Time: Monday & Wednesday 4:00 p.m. to 5:15 p.m. (January 19 - May 9, 2022)

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Introduction to Environmental Science – Spring 2022 (rev01)

<u>Course Description:</u> This course will provide a survey of basic ecological principles and an examination of selected environmental issues including overpopulation, pollution and energy alternatives.

Course Objectives:

- 1. Provide students with a basic understanding of the chemical, biological and physical foundations of environmental science.
- 2. Provide an understanding of environmental issues at local, regional and global scales.
- 3. Improve student skills in analyzing environmental science data and making informed decisions.
- Develop awareness through discussion and debate of issues in environmental science relevant to the Truckee River watershed and the Great Basin ecosystem.

Silver Core:

- 1. CO4 Physical & Natural Phenomena Students will be able to explain the processes by which the natural and physical world is investigated, articulate basic principles used to explain natural phenomena, and apply scientific processes to real problems using observational or experimental methods.
- 2. CO9 Science, Technology & Society Students will be able to connect science and technology to real-world problems by explaining how science relates to problems of societal concern; be able to distinguish between sound and unsound interpretations of scientific information; employ cogent reasoning methods in their own examinations of problems and issues; and understand the applications of science and technology in societal context.

Student Learning Outcomes: Upon successful completion of this course:

- 1. Describe the flow of energy and matter through ecosystems; key concepts of population and community ecology; and the biogeochemical cycles that connect air, water, soil and living organisms.
- 2. Discuss key local, regional and global environmental issues, how they relate to basic ecology and / or biogeochemical cycles, and the role of humans and technology in those issues.
- 3. Interpret basic environmental science graphs and data and distinguish between scientific and non-scientific information for informed decision-making.
- 4. List and describe issues in environmental science relevant to the Truckee River watershed and the Great Basin ecosystem.

Course Requirements:

- 1. Lecture. This course is lecture, discussion and activity oriented. Students are expected to attend class regularly and to be active participants in class lectures and discussions (including 20 Participation and Attendance Checks [PACs] WebCampus polls / activities / quizzes). Attendance is essential for student success. Students who miss a class session are responsible for finding out what they missed before the next class. Laptops and phones should only be used for specific class activities during class time. Arriving late, leaving early and talking to classmates during lecture disrupts the learning environment.
- 2. Online Homework / Assignment. Students complete online Mastering Environmental Science assignments for each chapter (12). The textbook includes a Mastering Environmental Science access code. Assignments must be submitted by the end of the day on their due date to receive full credit. Late work is only accepted up to 1 week after the original due date for 50% credit.
- 3. Unit Exams. Students will take three (3) Unit Exams during the semester. See "Examination dates and times" below. Unit Exams include 80 multiple choice questions. No make-up Unit Exams or extra credit will be given.

Proctored Examinations:

Requirements

At least one Identity Verification Assessment or experience per course, where students are required to present photo identification upon beginning the assessment is required of an accredited university. The Identity Verification Assessment for this course is three (3) exams administered in a proctored / supervised setting. Students are required to take all three (3) proctored exams.

If you require DRC accommodations for your exam and have not already contacted the DRC, then please do so immediately. See the Office of Digital Learning's Testing Accommodations page for more information.

Examination Dates and Times

Unless otherwise stated or adjusted by your instructor, proctored exams are available based upon the below schedule <u>AND</u> the schedule of the <u>University Testing Center</u>. You may take the exam at any point during this examination window (between when it is available and when it is due) once you have scheduled your examination appointment with the University Testing Center.

Unit 1 Exam

Exam Window: Unit 1 Exam available Thur. Feb. 17 9:00 a.m. through Thur. Mar. 03 at 7:00 p.m. (University Test Center appointment required).

UPDATED: Due date: Thur. Mar. 03, 2022.

Unit 1 Exam consists of 80 of 176 multiple choice items anticipated to take 30 to 60 min. on average. You have a maximum of 90 minutes to complete the exam.

The Unit 1 Exam is a proctored exam that will test lectures, assigned text readings, videos, and supplemental posted material from Weeks #01–#05. Further information about this exam can be found in the Week #06 module.

Unit 2 Exam

Exam Window: Unit 2 Exam available Wed. Mar. 23 9:00 a.m. through Tue. Mar. 29 at 7:00 p.m. (University Test Center appointment required).

Due date & time: Tue. Mar. 29, 2022.

Unit 2 Exam consists of 80 of 192 multiple choice items anticipated to take 30 to 60 min. on average. You have a maximum of 90 minutes to complete the exam.

The Unit 2 Exam is a proctored exam that will test lectures, assigned text readings, videos, and supplemental posted material from Weeks #07–#11. Further information about this exam can be found in the Week #11 module.

