SYLLABUS
ENR/AEDE 2500
Introduction to Sustainability
Fall 2021

COURSE OVERVIEW

Instructors

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Office hours: By appointment   By appointment

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Course description

This course introduces students to principles from various disciplines related to social, economic and environmental sustainability. Students will evaluate key concepts and examine tradeoffs that are a part of sustainability action using case studies that are used to represent sustainability challenges that can be viewed from numerous angles.

Credit hours: 3

Goals: Sustainability requires knowledge of human and natural systems and the skills to manage change and think holistically across scales in time and space. The course introduces skills and concepts necessary for a fruitful career in sustainability and critically evaluating key concepts and popular discourse. The primary goals of this course are to (1) develop the foundational knowledge and skills that students will require to grasp the multi-dimensional and multi-disciplinary nature of sustainability (2) introduce students to sustainability concepts from
different disciplines and (3) introduce the tradeoffs that are often a part of sustainability thinking, planning, and action. The course also provides students with a common framework for additional sustainability-oriented courses offered across campus. Students will be introduced to the fundamental principles, concepts, and knowledge from ecology and environmental science, economics and business, community and international development and sustainability science. Because sustainability can be laden with ideological thinking that can sometimes cloud important issues and avenues for advancement, we will employ a scientific perspective to examine the obstacles and opportunities for social, economic, and environmental sustainability.

Course learning outcomes

By the end of this course, students should successfully be able to:

1. Recall and critically assess various definitions of sustainability and sustainable development
2. Compare and contrast key concepts and ideas in sustainability, economics, business, ecology and conservation biology, and community and international development.
3. Describe how a scientific approach is important for examining the connections, tradeoffs, and synergies across environmental, economic, and social components that are involved in achieving sustainability goals
4. Demonstrate an appreciation of how ecosystem function changes in response to human and nonhuman influences, how humans use and impact ecosystem services, and the implications of these human-environment interactions for sustainability
5. Discuss their own ethics and values related to sustainability, the obstacles to changing their own behavior, and how those obstacles might apply to others
6. Demonstrate a basic understanding of how organizations, markets, and institutions can help and hinder achievement of a sustainable society
7. Apply sustainability concepts to evaluate case studies that explore sustainability goals and outcomes of programs or policies at individual, organizational, community, regional, and global scales
8. Exhibit independent thinking to understand the environmental, economic, and social components and trade-offs of sustainability

IN THE CLASSROOM

As of Aug. 2, all students, faculty and staff are required to wear masks in classrooms and other shared indoor spaces, regardless of their vaccination status. These include common areas, conference rooms, shared office spaces, hallways, buses and shared vehicles on all Ohio State campuses. Individuals should not eat in classrooms. Individuals can take an occasional drink but should take masks off only as necessary.
COURSE MATERIALS

Textbooks: There is no required textbook. Instead, we use a variety of materials that you will be required to read, view, or listen to. These materials will all be available through Carmen.

Optional Readings: Some optional readings will be provided in the course sections and will be clearly noted as optional.

Course technology: For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

- Carmen Help: https://resourcecenter.odee.osu.edu/carmencanvas
- Self-Service and Chat support: http://ocio.osu.edu/selfservice
- Phone: 614-688-HELP (4357)
- Email: 8help@osu.edu
- TDD: 614-688-8743

Carmen Access
You will need to use BuckeyePass multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click “Enter a Passcode” and then click the “Text me new codes” button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and the IT support staff will work out a solution with you.
GRADING AND FACULTY RESPONSE

How your grade is calculated

<table>
<thead>
<tr>
<th>ASSIGNMENT CATEGORY</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework 1: “Six words” for sustainability</td>
<td>40</td>
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<tr>
<td>Homework 2: Driving patterns and consumption</td>
<td>40</td>
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<td>Homework 3: Klamath basin dams</td>
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<td>Homework 4: Corporate sustainability</td>
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<td>Homework 5: GMOs, land use, and biodiversity</td>
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<td>Homework 6: New ideas for sustainability</td>
<td>40</td>
</tr>
<tr>
<td>12 weekly quizzes (5 pts each – due Sunday at 11:59pm on weeks they are assigned)</td>
<td>60</td>
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<tr>
<td>Mid-term exam 1</td>
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<tr>
<td>Mid-Term exam 2</td>
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<tr>
<td>Final Exam</td>
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<td>Total</td>
<td>500</td>
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See course schedule, below, for due dates.

Grading scale

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B
80–82.9: B-
77–79.9: C+
73–76.9: C
70–72.9: C-
67–69.9: D+
60–66.9: D
Below 60: E
Assignments

HOMEWORK
Six homework assignments will be provided during the term. These homework assignments focus on developing your critical thinking skills by providing you with an opportunity to apply the material learned in the modules to real world situations. Homework assignments are open book but must be completed individually and without the help of other individuals.

