Instructor: Dr. Kristi Hannam  
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Phone: 245-5790  
Email: hannam@geneseo.edu

**Office Hours:** Mondays, 9:30-10:30, Wednesdays 1-2; Thursdays 4-5:00 or by appointment

**Required Readings:** There is not a single, required textbook for this course. Daily readings will be posted to Canvas.

**Course Description:**

Sustainability is a problem-driven field that focuses on both the protection of the environment and the maintenance and enhancement of life for current and future human generations. This sustainability course will explore some of the major scientific issues behind our understanding of sustainability focusing on major themes of biodiversity, water, global change, energy and resources, food and agriculture, waste and human health. An examination of potential solutions will require an understanding of how the dynamic relationship between societal changes and environmental changes influence human-environment systems. Particular attention will be given to current local issues in New York, and in the United States through lectures, case studies and projects.

**Learning Outcomes:** By the end of the course, students will:

1. Be able to define the concept of sustainability and its components, and understand that sustainability problems and solutions are parts of complex systems made up of multiple interacting and inextricably linked elements

2. Understand the scientific principles of selected environmental problems and solutions and be able to critically evaluate sustainability related data and arguments

3. Investigate the environmental sustainability of a chosen topic by evaluating peer-reviewed literature related to the topic, evaluating their arguments and synthesizing them into a novel exploration of the topic.

4. Work successfully with groups or a partner on case studies, scientific communication projects and a major final project.

The following schedule is NOT set in stone; I may change the order of topics. More detailed reading notes will be found on MyCourses. It is very unlikely the Exam dates will change, so be sure to mark those on your calendar.

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<td>Other measures of human impact on the earth</td>
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GRADING:
Final grades will be assigned according to the following point distribution: 93+, A; 90-92%, A-; 87-89%, B+; 83-86%, B; 80-82%, B-; 77-79%, C+; 73-77%, C; 70-72%, C-; 60-69%, D; <60%, E. Under most circumstances, there will be no adjustment to your grades after the calculation.

**IMPORTANT** Grades for most assignments and Exams will be posted in our Canvas site, however, the gradebook in Canvas is NOT set up to calculate your final grade. I will export all your Canvas grades and compute your final grade offline.

Final Grades will be based on the following breakdown of points for assignments, classwork and exams:

- Homeworks & Case Studies 20%
- Exams 50%
- Student Group Presentation 5%
- Final Paper & Presentation 25%
- TOTAL 100%

HOMEWORK AND CASE STUDIES:
For most class periods there will be assigned readings that may consist of journal articles, book chapters, websites or other source material. In some cases extra outside reading to understand the scientific/ecological basis of a sustainability issue may be necessary. In that case, Dr. Hannam will announce in class that students should have a working understanding of a particular scientific concept (eg. the Nitrogen Cycle, Food Webs and Trophic Cascades) and you will be responsible for making sure you are up to speed. You are expected to read the assigned readings BEFORE coming to class, and be prepared to engage in a class discussion. A short 1-2 page position paper, or in-class response assignment may be assigned for some of the reading assignments. Case Studies done in class as a whole class or in small groups will typically have a short writing/data analysis component that will be completed individually and turned in as homework.

EXAMS:
The two Exams will be comprised of (1) an in-class section made up of multiple choice and short answer questions based on the background readings and lectures, and (2) a take-home section comprised of 1-2 essay/analysis questions.

STUDENT GROUP CLASS PERIOD:
At the end of each topic-section of the course, a student groups will be responsible for leading a class period on a Sustainability Issue related to that topic. The issue should ideally be a New York State issue, but should definitely be a North American issue. The class period may contain a presentation, but must also contain some other active learning group activity around the issue: a debate, a case study, a discussion/analysis of (a) journal article(s) or data, or another activity approved by Dr. Hannam. More details about this assignment will be provided in the first two weeks of class.

FINAL PAPER & PRESENTATION:
Students will work together to choose a sustainability issue about which to produce a 10-page research paper and 15-minute presentation. Presentations will be given to the class during the final two class periods and the final exam period. Final papers will be due during the final exam period. Topics MUST focus on biological aspects of the issue. There will be interim assignments associated with the paper and presentation, and further details will be given in class.

PARTICIPATION:
10 points/discussion or activity day – based on contributions to class-wide and small group discussions & my assessment of your engagement in the class activities. If you do not offer any verbal contributions to the class discussions, you will not get class participation credit for the discussion.

ELECTRONIC DEVICES IN CLASS
Please make sure all cellphones, laptops and other electronic devices are on “silent” during class. While laptops and other electronic devices can be useful learning tools in class, there is strong evidence that they can also be serious distractions from learning for the user, and for other people seated around the user. I will request you bring laptops to class on some days to access online material and data, however, please be mindful of how you use electronic devices in class, and their impact on the other learners around you. Also keep in mind that it is pretty clear to the instructor at the front of the classroom when electronic devices are being used for learning, and when they are being used for other (usually entertainment and communication) purposes. Not only is it apparent to the instructor, research (Ravizza et al. 2016) measuring the duration of student Internet use in class found that students who used laptops in class for nonacademic reasons had poorer class performance, as indicated by their final grade.

ACCOMMODATIONS
SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities. Accommodations will also be made for medical conditions related to pregnancy or parenting. Students should contact the Dean in the Office of Disability Services (585-245-5112) and their faculty to discuss needed accommodations as early as possible in the semester.