Unit 3 Exam (Final Exam)

Exam Window: Unit 3 Exam (Final Exam) available Thur. May 05 9:00 a.m. through Fri. May 13 at 7:00 p.m. (University Test Center appointment required).

Due date & time: Fri. May 13, 2022.

Unit 3 Exam (Final Exam) consists of 80 of 187 multiple choice items anticipated to take 30 to 60 min. on average. You have a maximum of 90 minutes to complete the exam.

The Unit 3 Exam (Final Exam) is a proctored exam that will test lectures, assigned text readings, videos, and supplemental posted material from Weeks #12–#16. Further information about this exam can be found in the Week #17 module.

University Testing Center requirements:

- Appointments must be made with 24 hours' notice.
- Identification: all test takers will be required to present a valid and acceptable form of identification prior to being admitted to their exam session.
- Late arrivals: test takers should arrive at least 15 minutes prior to their examination appointment. Learn about late arrival policies, canceling and rescheduling appointments.
- Only test takers with a scheduled appointment will be permitted in the Testing Center.
- Test takers must wear a mask or face covering in the Testing Center.
- Seating capacity will be limited to maintain physical distancing of at least six (6) feet.
- No regular paper and pens / pencils are permitted. Students will be provided two sheets of watermarked paper and two pencils (pens available on request).
- Prohibited items include: Personal items (including backpacks, briefcases, purses, bags, wallets, large jewelry items, and keys); weapons of any kind; cell phones and other electronic or photographic devices, including watches, activity trackers and other wearable technology; hats, hoods and other head coverings, unless worn for a religious purpose; outerwear (including heavy coats and jackets, parkas, rain coats, gloves, scarves and sunglasses); food and drink (including bottled water, candy and gum; and any materials or aids (including mechanical pencils, pens, pagers, beepers, calculators, watch calculators, books, pamphlets, notes, rulers, highlighter pens, stereos or radios with headphones, watch alarms, stopwatches, dictionaries, translators, compasses, protractors and any other material not explicitly approved for your exam).

Required Textbook and Materials:



Withgott, Jay H. and Matthew Laposata. 2019. <u>Essential Environment: The Science Behind the Stories</u> (6th Edition) – eBook (Pearson, New Jersey) and online access code for Modified Mastering Environmental Science.

The eBook with Online Access Code for this course is being delivered through the Wolf Shop's "Course Materials First Day" (Direct Access Program). The cost of the digital materials will automatically be charged to your MyNevada account at a discounted price. You are responsible for paying for charges applied to your student account.



The eBook (digital textbook) with Online Access Code (which is needed for weekly online homework assignments) will be available to you via the "Course Materials First Day" link on the course menu in WebCampus.

First Day / Inclusive Access Issues or Concerns

If you decide you want to opt-out of the Direct Access program, or have any questions or concerns, please reach out to the Wolf Shop's Customer Care team by choosing from the following options:

- Call the Customer Care team: 1-844-9-EBOOKS (1-844-932-6657)
- Check out the Customer Care website and FAQs
- Open a ticket for the Customer Care team

WebCampus Resources:

Course-related information and readings – https://unr.instructure.com/login/canvas

This course will be taught as a web-enhanced class. Students can access course materials, calendars, assignments and optional study guides for each chapter.

- 1. Enter your username (your UNR netID)
- 2. Enter your password (your netID password)

(Note – if you have not activated your netID account first go to https://identity.unr.edu/Account/Activate)

Library Resources – https://guides.library.unr.edu/environment Course Reserves – https://ares.library.unr.edu/ares/

Course Grading:

Course Requirement	Percentage of Total Grade		
In-class Lecture Participation and Attendance Checks (PACs): Students will complete / participate in WebCampus polls / activities / quizzes in real-time (n=20)	10% (0.5% each)	Student's final score will be converted to a letter grade as follows: 93–100 = A 90–92 = A- 87–89 = B+	
Online Homework Assignments: Students complete online Mastering Environmental Science assignments for each chapter (n=12).	36% (3% each)	83–86 = B 80–82 = B- 77–79 = C+ 73–76 = C 70–72 = C-	
Unit Exams: students will take three (3) Unit Exams during the semester (n=3)	54% (18% each)	67-69 = D+ 63-66 = D 60-62 = D- 59-00 = F	

Statement on Safe Learning Environment: The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit the Equal Opportunity and Title IX page.

Statement on Absences: There are no official absences from any university class. It is the personal responsibility of the student to consult with the professor regarding absence from class. The instructor shall make the final determination on whether the missed work can be done at a time other than during the regularly scheduled class period.

