



SAINT LOUIS UNIVERSITY
MADRID

EAS 1080 M01: Intro to Environmental Science

Fall 2017

Class Days and Time: MW, 14:30-15:45

Classroom: SIH-A

Prerequisite(s): None

Credit(s): 3

Instructor: Iván A. Sánchez, Ph.D.

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Instructor's Campus Phone: 91 554 58 58, ext. 266

Office: PAH-202

Office Hours: Tuesday 13:20-14:20

Course Description: This course is a first introduction to the main topics of environmental science, with emphasis on human interactions with the environment. Sustainability is a unifying theme throughout the course, with emphasis on understanding the connections between ecosystems and human impacts on those ecosystems. The course will review practical cases to determine the real solutions that societies have implemented.

Course Goals and Student Learning Outcomes: At the end of the course, students will:

- Understand better the complexity of the relationships between the environment and mankind.
- Achieve a foundation on the basic principles underlying the patterns and dynamics of the earth's environmental system going beyond the world governing ideas of popular ecology.
- Be acquainted with main current environmental problems and some of its solutions.
- Be able to think critically with a broad interdisciplinary perspective on the environmental problems and solutions.

Student Learning Outcomes

- Students will know the founding principles in their field of study as well as the facts and content appropriate to the field.
- Students will be able to use their knowledge to reason about issues in their discipline.
- Students will be able to solve quantitative problems in their discipline.

PLOs	Student Learning Outcomes	Assessment Method
A		- Mid-term and final exam.

	<p>A.1. Know the basic concepts of Environmental Sciences and the main drivers for humans to conserve or degrade the environment.</p> <p>A.2. Know the different types of biodiversity and the causes and consequences of its loss.</p> <p>A.3. Understand the processes and consequences of bioinvasions through several case study.</p> <p>A.4. Understand the basic concepts and solutions for the conservation of natural populations and communities.</p> <p>A.5. Be able to understand the main characteristics of the world ecosystems and their vulnerability.</p> <p>A.6. Possess the capacity of understanding the main land degradation processes such as desertification, agriculture and tree plantations.</p> <p>A.7. Apply the basic knowledge on the workings of the Earth system to understand the main environmental atmospheric issues such as the "El Niño" phenomena, the ozone layer and climate change.</p> <p>A.8. Be acquainted with the renewable and alternative energies and other environmental solutions.</p> <p>A.9. Be able to relate the different factors involved in waste and water issues and the consequences for the society.</p> <p>A.10. Understand the basic processes on Environmental Restoration and Conservation</p> <p>A.11. Know the main latest applications of environmental sciences for companies, urban areas, land management and other elements of the society.</p>	<ul style="list-style-type: none"> - Class participation. - Homework assignments. - Written paper. - Oral presentations.
B	<p>B.1. Be acquainted with the recent news related with the issues dealt within the class.</p> <p>B.2. Understand the implications of phenomena such as "El Niño", overpopulation or climate change within the context of the societal implications.</p> <p>B.3. Possess the thinking skills and ability to skip popular views and understand the different environmental issues from a scientific and applied point of view, including the consequences for the future of the planet.</p>	<ul style="list-style-type: none"> - Class participation. - Homework assignments. - Written paper. - Oral presentations.
C	<p>C.1. Include economic analysis and data in the written paper that contribute to the analysis of the chosen topic.</p> <p>C.2. Understand and apply the basic numbers of the Earth's Environmental Issues and be able to observe the changes.</p> <p>C.3. Be able to include new data within the theoretical information that is covered during the class.</p>	<ul style="list-style-type: none"> - Class participation. - Homework assignments. - Written paper. - Exams. - Oral presentations.

Saint Louis University - Madrid Campus is committed to excellent and innovative educational practices. In order to maintain quality academic offerings and to conform to relevant accreditation requirements, the Campus regularly assesses its teaching, services, and programs for evidence of student learning outcomes achievement. For this purpose anonymized representative examples of student work from all courses and programs is kept on file, such as assignments, papers, exams, portfolios, and results from student surveys, focus groups, and reflective exercises. *Thus, copies of student work for this course, including written assignments, in-class exercises, and exams may be kept on file for institutional research, assessment and accreditation purposes.* If students prefer that Saint Louis University - Madrid Campus does not keep their work on file, they need to communicate their decision in writing to the professor.

Required Texts and Materials: The following textbook is recommended for the course:

Cunningham, W.P., Cunningham, M.A. & Woodworth Saigo, B. *Environmental Science. A Global Concern.* McGraw-Hill International Edition. (not mandatory)

Attendance Policy:

- (1) Students are encouraged to participate in class discussions and to ask questions.
- (2) Announcements may be made during the semester
- (3) It is strictly forbidden to use the mobile phone during class. Anyone using or showing them in the classroom will be asked to give it to the professor that will keep it in the professor's table until the end of the class session. It also involves a decrease in the grade of participation.
- (4) Syllabus, reading and paper topics are subject to change.
- (5) Students are responsible for all lecture material, handouts, homework and assigned reading.
- (6) It is mandatory to attend all classes unless a reasonable excuse is given. More than two unjustified absences will decrease the grade on participation.

Reasonable excuses are attendance at excursions or other special events of the SLU, illness or family emergency. In cases of illness or family emergency, a written documentation of the circumstances must be given. A letter from the university counsellor is accepted. In these cases, the student has to remember to ask the professor to sign for the excuse in the attendance roster.