ACADEMIC DISHONESTY
SUNY-Geneseo’s policies on academic dishonesty are summarized in the Code of Student Conduct found in the Geneseo Undergraduate Bulletin online. Plagiarism and other forms of academic cheating are prohibited and may result in a zero on an assignment or exam. Plagiarism and cheating will be reported first to the departmental office, and may be referred to the Campus Judicial Council. Repeated incidents will result in failure of the course. Exams and term papers will be checked for plagiarism. If you have any questions about what constitutes academic dishonesty please contact the instructor.

PLAGIARISM
Plagiarism is very serious. If you plagiarize, you will be prosecuted. No excuses. No second chances -- even if you had planned to graduate. Plagiarism doesn't just happen accidentally. You are responsible for determining how to properly cite the work and ideas of other people. If you are unsure or have questions, refer to Milne library's links for citations (under “Research Help”). If you still need assistance, ask your instructor or a librarian. Students sometimes think that citations are necessary only when using material that is a direct quote. This is not true. A citation is necessary any time you include any information or idea that is not yours (i.e., directly or indirectly derived from someone else’s thinking or writing). Any non-original idea that you fail to cite is plagiarized. Plagiarism is intellectual stealing and the consequences of plagiarism are substantial. In order not to be accused of plagiarism, all a student needs to do is properly cite sources. For the purpose of this policy, plagiarism shall be considered to be deliberate representation of someone else's words or ideas as one's own or the deliberate arrangement of someone else's material(s) as one's own.

COMMUNICATION WITH THE INSTRUCTOR
The best way to communicate with Dr. Hannam is directly, face-to-face during office hours. If this is not possible, email is the second most favored means of communication. Dr. Hannam will make every effort to respond to emails sent to
her during the workday by 6pm the same day. Emails sent after 5pm may not be answered until the following workday depending on Dr. Hannam’s schedule outside of work.

**Dr. Hannam will communicate with the class primarily via “Announcements” on the course Canvas page. Please make sure you check the “Announcements” page regularly and/or sign up for notifications to your phone or email when additions have been made to the “Announcements” page.

TAKING CARE OF YOUR MENTAL HEALTH

The Biology major is demanding, and as your instructor I try to keep in mind that mine is not the only course you are taking, and that most of you also have other demands on your time and attention in addition to your coursework. Juggling your many responsibilities can have an impact on your mental health. With this in mind, I realize that diminished mental health, including significant stress, mood changes, excessive worry, or problems with eating and/or sleeping can interfere with optimal academic performance. The source of symptoms might be strictly related to your course work; if so, please make an appointment to speak with me one-on-one. I realize, problems with relationships, family worries, loss, or a personal struggle or crisis can also contribute to decreased academic performance.

SUNY Geneseo provides mental health services to support the academic success of students. Counseling Services, a part of the Lauderdale Center for Student Health & Counseling, offers free, confidential psychological services to help you manage personal challenges that may threaten your well-being and success here in college.

In the event I suspect you need additional support, I will express my concerns and the reasons for them, and remind you of resources (e.g., Counseling Services, Career Services, Dean of Students, etc.) that might be helpful to you. It is not my intention to know the details of what might be bothering you, but simply to let you know I am concerned and that help, if needed, is available.

Getting help is a smart and courageous thing to do -- for yourself and for those who care about you.

COPYRIGHT NOTICE

Many of the materials that are provided to students in this course have been created by Dr. Hannam, or by the publisher of our textbook. Students would be best to assume that all course materials are protected by legal copyright. Copyright will be indicated by a “©DATE AUTHOR” on the document. Copyright protection means that reproduction of this material is prohibited without the author’s consent. Thus, students are prohibited from sharing or posting copyrighted material to any websites outside our course Canvas site. This includes but is not limited to sites such as StudyBlue: www.studyblue.com Course Hero: www.coursehero.com Studysoup: www.StudySoup.com Chegg Study: www.chegg.com Oneclass: www.oneclass.com Gradebuddy: www.gradebuddy.com Quizlet: www.quizlet.com Students are also prohibited from reproducing material to be shared with other more limited groups (eg. sorority/fraternity test bank). Be aware that UUP (Union of University Professionals, the union representing faculty on this campus) is seeking to take legal action against these and other sites, and that posting or selling copies of materials to such sites may put a student in legal jeopardy.
COURSE READINGS & EXERCISES

Jan 17: Intro to the Course
Emailed article – Ecoperception Gap

Jan 19: Defining the Anthropocene

Jan 24- 26: The Environmentalist’s Paradox
HANNAM - The Environmentalist’s Paradox Case Study Handout.

Jan 31- Feb 2: The Environmentalist’s Paradox
HANNAM - The Environmentalist’s Paradox Case Study Handout.
Worm & Paine. 2016. Humans as Hyperkeystone species. TREE

Feb 7-9:
HANNAM - Handout

Feb 14 – 16: Biodiversity & Sustainability
HANNAM - Handout
Chivian & Bernstein – How is biodiversity threatened by human activity?
Scheffers et al. 2016. Climate change impacts from genes to biomes to people.

Feb 21-23: Biodiversity and Sustainability
HANNAM – Lyme Disease Case Study.

Feb 28: Biodiversity & Sustainability
TBA

Mar 2: MIDTERM EXAM 1

Mar 7-9: Energy & Sustainability
HANNAM - The Biofuels Challenge Case Study - Handout

Mar 21-23: Energy & Water
Student Group-Led Class reading assignment – TBA

**March 28-30**
Reading TBA
HANNAM – Case Study

**April 4-6: Food & Ag**
TBA

**April 11-13: Food & Ag**
TBA
Assigned Papers for Review

**April 18: Food & Ag**
TBA
**April 20: MIDTERM 2**

**April 25: GREAT DAY – NO CLASS**