Exceptions: Absence due to university approved extracurricular activity. It is the policy of NSHE to be sensitive to the religious obligations of its students. Any student missing classes because of observance of religious holy days will, whenever possible, be given an opportunity to make up the missed work. The make-up work will apply to the religious holy day absence only. It shall be the responsibility of the student to notify the instructor in advance in writing, if the student intends to participate in a religious holy day which does not fall on state holidays or periods of class recess.

Statement on Academic Dishonesty: Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university (see the University Academic Standards policy: UAM 6,502). Academic dishonesty will not be tolerated and penalties can include canceling a student's enrollment without a grade, giving an F for the course or for the assignment. For more details, see the University of Nevada, Reno General Catalog. The definition of plagiarize is the following: "To steal and pass off as one's own (the ideas or words of another); Use (a created production) without crediting the source" Webster's Third New International Dictionary, Meridian Webster, Incorporated, 1981, page 1728.

Statement on Disability Services: If you are a student who would normally seek accommodations in a traditional classroom, please contact me as soon as possible. You may also contact the Disability Resource Center for services for online courses by emailing drc@unr.edu or calling 775-784-6000. Academic accommodations for online courses may be different than those for seated classrooms; it is important that you contact us as soon as possible to discuss services. The University of Nevada, Reno supports equal access for students with disabilities. For more information, visit the Disability Resource Center.

This course utilizes third-party web/multimedia content, if you experience any issues accessing this content, please notify me immediately. Any student with a disability needing academic adjustments or accommodations is requested to speak with me or the <u>Disability Resource</u> <u>Center</u> (Pennington Achievement Center Suite 230) as soon as possible to arrange for appropriate accommodations.

Statement on Academic Success Services: Your student fees cover usage of the Math Center (775) 784-4433, Tutoring Center (775) 784-6801, and University Writing Center (775) 784-6030. These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

Statement on Surreptitious Audio and Video Recording of Class Lectures: Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may be given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

Statement on COVID-19 Face Coverings: In response to COVID-19, and in alignment local, state, and U.S. Center for Disease Control guidelines, face coverings are required at all times in all UNR indoor public spaces, including classroom, laboratory, studio, creative space, or any type of in-person instructional activity, and public spaces. Furthermore, individuals who have not been fully vaccinated against COVID 19 are required to wear a face covering at all times while on campus, including all indoor and outdoor public spaces. A "face covering" is defined as a "covering that fully covers a person's nose and mouth, including without limitation, cloth face mask, surgical mask, towels, scarves, and bandanas" (State of Nevada Emergency Directive 024). Students that cannot wear a face covering due to a medical condition or disability, or who are unable to remove a mask without assistance may seek an accommodation through the Disability Resource Center.

Statement on COVID-19 Social Distancing: In alignment with State of Nevada guidelines, social distancing is no longer required.

<u>Statement on COVID-19 Disinfecting Your Learning Space:</u> Disinfecting supplies are provided for you to disinfect your learning space. You may also use your own disinfecting supplies.

Statement on COVID-19, COVID-19 Like Symptoms, and Contact with Someone Testing Positive for COVID-19: Students testing positive for COVID 19, exhibiting COVID 19 symptoms regardless of vaccination status will not be allowed to attend in-person instructional activities and must leave the venue immediately. Students should contact the Student Health Center or their health care provider to receive care and who can provide the latest direction on quarantine and self-isolation. Contact your instructor immediately to make instructional and learning arrangements.

Statement on Accommodation for COVID-19 Quarantined Students: For students who are required to quarantine or self-isolate due to 1) COVID 19 infection or 2) exposure while not vaccinated, instructors must provide opportunities to make-up missed course work, including assignments, quizzes or exams. In courses with mandatory attendance policies, instructors must not penalize students for missing classes while quarantined.

Statement on Failure to Comply with Policy (including as outlined in this Syllabus) or Directives of a University Employee: In accordance with section 6,502 of the University Administrative Manual, a student may receive academic and disciplinary sanctions for failure to comply with policy, including this syllabus, for failure to comply with the directions of a University Official, for disruptive behavior in the classroom, or any other prohibited action. "Disruptive behavior" is defined in part as behavior, including but not limited to failure to follow course, laboratory or safety rules, or endangering the health of others. A student may be dropped from class at any time for misconduct or disruptive behavior in the classroom upon recommendation of the instructor and with approval of the college dean. A student may also receive disciplinary sanctions through the Office of Student Conduct for misconduct or disruptive behavior, including endangering the health of others, in the classroom. The student shall not receive a refund for course fees or tuition.

