental degradation, regional conflicts, climate change and many other social/environmental problems that emerged by the new millennium. By the end of the course, students will be able to connect their own lived experience to the historical energy transitions and sustainability issues that continue to shape the modern world.

Course Learning Outcomes: Students will formulate working definitions of “energy,” “energy transitions” and “sustainability.” They will also identify a variety of factors related to historical energy transitions. This develops the student’s capacity for systems thinking and ability to identify complex connections between energy source procurement, conversion, and consumption. This will involve identifying causal relationships, ordering historical events, describing change over time, and comparing and contrasting alternative perspectives from a variety of sources. Students will locate and analyze primary and secondary source material in physical and digital formats. This includes, but is not limited to, identifying major historiographical questions involved with the history of energy and sustainability, judging the merits of secondary source arguments, analyzing historical and contemporary data related to energy transitions and ranking various sustainability metrics based on relevance and importance. Students will be able to explain why their unique understanding of energy transitions and sustainability differs from, or supports, conventional wisdom, defend their perspective through the use of historical sources, and explain how the past connects to the present through crafting a primary source research essay. By the end of the semester, students will have gained the historical background necessary to understand the roots of current sustainability issues related to contemporary energy systems.

The syllabus is subject to change throughout the semester at the discretion of the instructor. Students will be notified of all changes via Canvas.

Syllabus Disclaimer: The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check your ASU email and the course site often.

Course Structure: This is an ASU iCourse and you have the exciting opportunity to engage with the class material through regular discussion boards and creative and collaborative writing assignments. All students must participate. Assignments include lesson quizzes, regular discussion boards as well as two essays. While a lot of fun, this class is intensive. Please plan accordingly. There is a course schedule on the last page of the syllabus.

Course Readings and Historical Sources: You are responsible for reading, watching, and listening to any assigned readings, videos, and recordings. The required readings are listed below. Please purchase or rent the correct edition and publication year of the text. I will post other required readings, including primary sources, and links to videos and recordings on Canvas.

Required Readings:

Books are available through the ASU Bookstore or can be purchased online.

McNeill, J.R. and Peter Engelke. *The Great Acceleration: An Environmental History Since 1945*. Cambridge MA: The Belknap Press of Harvard University Press, 2014.

White, Richard. *The Organic Machine: The Remaking of the Columbia River*. New York: Hill and Wang, 1995.

Wrigley, E.A. *The Path to Sustained Growth*. Cambridge UK: Cambridge University Press, 2016.

All other articles, primary sources, and multimedia will be posted on Canvas.

Course Access: Your ASU courses can be accessed by both my.asu.edu and myasucourses.asu.edu; bookmark both in the event that one site is down.

Computer Requirements: This is a fully online course; therefore, it requires a computer with internet access and the following technologies:

- Web browsers ([Chrome](#) , [Mozilla Firefox](#) , or [Safari](#))
- [Adobe Acrobat Reader](#) (free)
- [Adobe Flash Player](#) (free)
- Webcam, microphone, headset/earbuds, and speaker
- Microsoft Office ([Microsoft 365 is free](#) for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream video

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in ASU Online courses. While you will be able to access course content with mobile devices, you must use a computer for all assignments, quizzes, and lessons.

Student Success

To be successful:

- check the course daily
- read announcements
- read and respond to course email messages as needed
- complete assignments by the due dates specified
- communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track
- access [ASU Online Student Resources](#)

Grading Standards and Practices

Your grade will be determined based on the following grading schema:

Grade Percentage	
A	90-100%
B	80-89%
C	70-79%
D	60-69%
E	Below 60%

Total Points Possible:

Introduction Post	20 points
Discussion Board (20 points each)	60 points
Issue Essays (20 points each)	60 points
Book Review	60 points
The Anthropocene Essay	100 points
TOTAL	300 points

Assignment Descriptions

Extra Credit: There will be NO extra credit assigned in this course, except that which may be awarded during class.

Submitting Assignments: All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas. Do not submit an assignment via email.

Assignment due dates follow Arizona Standard time. Click the following link to access the [Time Converter](#) to ensure you account for the difference in Time Zones. Note: Arizona does not observe daylight savings time.

Discussion Policy: This course requires a total of three discussion posts. The posts must be meaningful to receive credit. The discussion directions on Canvas explain what constitutes a “meaningful” post. The discussion forum will be read by the instructor and all of the other students in the course. *Only respectful and thoughtful posts are allowed.* Any student who does not comply with this policy might receive a zero or be withdrawn from the class. We will discuss controversial issues and it’s OK to disagree. However, *derogatory, obscene, disrespectful, and hypercritical attacks on a student’s or the instructor’s posts will not be tolerated.* Not participating in discussions is the same as not participating in the course. A student who does not complete two discussions may be withdrawn from the course.

Issue Essays: There are a total of three “issue essays” for this course.

Writing Assignments: Rather than have traditional assessments, there will be two larger writing assignment that asks you to apply your historical knowledge and research skills to an issue related to our course topic. This will be graded based on associated rubrics and your cumulative improvement in the course. Detailed feedback will be provided for all writing in the course and your ability to incorporate that feedback will be a significant part of the writing assignment grades.

Grading Procedure: Grades reflect your performance on assignments and adherence to deadlines. Grades on assignments will be available within 72 hours of the due date in the Gradebook.

COURSE POLICIES

Professionalism: Professionalism is expected at all times. Professionalism includes engaging in class activities, providing thoughtful feedback to peers and instructor, completing assigned work on time, producing and submitting quality work that is legible and coherent, generally conducting yourself in a professional and respectful manner. Additionally, all assignments include a professionalism component whether explicitly stated or not.