WEEKLY QUIZZES
There are 12 graded online quizzes during the term. They are required and will be due by 11:59pm on the Sunday of the week they are assigned. Quiz questions may consist of true/false, multiple choice and short answer questions. All quizzes will be taken online using Carmen. If you do not take the quiz before it closes, you will earn a grade of 0%. Quiz questions will come from lectures, reading material, or other materials (e.g., videos or podcasts) that are assigned for that week. Each student must complete the quiz on her or his own. You are NOT permitted to receive assistance from anyone else during the quiz. You are NOT permitted to take a quiz as part of a group. You are on your honor to complete the quizzes on your own without help from another person. You ARE permitted to use notes, slides, calculator, textbook, journal articles, books, and Internet during the exam. Additional details will be provided during the semester.

ONLINE EXAMS
Examinations may consist of true/false, multiple choice, and short answer questions. All exams will be taken online using Carmen. Exams will be open on Carmen for approximately 24 hours and you can take the exam anytime during these 24 hours. You will be given 80 minutes to complete the exam. This is the typical time that would be allowed if the exam were given in a regular classroom setting. If you fail to complete the exam on Carmen before it closes you will earn a grade of 0%. A significant number of exam questions will come from material presented in lectures. Additional material will be drawn from the readings, videos, or other assigned materials. Each student must complete the exam on her or his own. You are NOT permitted to receive assistance from anyone else during the exam. You are NOT permitted to take the exams as part of a group. You ARE permitted to use notes, slides, calculator, textbook, journal articles, books, and Internet during the exam. Additional details will be provided during the semester.

There are NO make-up exams except for valid reasons (e.g., medical excuse). If you are sick, you must have a note signed by your medical doctor (i.e. a licensed physician)
and dated the same day as the exam and excusing you from the 24-hour period that the
exam is open. Otherwise, you will receive a 0 on the exam. The instructor will determine
if your excuse is valid. If you do not have a reasonable excuse for missing an exam,
then you will receive a zero for the exam. Approved make-up exams will consist of
multiple choice, short-answer and essay questions.

Late assignments

Please refer to Carmen for due dates. To receive full credit, work must be turned-in on time
and in condition to be evaluated. Late assignments will incur a deduction of 10% of the
total point value for each 24-hour period that they are late (including weekends). Late
assignments can be turned in for up to 7 days (including weekends) after they are due with
the penalty described above. After that students will receive a 0 for the assignment.
Excuses for missed or late assignments – even valid ones – will not be accepted more than
7 days after the assignment due date. Excuses for missing an exam must be presented to
the instructors prior to the exam when at all possible.

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all,
please remember to be respectful and thoughtful.

- **Tone and civility**: Let's maintain a supportive learning community where everyone feels
  safe and where people can disagree amicably. There is likely to be disagreement about
  which sustainability challenges should be prioritized and why, about which causes of
  sustainability problems should receive the most attention, and about what solutions
  should be pursued. That disagreement is OK, and it is welcomed – as long as they are
  voiced calmly and in a friendly and civil tone.

OTHER COURSE POLICIES

Academic integrity policy

- **Written assignments**: Your written assignments should be your own original work. In
  formal assignments, you should follow APA style to cite the ideas and words of your
  research sources. You are encouraged to ask a trusted person to proofread your
assignments before you turn them in--but no one else should revise or rewrite your work.

- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you’ve explored in previous courses, please discuss the situation with me.

- **Collaboration and informal peer-review:** The course includes many opportunities for formal collaboration with your classmates. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on a quiz or assignment is not permitted. If you're unsure about a particular situation, please feel free just to ask ahead of time.

### OHIO STATE’S ACADEMIC INTEGRITY POLICY

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University’s *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University’s *Code of Student Conduct* and this syllabus may constitute “Academic Misconduct.”

The Ohio State University’s *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the University or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University’s *Code of Student Conduct* is never considered an “excuse” for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University’s *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages ([COAM Home](#))
- *Ten Suggestions for Preserving Academic Integrity* ([Ten Suggestions](#))
- *Eight Cardinal Rules of Academic Integrity* ([www.northwestern.edu/uacc/8cards.htm](http://www.northwestern.edu/uacc/8cards.htm))
Safe and Healthy Buckeyes

Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (https://safeandhealthy.osu.edu), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will result in a warning first, and disciplinary actions will be taken for repeated offenses.”

Disability Accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Counseling and Consultation Services/Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life Counseling and Consultation Services (CCS) by visiting ccs.osu.edu or calling (614) 292- 5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org.

David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor. He is available for new consultations and to establish routine care. To schedule with David, please call 614-292-5766. Students should mention their affiliation with CFAES when setting up a phone screening.
Creating an environment free from harassment, discrimination, and sexual misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.

- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

This course adheres to The Principles of Community adopted by the College of Food, Agricultural, and Environmental Sciences. These principles are located on the Carmen site for this course; and can also be found at https://go.osu.edu/principlesofcommunity. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (https://equityandinclusion.cfaes.ohio-state.edu/). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at https://studentlife.osu.edu/bias/report-a-bias-incident.aspx.
COURSE SCHEDULE

- Information on assigned readings can be found on the Carmen site in the module for each week.
- Due dates for all assignments, discussions and quizzes will be clearly indicated on the Carmen site for the class.

