ECO 180 Citizens, Energy, and Sustainability

Spring 2021 Syllabus

**ONLINE ASYNCHRONOUS**

**COURSE INFORMATION**

**Course Description**

This course introduces students to why they should care about energy issues and what they can do about them. Students will get a broad overview of a variety of technical, economic, environmental, and social implications of energy production and use. The course will focus on current U.S. and global energy use and policies as well as alternative energy options.  Students will learn how citizens can play a vital role in determining the direction that the future energy system and policies will take. In the course of our lifetime each of us will be asked to make individual energy decisions, including voting on energy-related issues. This course will give you a place to start in understanding the complex tradeoffs associated with sustainable energy decision-making. Students will be required to do readings and watch videos prior to class so they can spend most of the class time engaged in active learning (e.g., discussions, debates, problem-solving, games, presentations, etc).

**Undergraduate General Education Requirements**: Population and the Environment and Social Context and Institutions[[1]](#endnote-1).

**Undergraduate Prerequisites:** None

**Credits**: 3

**COURSE DELIVERY METHOD**

**Mode of Instruction**: Online asynchronous (no class meetings)

**Learning Management System**: Google Classroom (<https://classroom.google.com>, class code: **xfxtmdy**)

**Preferred Hardware**: Computer and online access

**FACULTY INFORMATION**

**Dr. Sharon Klein**

Associate Professor

School of Economics

Winslow Hall, Room 305C

207-581-3174

sharon.klein@maine.edu *(when sending email to this address, please start the subject line with the course designator (e.g., ECO 180))*

**Office Hours**: Held via Zoom; to be determined during first 2 weeks of class based on the result of a survey

**INSTRUCTIONAL MATERIALS AND METHODS**

**Required Texts:** There is no required text for this course. All required readings and videos will be available through the course website in Google Classroom (<https://classroom.google.com>, class code: **xfxtmdy**).

**Google Classroom** will be our main stop for most course content. This is where I will post learning modules, announcements and grades. You will access Google Form quizzes through Classroom as well. Classroom also links to Google Drive (GD) so if you have GD installed on your computer and set up to automatically sync, you can access the Classroom folder for this course directly from your computer’s desktop. Alternatively, you can visit your GD through your web browser and find the Classroom folder for this course in there.

**COURSE GOAL**

The main goal of this course is to expand student understanding of the current energy system, sustainable energy alternatives, and the citizen’s role in achieving a sustainable energy future.

**INSTRUCTIONAL OBJECTIVES**

1. **Describe energy production and consumption systems using appropriate units and vocabulary.**
2. **Identify existing patterns, policies and targets associated with energy consumption and production.**
3. **Identify options and constraints associated with various methods of alternative energy production, transportation, and use.**
4. **Discuss the role of the citizen in local, state and national energy policy and other sustainable energy action**.
5. **Discuss tradeoffs inherent in the selection of energy options.**
6. **Evaluate the overall sustainability of energy options.**

**STUDENT LEARNING OUTCOMES**

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

1. Explain, to an audience of mixed energy knowledge, the most pressing sustainable energy-related problems and potential solutions.
2. Evaluate technical, economic, environmental, and social advantages and disadvantages of different energy solutions.
3. Formulate sustainable energy solutions that citizens can help implement and identify specific actions citizens can take to effect these solutions.
4. Find, develop, and/or participate in local sustainable energy solutions.

#### We will measure these learning outcomes throughout the semester through learning module quizzes and exams.

**GRADING AND COURSE EXPECTATIONS**

#### Components of Final Grade:

|  |  |
| --- | --- |
| Learning Module Quizzes | 70% |
| Exams | 30% |

#### The final semester grade will be the sum of the weighted total of Learning Module Quizzes and Exams and will be assigned as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| A (93 or above) | A- (90-92.9) | B+ (87-89.9) | B (82-86.9) |
| B- (80-81.9) | C+ (77-79.9) | C (72-76.9) | C- (70-71.9) |
| D+ (67-69.9) | D (62-66.9) | D- (60-61.9) | F (59.9 or less) |