Spring 2022 – Introduction to Environmental Science – Course Schedule

Week # - Date	Lecture #	Units	Lecture Topic	Related Readings	Assignments / Test due dates
Week #01 - Wed. Jan. 19	#00		Getting Started		
Week #02 - Mon. Jan. 24	#01		Begin Unit 1	Chapter 1	
		_	Introduction to Environmental Science		
Week #02 - Wed. Jan. 26	#02	Unit 1: Environmental Basics	Nature of Science	Chapter 1	MES Chapter 1 HW #01 due Wed. Jan. 26
Week #03 - Mon. Jan. 31	#03		Environmental Ethics & Sustainability	Chapter 1	
Week #03 – Wed. Feb. 02	#04		Environmental Systems	Chapter 2	MES Chapter 2 HW #02 due Wed. Feb. 02
Week #04 – Mon. Feb. 07	#05	βĕ≟č	Energy & Ecosystems	Chapter 2	
Week #04 – Wed. Feb. 09	#06	Env	Biogeochemical Cycles	Chapter 2	MES Chapter 3 HW #03 due Wed. Feb. 09
Week #05 – Mon. Feb.14	#07		Population & Community Ecology	Chapters 3 & 4	
Week #05 – Wed. Feb. 16	#08		Earth's Biomes	Chapter 4	MES Chapter 4 HW #04 due Wed. Feb. 16
Week #06 – Mon. Feb. 21			President's Day Holiday	No Class	
Week #06 – Wed. Feb. 23			Unit 1 Exam	Chapters 1, 2, 3, 4	Unit 1 Exam available Thur. Feb. 17 9:00 a.m. through Thur. Mar. 03 at 7:00 p.m.
Week #07 – Mon. Feb. 28	#09		Begin Unit 2	Chapter 5	
		l Se	Environmental Economics & Policy	•	
Week #07 – Wed. Mar. 02	#10	e C	Environmental Policy & Law;	Chapter 5	MES Chapter 5 HW #05 due Wed. Mar. 02
		Š E	Sustainable Development		
Week #08 - Mon. Mar. 07	#11	Unit 2: I Resource Us Management	Agriculture	Chapter 7	
Week #08 – Wed. Mar. 09	#12	Unit Reso Ianag	Environmental Health & Toxicology	Chapter 10	MES Chapter 7 HW #06 due Wed. Mar. 09
Week #09 – Mar. 14 & 16		_ = <u>=</u> _	UNR Spring Break	No Classes	
Week #10 - Mon. Mar. 21	#13	Unit 2: Natural Resource Use and Management	Toxicology	Chapter 10	
Week #10 - Wed. Mar. 23	#14		Minerals & Mining	Chapter 11	MES Chapter 10 HW #07 due Wed. Mar. 23
Week #11 – Mon. Mar. 28	#15		Minerals & Mining	Chapter 11	MES Chapter 11 HW #08 due Mon. Mar. 28
Week #11 – Wed. Mar. 30			Unit 2 Exam	Chapters 5, 7, 10, 11	Unit 2 Exam available Wed. Mar. 23 9:00
					a.m. through Tue. Mar. 29 at 7:00 p.m.
Week #12 – Mon. Apr. 04	#16		Begin Unit 3	Chapter 13	
March #40 - Mark Ass. 00	U47	Unit3: Climate Change and Energy Sources	Atmosphere	Objection 40	MEQ OF sector 40 FBM #00 de a Maril Avec 00
Week #12 – Wed. Apr. 06	#17		Air Pollution	Chapter 13	MES Chapter 13 HW #09 due Wed. Apr. 06
Week #13 – Mon. Apr. 11	#18		Air Pollution	Chapter 13	MEQ OL server 4.4 LIW #40 d. s. Wed. Ass. 40
Week #13 – Wed. Apr. 13	#19		Global Climate Change	Chapter 14	MES Chapter 14 HW #10 due Wed. Apr. 13
Week #14 – Mon. Apr. 18	#20		Global Climate Change	Chapter 14	MEC Obartar 45 LIW #44 due Wed Accessor
Week #14 – Wed. Apr. 20	#21		Global Climate Change	Chapter 14	MES Chapter 15 HW #11 due Wed. Apr. 20
Week #15 – Mon. Apr. 25	#22		Fossil Fuels & Non-renewable Energy	Chapter 15	MEQ Objective 40 LINA (42 Line)
Week #15 – Wed. Apr. 27	#23		Non-renewable & Renewable Energy	Chapters 15 & 16	MES Chapter 16 HW #12 due Wed. Apr. 27
Week #16 – Mon. May 02	#24		Renewable Energy	Chapter 16	
Week #16 – Wed. May 04			Dead Day	No Class	
Week #17 – Mon. May 09			Unit 3 Exam	Chapters 13, 14, 15, 16	Final Exam available Thur. May 05 9:00 a.m. through Fri. May 13 at 7:00 p.m.

MES – Mastering Environmental Science homework accessed via WebCampus MyLab & Mastering Link Assignments are due by 11:59 p.m. (Pacific Time) on the specific date listed above