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<th>Lectures / Dates</th>
<th>Topics</th>
<th>Assignments &amp; Quizzes</th>
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<td></td>
<td>SECTION I – INTRODUCTION AND BACKGROUND</td>
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<tr>
<td>1</td>
<td>Lect 1 – Aug 24</td>
<td>Class overview and overview of the Anthropocene</td>
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<td>Lect 2 – Aug 26</td>
<td>Introduction to sustainability – definitions and perspectives</td>
<td>Weekly Quiz 1 (Due Sunday)</td>
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<td>2</td>
<td>Lect 3 – Aug 31</td>
<td>Introduction to sustainability – foundational concepts</td>
<td>Homework: Six words for sustainability</td>
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<td>Lect 4 – Sept 2</td>
<td>Introduction to economic and business concepts</td>
<td>Weekly Quiz 2 “Six words for sustainability – comments due”</td>
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<tr>
<td>3</td>
<td>Lect 5 – Sept 7</td>
<td>Overview of development, poverty, community &amp; inequality</td>
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<td></td>
<td>SECTION II - CONSUMPTION</td>
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<tr>
<td>3</td>
<td>Lect 6 – Sept 9</td>
<td>Introduction to consumption</td>
<td>Weekly Quiz 3</td>
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<td>4</td>
<td>Lect 7 – Sept 14</td>
<td>Econ and business perspectives on consumption I</td>
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<td>Lect 8 – Sept 16</td>
<td>Econ and Business perspectives on consumption II</td>
<td>Weekly Quiz 4</td>
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<td>5</td>
<td>Lect 9 – Sept 21</td>
<td>Social, psychological, and anthropological perspectives on why we consume</td>
<td>Homework: Driving patterns and consumption</td>
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<td>Lect 10 – Sept 23</td>
<td>How can we consume more sustainably I?</td>
<td>Weekly Quiz 5</td>
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<tr>
<td>6</td>
<td>Lect 11 – Sept 28</td>
<td>How can we consume more sustainably II?</td>
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SECTION III - WATER
<table>
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<tr>
<th>Lect</th>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
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<tbody>
<tr>
<td>6</td>
<td>Sept 30</td>
<td>Introduction to Water</td>
<td>Weekly Quiz 6</td>
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<tr>
<td>7</td>
<td>Oct 5</td>
<td>The economics of water quality and quantity</td>
<td>Midterm Exam 1</td>
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<td>Oct 7</td>
<td>Water and development</td>
<td>Weekly Quiz 7</td>
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<td>8</td>
<td>Oct 12</td>
<td>Business and Water</td>
<td>Homework: Klamath Dams</td>
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<td>Oct 14</td>
<td>FALL BREAK</td>
<td>No weekly quiz</td>
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<td>9</td>
<td>Oct 19</td>
<td>Introduction to Climate/Energy</td>
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<td>Oct 21</td>
<td>Climate/Energy - economics and business</td>
<td>Weekly Quiz 8</td>
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<td>10</td>
<td>Oct 26</td>
<td>Guest Lecturer</td>
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<td>Oct 28</td>
<td>Climate/Energy economics and business II</td>
<td>Weekly Quiz 9</td>
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<td>Nov 2</td>
<td>Climate/Energy and international development</td>
<td>Homework: Corporate sustainability</td>
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<td>11</td>
<td>Nov 4</td>
<td>Climate/energy and communities</td>
<td>Weekly Quiz 10</td>
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<td>12</td>
<td>Nov 9</td>
<td>Introduction to biodiversity</td>
<td>Midterm Exam 2</td>
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<td>Nov 11</td>
<td>VETERAN’S DAY</td>
<td>No weekly quiz</td>
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<tr>
<td>13</td>
<td>Nov 16</td>
<td>Biodiversity and sustainable development</td>
<td>Homework 5: new ideas for sustainability (can be submitted at any time before)</td>
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<td>Nov 18</td>
<td>Communities and Conservation</td>
<td>Weekly Quiz 11</td>
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<td>14</td>
<td>Nov 23</td>
<td>Biodiversity and community development (Film)</td>
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<td>Nov 25</td>
<td>THANKSGIVING</td>
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<td>Week</td>
<td>Lecture Date</td>
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<tr>
<td>15</td>
<td>Lect 29 – Nov 30</td>
<td>Biodiversity and economics</td>
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<td>Lect 30 – Dec 2</td>
<td>GMOs case study discussion</td>
<td>Weekly Quiz 12</td>
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<td>Homework 6: GMOs and Biodiversity</td>
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<td>16</td>
<td>Lect 31 – Dec 7</td>
<td>New ideas for sustainability and class-wrap up</td>
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<td>Dec 14th</td>
<td>FINAL EXAM: 2:00 – 3:45 pm</td>
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