#### Learning Module Quizzes (70%)

A series of weekly learning modules will be posted on Google Classroom. Each module will include a collection of “course material”, including video lectures, readings, other videos, interactive websites, etc. and a Google Form quiz. You may use any course materials to help you answer quiz questions, but you may not discuss answers with anyone else – you must answer the questions on your own. Learning Module Quizzes will have “recommended” due dates. For students to stay on track and not get overwhelmed at the end of the semester with a heavy workload, it is important to submit assignments by the recommended due dates. However, I also want to be flexible for situations that arise, especially during this pandemic and do not want to experience frequent requests for deadline exceptions. Therefore, my policy is that students who submit assignments by the recommended deadline earn the equivalent of a 20% bonus on the assignment (e.g., if the assignment is a 10-question 10-pt quiz, you essentially get 2 points extra or 2 wrong answers that do not count against you if you turn in the assignment before the recommended deadline). If you miss the recommended deadline, you have until the last day of the final exam period to turn in the assignment. Learning module assignments will comprise 70% of the final grade.

#### Exams (30%)

#### There will be one Mid-Term Exam and one Final Exam. Exams will be based on the material presented in the Learning Modules. Each exam will be cumulative, covering all of the Learning Modules that came before it. The Mid-Term Exam will cover the first half of the Learning Modules. The Final Exam will cover ALL Learning Modules. You may use any course materials to help you answer exam questions, but you may not discuss answers with anyone else – you must answer the questions on your own. Both exams will be administered through Google Forms, similar to the Learning Module Quizzes but longer. Exams will also have recommended deadlines similar to what is described above for Learning Module Quizzes and subject to the same policy.

**COURSE POLICIES**

**Extra Credit**

Several extra credit opportunities are available - more information and specific instructions are located in the “Extra Credit” topic area in Google Classroom.

**Late/Missed Assignments**

I understand that life happens, and I don’t want to waste student time and mine discussing excuses and/or valid reasons for missed assignments. For this reason, the deadlines posted on Google Classroom are “suggested deadlines”. These are the deadlines I think will bring the most benefit for your learning and keep you on a gradual, steady learning pace, rather than trying to cram everything in at once at the end. As an extra incentive, you earn extra credit for meeting these deadlines (see above). However, your grade will not suffer if you do not meet these suggested deadlines – you can still earn full credit (but not the extra credit) as long as you submit the Google Form by the last day of the final exam period. After that final deadline, there is no further opportunity to make up missed work. Also, if you miss the suggested deadlines, I may not be available for extra help as reliably as I will for help that occurs within the normal schedule of deadlines. In other words, students who are seeking help for the current week’s worth of material will have priority in office hours over those seeking help for material that was covered weeks prior.

**Communication Policy & Extra Help**

Check Google Classroom regularly for announcements, assignments and other communication from me.

If you have a question or need extra help, please do the following **in order**:

1. Review the course materials on Google Classroom (i.e., syllabus, instructions, announcements, readings, videos, etc.) and see if there are already answers available in these materials.
2. Check the discussion threads surrounding the course materials to see if your question has already been asked and answered.
3. If your question has not been asked yet in Classroom, but it may apply to other students, please post your question to the appropriate course material discussion thread and/or ask your question in class so all students can benefit.
4. If your question is more individual in nature and/or you have not found an answer after completing steps 1-3, please email your TA first and then me if your TA is unable to help. Please send email requests for meetings **at least 48 hours ahead of time** – depending on my travel and research schedule, I may need more time than this.

I expect emails from students to the TA and me (and vice versa) to be composed professionally with complete sentences and proper English writing style with no spelling mistakes or cryptic abbreviations (i.e, an email is not a text message), a CLEAR subject line that includes the course designator (e.g., ECO 405 or ECO 505) and a clear, concise question. I reserve the right not to respond to emails that don’t meet these qualifications.

During the weekdays, I will try to respond to emails within a 36-hour turnaround time. I will try to respond to emails sent on weekends/holidays within 60 hours.  I teach other courses, do research, and have a personal life, so please be patient and respectful.