Statement Regarding Student Responsibility: Students are responsible for reading and knowing the syllabus, meeting course deadlines, completing assigned readings, and participating in online discussions, assignments, and group projects. If you have a question regarding course requirements, dates, or other related information, please consult the syllabus and Canvas before contacting the professor.

ASU Online Course Policies: View the [ASU Online Course Policies](#).

Accessibility Statements: View the [ASU Online Student Accessibility](#) page to review accessibility statements for common tools and resources used in ASU Online courses.

Late Papers/Late Assignments: A student may turn in a late paper or assignment without penalty ONLY if s/he can provide documentary evidence that s/he was ill, observed a religious holiday, attended an ASU athlete-required event, or experienced a death in the family. Students must contact the instructor by email as soon as the student knows s/he will not be able to turn in or take the presentation/discussion board/paper/assignment at the regularly scheduled time/day. If a student has documentary evidence for one of the above listed reasons, s/he may (at the

instructor's discretion) have an extended deadline for a paper/discussion/assignment. The student will turn in the paper/discussion/assignment within five days from the original due date. The student *must contact the instructor before the original due date* in order to complete a late presentation/paper/assignment without a penalty.

Follow the appropriate University policies to request an [accommodation for religious practices](#) or to accommodate a missed assignment [due to University-sanctioned activities](#).

Unexcused late papers, discussion posts, homework, presentations, and projects: Unexcused late assignments are not only assignments turned in late, but assignments that are not turned in according to the correct format by the due time/date. The purpose of this policy is to uphold fairness among students and to assist me with keeping track of students' assignments. All homework, discussion posts, presentations, and projects must be completed and turned in on time in order to count for full points.

Unexcused late content will be accepted up to 48 hours after the original due date and will lose 20% of the total points earned.

Policy Regarding Withdrawal from the Course: According to ASU policy, students in this course may choose to withdraw with a guaranteed "W" until *the guaranteed withdrawal date listed for this course*. After that date, a student's grade will be calculated by dividing the total points earned by the total points possible.

Information Regarding Disability Services: It is the student's responsibility to self-identify. Disability Resources Center (DRC) webpage: <https://eoss.asu.edu/drc>. All DRC processes must be followed for academic accommodations to be implemented.

Statement Concerning Plagiarism: Plagiarism is defined as presenting the work of another as one's own. More than four consecutive words from a source other than the writer constitute plagiarism when the source is not clearly identified in appropriate documentation format. To avoid plagiarizing, do not copy from websites, the textbook, or any other source. Our course will use the *Turnitin* plagiarism software in Canvas for all assignments submitted.

Please see the Office of Academic Integrity page: <https://provost.asu.edu/academic-integrity>

Title IX Statement: Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <http://sexualviolenceprevention.asu.edu/faqs/students>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

Communicating With the Instructor

Contacting Instructor: Students must use the ASU email system (their own asu email address). Please allow 72 hours for email responses Monday through Friday. Typically, I will not be working (online) weekends or college-designated holidays; responses to emails received on those days may not be made until the following weekday. Plan accordingly when contacting me for questions regarding assignments.

Email: ASU email is an [official means of communication](#) among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

Community Forum: This course uses a discussion topic called "Community Forum" for general questions and comments about the course. Prior to posting a question or comment, check the syllabus, announcements, and existing posts to ensure it's not redundant. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor. You can expect a response within 72 hours.

Course Schedule

Week 1: Course Introduction (October 13-17)

Topic: What is energy and sustainability?

Assignments:

Friday (Oct. 15): Introduction Post due by 11:59pm

Sunday (Oct. 17): Introduction Responses due by 11:59pm

Module 1: Energy Regimes

Week 2: The Organic Economy (October 18-24)

Topic: Wood, Wind and Water

Assignments:

Sunday (Oct. 24): Issue Essay #1 due by 11:59 pm

Week 3: The Mineral Economy (October 25-31)

Topic: The Mineral Energy Transition

Assignments:

Friday (Oct. 29): DB#1 Post due by 11:59 pm

Sunday (Oct. 31): DB#1 Response due by 11:59 pm

Week 4: Industrial Revolutions and Their Consequences (November 01-07)

Topic: Steam and I.C.E.

Assignments:

Sunday (Nov. 07): Issue Essay #2 due by 11:59 pm

Module 2: Development

Week 5: Electrification (November 08-14)

Topic: Electrification, potentials and limits

Assignments:

Sunday (Nov. 14): Book Review due by 11:59 pm

Week 6: Hydropower (November 15-21)

Topic: Hydropower, potentials and limits

Assignments:

Friday (Nov. 19): DB#3 Post due by 11:59 pm

Sunday (Nov. 21): DB#3 Response due by 11:59 pm

Module 3: The Anthropocene

Week 7: Energy Abundance (November 22-28)

Topic: The Great Acceleration

Assignments:

Sunday (Nov. 28): Issue Essay #3 due by 11:59 pm

Week 8: Energy Scarcity (Nov. 29-Dec. 03)

Topic: Contemporary issues

Assignments:

Friday (Dec. 03): The Anthropocene Essay due by 11:59 pm

The Path to Sustained Growth

*England's Transition from an Organic
Economy to an Industrial Revolution*

E. A. Wrigley

University of Cambridge



CAMBRIDGE
UNIVERSITY PRESS

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THE
Organic
Machine

Richard White

 HILL AND WANG

A division of Farrar, Straus and Giroux / New York

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The Great Acceleration

An Environmental History of the Anthropocene since 1945

J. R. McNeill and Peter Engelke

The Belknap Press of Harvard University Press

CAMBRIDGE, MASSACHUSETTS

LONDON, ENGLAND

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