University of Florida
Department of History
Spring 2020

## **WOH3404: Global History of Energy**

Professor Sean Adams MWF 4 (MWF 10:40-11:30) Keene-Flint Hall 105

### **Course Introduction and Objectives**

This course will address several questions involving the relationship of energy to human society. It is global in size and scope, meaning that we will cover a large swath of human history on several continents. Such an ambitious size means that the course lectures and readings will be wide ranging and not attempt to provide a comprehensive account of the production and consumption of energy. Instead, we will move around the globe in order to engage themes such as energy transitions, the impact of energy on political and social structures, and the ways in which energy needs drive historical change.

After completing this course, students will have a greater appreciation of the historical development of energy from a global perspective. We will discuss these issues in class, providing you the opportunity to work through some of these very complex concepts. Over the course of the semester, students will also have the opportunity to hone verbal and written arguments that use both primary and secondary sources in order to address complex historical questions.

# **Required Readings**

There are six (6) required texts available for purchase at the UF Bookstore. If you choose to purchase these books online, please make sure that you leave enough time for shipping. A tardy delivery will not be an acceptable excuse for not having the reading materials. In addition to these books, there will be various readings, images, and other sources available online via the course e-learning site at <a href="https://elearning.ufl.edu">https://elearning.ufl.edu</a>. These are required readings and will form the basis of many assignments. Whether you print them out as hard copy or not is up to you, but please be sure that you can access them in time for class.

E. A. Wrigley, *Energy and the English Industrial Revolution*. New York: Cambridge University Press, 2010. ISBN 0521131855

Peter Shulman, Coal & Empire: The Birth of Energy Security in Industrial America. Baltimore: Johns Hopkins University Press, 2015. ISBN 1421417065

Miguel Tinker Salas, *The Enduring Legacy: Oil, Culture and Society in Venezuela*. Durham, NC: Duke University Press, 2009. 082234419X

Matthew Huber, *Lifeblood: Oil, Freedom, and the Forces of Capital*. Minneapolis: University of Minnesota Press, 2013. ISBN 0816677859

Arbella Bet-Shlimon, City of Black Gold: Oil, Ethnicity, and the Making of Modern Kirkuk. Palo Alto, CA: Stanford University Press, 2019. ISBN 9781503609136

Jonathan Fetter-Vorm, *Trinity: A Graphic History of the First Atomic Bomb*. New York: Hill and Wang, 2012. ISBN 0809093553

### **Grading Policy**

Your grade in this class will be determined largely by your performance on a variety of brief written assignments, as well as longer papers. These exercises will allow you to hone your skills in critical thinking and writing in addition to providing thoughtful commentary on the global history of energy; this work is essential for success in both academic and professional settings. Improvement over the course of the semester is not only encouraged, but rewarded. My hope is that the work you do in this class will pay dividends—the market reference is quite intentional here—for years after you leave UF and Gainesville.

There will be six (6) brief essay assignments of roughly 500-750 words (2-3 pp.) each, with the option of dropping the two (2) lowest grades. Yes, that means that you may write only four of the six brief assignments if you wish to do so. There will also be three (3) longer, mandatory essays of 1,250-1,750 words (5-7 pp.) due at the end of each major unit. All written work in this class will be evaluated with three major assessment tools in mind. First, the clarity and coherence of an argument made in the essay, with the clear use of supporting evidence will be required of all successful papers. Second, a logical and clear organization, in which the case study materials are marshaled in support of the essay's argument, is a necessary component of a successful paper. Finally, proper grammar, punctuation, citation methods, and other elements of clear writing are an important part of this evaluation. All evaluated materials will be returned with qualitative feedback from the instructor, as well as a quantitative grade, within two (2) weeks of being handed in for evaluation. Please contact the instructor to receive your final essay following the conclusion of the semester.

Regular attendance in this course is not optional, but mandatory. Any more than three (3) unexcused absences will result in a reduction of the participation grade by a full letter. More than six (6) absences will result in a failing grade for the course. Please be respectful to your fellow students by turning off all cell phones and tablets, arriving on time, and please avoid making excessive noise. You may use a computer to take notes, but any distracting web surfing, game playing, texting or other behavior will not be tolerated. Students who do not abide by these simple rules of courtesy will be asked to leave.

Your final grade will be calculated on the following basis:

| Grade Calculation            | Grading Scale | Grade Value |
|------------------------------|---------------|-------------|
|                              |               |             |
| First Essay Exam: 15%        | 100-93=A      | A=4.0       |
| Second Essay Exam: 20%       | 92-90=A-      | A-=3.67     |
| Brief Assignments: 30%       | 89-87=B+      | B+=3.33     |
| Participation/Attendance 10% | 86-82=B       | B=3.00      |
| Third Essay Exam 25%         | 82-80=B-      | B-=2.67     |
|                              | 79-76=C+      | C+=2.33     |
|                              | 75-72=C       | C=2.00      |
|                              | 71-69=C-      | C-=1.67     |
|                              | 68-66=D+      | D+=1.33     |
|                              | 65-62=D       | D=1.00      |
|                              | 61-60=D-      | D-=0.67     |
|                              | 59-0=E        | E=0.00      |
|                              |               |             |

Please do not hesitate to contact the instructor during the semester if you have any individual concerns or issues that need to be discussed. Students requesting classroom accommodation must first register with the Disability Resource Center (<a href="https://disability.ufl.edu/">https://disability.ufl.edu/</a>). The DSO will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code." On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor and Student Conduct Code (<a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/">https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</a>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

