

# Syllabus: ENSP 2000 – Intro to Environmental Science

**Term:** Fall 2019 (August 21<sup>st</sup> – December 13<sup>th</sup>)

**Time:** MWF 2:30 – 3:20pm

**Location:** Brackett Hall 322

**Instructor:** John Sherwood

Watt Center 409

(224) 558-3844 (Text before calling. Include your name.)

jgsherw@clemson.edu (Emails must include ENSP2000 in subject)

Discord: JGSherw#5224

Skype: j.sherwood7

**Office hours:** 10am-5pm MWF – text before showing up. You can also call me through Skype, Discord, or Google Hangouts.

## 1. Required Materials

- 1) Textbook - *Scientific American Environmental Science for a Changing World, Third Edition* – Susan Karr (ISBN: 1319059627) I'd recommend a paper copy. \$28 rental at Amazon.
- 2) Laptop for in-class exercises. Must use Windows or macOS – some software will not work on a Linux machine.
- 3) Tableau (free software). We will learn and use this throughout the semester. Free download here: <https://www.tableau.com/academic/students>

## 2. Optional Materials

- 1) *Storytelling with Data: A Data Visualization Guide for Business Professionals* – Cole Nussbaumer Knaflc (ISBN: 1119002257) \$27 at Amazon. Free e-book through Clemson library. Chapters from this book may become extra credit activities. I have a few copies available at my office – you do not need to buy this to take part in the extra credit, but you may want your own copy.

## 3. Course Description

ENSP 2000 Introduction to Environmental Science: Basic principles of environmental science including ecology, energy, resources, waste management; and air, water, and soil pollution. Consideration of issues, specific cases, investigative approaches and remedial action. Preq or concurrent enrollment: Any course that satisfies the Natural Science with a Lab General Education requirement. \*This course can satisfy the STS (Science, Technology, and Society) requirement.

## 4. Course management/communication

A Canvas site for this class will be used for announcements, supplementary materials, and general information (e.g., assignments, suggestions for study), as well as records of grades. I also send notices and information by email using Canvas. Canvas uses your Clemson student email addresses. Be sure to maintain your email account to avoid undeliverable mail occurrences.

## 5. Grading

- Homework: 14%
- Participation: 11%
- Class-wide Project: 20%
- Final Paper: 20%
- Tests / Quizzes: 25%
- Final Presentation: 10%

Exams: Two or three non-cumulative tests will be given throughout the semester. There will be a final paper in place of a final exam.

Final grades will generally be assigned according to the scale given below. However, the instructor reserves the right to curve grades. In no case will curving be done if it results in a lower letter grade.

A	B	C	D	F
90%	80%	70%	60%	<60%

## 6. Attendance

Attendance in class is expected as a matter of maturity, unless exceptional circumstances (sickness, personal issues) prevent. This should be discussed with the instructor *before* the class to be missed. Unexcused absences during the course will negatively affect the student's participation grade. Each unexcused absence will lower the participation grade component by 1%. Your attendance is a measure of your level of commitment to the education process.

## 7. Assignments

Homework will be assigned most weeks (on Mondays) via Canvas and will usually be due electronically (upload to Canvas) the following week (on Monday), before the beginning of class. Homework content will include problem solving, reading assignments, written critiques of readings, etc. In addition to formal assignments, students are asked to pay attention to current topics in environmental science and sustainability. Late homework will receive half credit. Assignments later than 3 days will receive no credit. All assignments must be submitted before the final day of class to receive a passing grade.

## 8. Policies

- In the event of an unplanned absence by the professor, class will be cancelled after 15 minutes
- Academic honesty is expected. Any violation of Clemson University policy as described in the Student Handbook will not be tolerated and may result in a failing grade.
- Use of electronic devices will not be permitted during class, except for the purposes of taking notes. Note that recent studies have shown hand-written notetaking is more effective than electronic notetaking. Breaching this policy will result in a 1% reduction in total course grade per minute.
- Any exam that was scheduled at the time of a class cancellation due to inclement weather will be given at the next class meeting unless contacted by the instructor.
- Any extension or postponement of assignments or exams must be granted by the instructor via email or Canvas within 24 hours of the weather-related cancellation.

## 9. Academic Integrity

*As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.*

Use of work turned in for credit on previous course must be discussed with the instructor. Acts of academic dishonesty will result in a formal written charge of academic dishonesty, including a description of the misconduct to Dr. Jeff Appling, Associate Dean of Undergraduate Studies.

Course Component / Activity	Specific examples of academic <b><i>dishonesty</i></b>
In-class tests	<ul style="list-style-type: none"><li>- Use of internet</li><li>- Use of cell phones / smart watches</li><li>- Looking at another student's test</li><li>- Copying or utilizing another student's work during the test</li></ul>
Homework	<ul style="list-style-type: none"><li>- Use of any solutions manual</li><li>- Use of online solutions websites (e.g. Chegg)</li><li>- Copying another student's work</li><li>- Copying and/or modifying another student's files</li></ul>
Projects	<ul style="list-style-type: none"><li>- Use of fake data</li><li>- Use of other material (including text and diagrams) without attribution</li></ul>

Course Component / Activity	Specific examples of academic <b><i>honesty</i></b>
In-class tests	<ul style="list-style-type: none"><li>- Asking professor for clarification</li></ul>
Homework	<ul style="list-style-type: none"><li>- Working with another student on specific problems, after you are stuck on a problem</li><li>- Discussing ideas and general tips with other students</li><li>- If you receive significant help from another student, you must cite them in your answer</li></ul>
Projects	<ul style="list-style-type: none"><li>- Consulting with others on general ideas, data sources, etc.</li></ul>

## 10. Accessibility

*Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing [studentaccess@lists.clemson.edu](mailto:studentaccess@lists.clemson.edu), or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – dropins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.*

## 11. Title IX Statement

*Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at <http://www.clemson.edu/campus-life/campus-services/access/title-ix>. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 110 Holtzendorff Hall, 864.656.3184 (voice) or 864.656.0899 (TDD).*

Week	Day	Date	Topic	Notable Deadlines
1	1	August 21	Course Introduction	
	2	August 23	Ethics and Science	
2	3	August 26		
	4	August 28	Energy	
	5	August 30		
3	6	September 2		
	7	September 4	Climate Change	
	8	September 6		
4	9	September 9		Project Phase 1 & 2
	10	September 11	Ecology	
	11	September 13		
5	12	September 16		
	13	September 18	Evolution & Biodiversity	Project Phase 3
	14	September 20		Project Phase 4
6	15	September 23	Test 1	
	16	September 25		
	17	September 27	Populations	
7	18	September 30		
	19	October 2	Economics	
	20	October 4		
8	21	October 7		
	22	October 9	Water	
	23	October 11		Project Phase 5
9	24	October 14	FALL BREAK	
	25	October 16	Land Use	
	26	October 18		Project Phase 5R
10	27	October 21	Test 2	
	28	October 23		Project Phase 6
	29	October 25	Nonrenewables	
11	30	October 28		
	31	October 30	Air Quality	
	32	November 1		
12	33	November 4		
	34	November 6	Renewables	
	35	November 8		Project Phase 7
13	36	November 11	Food	
	37	November 13		
	38	November 15		Project Phase 7R
14	39	November 18	Waste Management	
	40	November 20	Test 3	
	41	November 22	TBD	
15	42	November 25	Class Presentations	
	43	November 27	THANKSGIVING	
	44	November 29		
16	45-47	December 2-6	Class Presentations	Final Paper Due