**UNIVERSITY POLICIES**

**Academic Honesty Statement:** Academic honesty is very important. It is dishonest to cheat on exams, to copy term papers, to submit papers written by another person, to fake experimental results, or to copy or reword parts of books or articles into your own papers without appropriately citing the source. Students committing or aiding in any of these violations may be given failing grades for an assignment or for an entire course, at the discretion of the instructor. In addition to any academic action taken by an instructor, these violations are also subject to action under the University of Maine Student Conduct Code. The maximum possible sanction under the student conduct code is dismissal from the University.

**Students Accessibility Service Statement**: If you have a disability for which you may be requesting an accommodation, please contact Student Accessibility Services, 121 East Annex, 581.2319, as early as possible in the term. Students who have already been approved for accommodations by SAS and have a current accommodation letter should meet with me privately as soon as possible.

**Course Schedule Disclaimer (Disruption Clause):** In the event of an extended disruption of normal classroom activities, the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

**Observance of Religious Holidays/Events:** The University of Maine recognizes that when students are observing significant religious holidays, some may be unable to attend classes or labs, study, take tests, or work on other assignments. If they provide adequate notice (at least one week and longer if at all possible), these students are allowed to make up course requirements as long as this effort does not create an unreasonable burden upon the instructor, department or University. At the discretion of the instructor, such coursework could be due before or after the examination or assignment. No adverse or prejudicial effects shall result to a student’s grade for the examination, study, or course requirement on the day of religious observance. The student shall not be marked absent from the class due to observing a significant religious holiday. In the case of an internship or clinical, students should refer to the applicable policy in place by the employer or site.

**University Sexual Discrimination Reporting Policy**

The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of **sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination** involving members of the campus, **your teacher is required to report** this information to the campus Office of Sexual Assault & Violence Prevention or the Office of Equal Opportunity.

**If you want to talk** **in confidence** to someone about an experience of sexual discrimination, please contact these resources:

For *confidential resources on campus*: **Counseling Center: 207-581-1392** or **Cutler Health Center: at 207-581-4000**.

For *confidential resources off campus*: **Rape Response Services:** 1-800-310-0000 or **Spruce Run**: 1-800-863-9909.

**Other resources:** The resources listed below can offer support but may have to report the incident to others who can help:

For *support services on campus*: **Office of Sexual Assault & Violence Prevention: 207-581-1406**, **Office of Community Standards: 207-581-1409**, **University of Maine Police: 207-581-4040 or 911**. Or see the OSAVP website for a complete list of services at <http://www.umaine.edu/osavp/>

**University of Maine COVID-19 Syllabus Statement**

COVID-19 is an infectious disease caused by the coronavirus SARS-CoV-2. The virus is transmitted person-to-person through respiratory droplets that are expelled when breathing, talking, eating, coughing, or sneezing. Additionally, the virus is stable on surfaces and can be transmitted when someone touches a contaminated surface and transfers the virus to their nose or mouth. When someone becomes infected with COVID-19 they may either have no symptoms or symptoms that range from mild to severe and can even be fatal. During this global pandemic, it is imperative that all students, faculty, and staff abide by the safety protocols and guidelines set forth by the University to ensure the safety of our campus. All students are encouraged to make the Black Bear Cares Pact to protect the health of themselves, the health of others, and the College of Our Hearts Always.

**Black Bears Care Pact:** [**https://umaine.edu/return/black-bears-care/**](https://umaine.edu/return/black-bears-care/)

**Symptom checking:** The symptoms of COVID-19 can range from mild to severe, and even people with mild symptoms may transmit the virus to others. Students are encouraged to use the symptom checking app each day before attending class or moving about campus and follow the recommendation prompted within the app. Students should monitor for the following symptoms daily: fever (temperature >100.4F/38.0C) or chills, new cough, loss of taste or smell, shortness of breath/difficult breathing, sore throat, diarrhea, nausea, or vomiting, or the onset of new, otherwise unexplained symptoms such as headache, muscle or body aches, fatigue, or congestion/runny nose.