Plagiarism will not be tolerated in this class, as it constitutes intellectual theft and academic dishonesty. If you turn in the work of others and try to pass it off as your own, you will fail that assignment and risk expulsion from the University of Florida. I will give you the guidelines, expectations, and other information regarding the written work in this course, so you really have no reason to cheat. I take these matters very seriously and will prosecute vigorously if

provoked. Any possible rewards derived from plagiarism simply don't justify the risk! All students must conform to UF's honesty policy regarding cheating, plagiarism, and the use of copyrighted materials. Your major assignments will be monitored with the Turnitin Anti-Plagiarism Service, so please keep in mind that cheating on the assignments in this course will be much more difficult than actually doing the work.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

## **Lecture and Readings Schedule (Subject to Change)**

#### **Week One: Course Introduction**

January 6 Course Introduction

January 8 Why a Global History of Energy?

Readings: Shulman, Coal & Empire, pp. 1-13.

January 10 Measuring and Defining Energy

Readings: Wrigley, Energy and the English Industrial Revolution, pp. 1-52

## **Section 1: Organic to Mineral Energy**

### **Week Two: Origins**

January 13 Energy in Ancient Agriculture

January 15 Organic Energy Regimes

Readings: Wrigley, pp. 55-90

January 17 Why England?

First Brief Response Due

#### **Week Three: Muscles and Calories**

January 20 Martin Luther King Day—No Class Session

January 22 The Domestication of Animals

January 24 The Human Body as Energy

**Week Four: Organic Regimes in Crisis** 

January 27 The First Energy Crisis in Western Europe

Readings: Wrigley, pp. 91-139

January 29 The Rise of Steam

January 31 Organic vs. Fossil Fuels

Readings: Matthew Huber, Lifeblood, pp. vii-xxi; 1-26.

**Extra Credit Opportunity** 

Week Five: Energy Transitions I: Wood to Coal

February 3 Coal and the Industrial Revolution

Readings: Wrigley, pp. 140-210

February 5 Home Heating and Energy

Readings: Adams, "How Mineral Heat Came to American Cities," from *Home Fires: How Americans Kept Warm in the 19<sup>th</sup> Century*, pp. 39-64 (e-learning)

February 7 A Revolution in Fuels

**Second Brief Assignment Due** 

Week Six: The Hazards of the 19th Century Energy Economy

February 10 The Deepest, Darkest Abode of Men

February 12 Coal's Empire

Readings: Shulman, pp. 14-91

February 14 Leviathan: The Whale and Energy

Readings: Philbrick, "Knockdown" and "First Blood," In the Heart of the Sea: The

Tragedy of the Whaleship Essex, pp. 28-61 (e-learning)

Week Seven: King Coal

February 17 Power in the Coalfields

February 19 The Coaling Station

Readings: Shulman, pp. 92-228.

February 21 First Major Essay

### Section 2: The Rise of Oil

Week Eight: Why Petroleum?

February 24 Petropolis: The Early Boom Towns

February 26 Oil and Electricity Remake the City

Readings: Huber, pp. 27-59

February 28 Standard Oil and the Monopoly Problem

### 29 February -7 March—Spring Break—Have a Good and Safe Holiday

Week Nine: Petro-Transformation?

March 9 Automobiles and the Demand for Petroleum

Readings: Wells, "Fueling the Boom," in Car Country: An Environmental History,

pp. 173-199 (e-learning)

March 11 Better Living Through Petroleum

Readings: Huber, pp. 61-95

March 13 Liquid Gold? The Oil Regime in a Global Context

Readings: Miguel Salas, The Enduring Legacy, pp. 1-14; Arbella Bet-Shlimon, City

of Black Gold, pp. 1-18.

Third Brief Assignment Due

Week Ten: Oil Reshapes the Globe

March 16 Oil and War

March 18 Ethnic Identity in the Petroleum Age

Readings: Bet-Shlimon, pp. 19-77; Salas, pp. 15-37

March 20 Global Patterns in Oil Markets

Week Eleven: National Identity in the Petroleum Age

March 23 Venezuela

Readings: Salas, pp. 40-106

March 25 Iran

March 27 Iraq

Readings: Bet-Shlimon, pp. 79-164
Fourth Brief Assignment Due

Week Twelve: Fueling Civil Wars

March 30 Mexico

Readings: Salas, pp. 106-203

April 1 Nigeria

April 3 Second Major Essay

# **Section 3: Problems of Scarcity and Abundance**

Week Thirteen: Banking on Scarcity

April 6 OPEC and the Cartelization of Oil

April 8 The Energy Crisis of the 1970s

Readings: Huber, pp. 96-169

April 10 Peak Oil and the Dutch Disease

Week Fourteen: Unhealthy Alternatives?

April 13 The Making of a Failed State

Readings: Salas, pp. 205-250

April 15 Atoms for Peace

Readings: Fetter-Vorm, Trinity (entire book)

April 17 The Rise (and Fall) of Nuclear Energy

Fifth Brief Assignment Due

Week Fifteen: Energy's Legacy So Far

April 20 Energy and the Gulf War(s)

Readings: Bet-Shlimon, pp. 165-198

April 22 The Future?

**Sixth Brief Assignment Due** 

Final Exam Period: Wednesday, 29 April 2019, 3 pm-5 pm

### **Contact Information**

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Website: http://people.clas.ufl.edu/spadams/

Office Hours: Mondays 2-3 pm; Wednesdays, 9 am-10 am; & by appointment.

### **Course Evaluation**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.