**Physical distancing:** Students need to make every effort to maintain physical distancing (6 feet or more) indoors and outdoors including within classrooms. The University classrooms and physical spaces have been arranged to maximize physical distancing. Follow the traffic patterns outlined in each building and outdoor space to avoid crowding. If students are in an academic setting (i.e. clinical or lab class) that requires them to reduce physical distancing, they should follow the instructor’s guidelines.

**Face coverings:** Students must wear appropriate face coverings in the classroom. Face coverings must be worn in indoor and outdoor spaces on campus unless people are alone in a room with a door closed or when they are properly physically distanced and do not expect someone to approach them. When face coverings are removed people are placing themselves and those surrounding them at increased risk for COVID-19.

**Eating and drinking in classrooms:** Students may not eat or drink in the classrooms and are encouraged to take their food or drink into areas designated for these purposes where they can maintain 6 feet physical distance from others.

**Hand hygiene:** Proper hand hygiene is an effective measure to prevent the spread of COVID-19. Students should wash their hands often with soap and water or use a hand sanitizer with at least 60% alcohol, especially after using the bathroom, before eating or drinking, and before and after going to class or university spaces such as the recreation center, library, or dining halls.

**Contingency plans:** Classes will be held in various formats to offer flexibility, compassion, and empathy during these unprecedented times. Under certain circumstances, students or instructors may need to miss classes or in-person classes may be disrupted. Students are expected to notify their instructor if they are unable to attend an in-person or online class but will not be penalized for missing class due to illness or the need to care for a family member affected by COVID-19. If a disruption occurs, your instructor will provide communication and contingency plans.

**What to do if you have or suspect you have COVID-19:** If you have symptoms of COVID-19 or have been possibly exposed to someone with COVID-19, you should stay home, not interact with others, and contact your health care provider immediately to be tested for COVID-19. You may not attend in-person classes and should suspend interactions with others until you are tested. Prior to receiving test results you should quarantine in your living area according to the Maine CDC guidelines below. Please follow the guidance of your health care professional regarding testing, quarantine, and isolation during the testing process and potential illness period.

**What to do if someone you know has or may have COVID-19:** If someone you know or that you have had close contact with (defined by the ME CDC as 15 mins or more within 6 feet or less) has tested positive for COVID-19, you should stay home and quarantine according to the guidance of the ME CDC, contact your health care provider, and continue to monitor for symptoms. You may be required to quarantine and/or be tested for COVID-19 under these circumstances. You may also have been exposed to COVID-19 by someone you do not know, and it is possible that you could be contacted through contact tracing to determine if you were exposed. Everyone should respond to these confidential questions to ensure the safety of themselves and those around them.

**Maine CDC guidelines:**<https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/airborne/coronavirus/general-information.shtml>

**If you have questions or would like additional information related to the University of Maine COVID-19-specific policies or procedures please use the following sources:**

University Webpages: [umaine.edu/return](http://umaine.edu/return) and [together.maine.edu](http://together.maine.edu/)

COVID-19 Information line: 207.581.2681

Emergency Operations Center Email Contact: [umaine.alerts@maine.edu](mailto:umaine.alerts@maine.edu)

**COURSE SCHEDULE**

Please access the most updated Course Schedule on Google Classroom.

1. Population and the Environment: help students to understand how humankind interacts with our finite physical and biological environment by addressing:

   * The role of both local and global environmental change on the quality of human life
   * The pervasive role of human population growth on environmental quality and the quality of life, both in industrial and developing countries
   * The influence of cultural, religious, economic, educational and political factors on population growth and environmental quality
   * Possible solutions to the population/environmental problems, which may include the role of technological advancements, a re-examination of educational and political institutions, enlightened reassessment of traditional religious and economic conceptions, and rethinking contemporary Western conception of “the good life”

   Social Context and Institutions: focus upon the ways in which social contexts shape and limit human institutions.  The specific focus may be upon ways in which social contexts and institutions interact with human values, the role of institutions in expressing cultural values, or the social and ethical dimensions attendant upon particular academic disciplines. [↑](#endnote-ref-1)