(7) Make up exams are not given. Students who legitimately miss an exam, due to a doctor's visit or family emergency must provide written documentation of the circumstances. A letter from the university counsellor is accepted. Exams that are missed illegitimately result in a score of F. Grades for these students will be based on the remaining exams.

(8) The order and number of the topics given on the calendar are subject to change. More topics than the possibility of covering them are given in the calendar. According to the circumstances of the course or the current news on environmental issues the professor will choose the most suitable topics for a better and up-to-date development of the course.

Here is a list of topics:

- 1- Understanding our environment
- 2- Biodiversity
- 3- Bioinvasions
- 4- Conservation of Populations and Communities
- 5- World terrestrial biomes
- 6- Environmental Restoration
- 7- Desertification, Agriculture and Plantations
- 8- Pollution, Climate Change and Ozono Layer
- 9- Energy and Renewables
- 10- Waste Management
- 11- World aquatic biomes
- 12- Fundamentals of environmental oceanography
- 13- Water Issues
- 14- Environmental Conservation
- 15- Applied environmental sciences

(9) No food or drink (except water) in class is allowed.

(10) All students have to be punctual. Repeated lateness may reduce the grade. Late arrivals to class are considered up to 10 minutes. Students who arrive 10 minutes or more after the beginning of class will be considered as having missed that class.

(11) Students are expected to remain in the classroom throughout the class meeting, except for reasonable emergencies. In the case of exams, leaving the classroom involves that the exam has been finished.

(12) Useful and important information for the course will be given in Blackboard.

This information includes: PowerPoint-Presentations and notes shown in class, readings, supplementary study material, further information about the elaboration of the research work or presentations, grades of exams and paper.

To communicate with the students, the professor will use Blackboard, e-mail. Consequently, it is necessary, that the students check their Blackboard-email.

(13) Exams must be presented with a readable handwriting and well organized otherwise a % can be discounted from the final grade.

(14) The table of contents of the course is a basic guidance only. Though most of the topics on the table will be covered, it includes some more items than will be possible to cover during the course. The professor will choose the fundamental ones plus some additional ones depending on the student interests and profile, and the relationship with current news.

(15) Students with accredited accommodations for exams need to communicate them to the professor at least 14 days before the mid-term or final dates.

(16) E-mails are answered from Monday 12:00h to Friday a 12:00h

(17) During exams it is not allowed to go out of the classroom, so it is recommended to go to the toilet right before exams and to bring water and an extra pen.

(18) Exams include all the material covered in the classroom.

Course Requirements and Grading Rationale/System:

The grade will be obtained from the following areas:

-Mid-term I: 25%

-Homework, Attendance, class participation: 25%

-Paper and presentation: 25%

-Final: 25%

Note: In case the first mid-term includes less contents than the final the % will change from 25% to 20% in the Mid-term and from 25% to 30% in the final.

Grading Scale:

A: 93-100%

A-: 90-92.9%

B+: 87-89.9%

B: 83-86.9%

B-: 80-82.9%

C+: 77-79.9%

C: 73-76.9%

C-: 70-73.9%

D: 60-69.9%

F: 00-59.9%

Papers: Every student/group has/have to prepare a paper about a specific topic. The professor will give an indicative list of topics. However, this list is only to orientate what type of topics are suitable for the research and the student is also encouraged to suggest her/his own topics (always related to the course).

Papers will be presented orally at the end of the course. Detailed information about the paper will be given in a separate document (posted in Blackboard). Together with every paper a PowerPoint-Presentation has to be presented and submitted. Delivery of research papers or any other course work will not be accepted by email. This PowerPoint-Presentation will be the basis of the oral presentation at the end of the course. The deadline for the submission will be given during the course, though it often coincides with the date of the last presentation (after the deadline the paper is only accepted if a reasonable excuse is given; reasonable excuses, due to an illness or family emergency, must provide written documentation of the circumstances; a letter from the university counselor is accepted). The recommended presentation is APA, without page numbers in citations, 1.5 spaced, Times New Roman 11. However, web citations should include date of access and the rest of relevant information. The paper should also include sections an index and page numbers.

Homework: Instructions will be given in Blackboard documents and the first day of classes on how to elaborate homework.

E-mail: Campus and course announcements will often be handled by e-mail. Students should check their "@slu.edu" e-mail regularly.

University Statement on Academic Integrity: Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic

integrity as matters of serious concern.

The governing University-level Academic Integrity Policy can be accessed on the Provost's Office [website](#). Additionally, SLU-Madrid has posted its academic integrity policy online: <http://www.slu.edu/madrid/academics>. As a member of the University community, you are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions and appeals.

The professor will review these matters during the first weeks of the term. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program or the Academic Dean of the Madrid Campus.

University Title IX Statement: Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX deputy coordinator, Marta Maruri, whose office is located on the ground floor of Padre Rubio Hall, Avenida del Valle, 28 (mmaruri@slu.edu; 915-54-5858, ext. 213) and share the basic fact of your experience with her. The Title IX deputy coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the SLU-Madrid's Counseling Services on the third floor of San Ignacio Hall (counselingcenter-madrid@slu.edu; 915-54-5858, ext. 230) or Sinews Multiplettherapy Institute, the off-campus provider of counseling services for SLU-Madrid (www.sinews.es; 917-00-1979). To view SLU-Madrid's sexual misconduct policy and for resources, please visit the following web address: <http://www.slu.edu/Documents/Madrid/campus-life/SLUMadridSexualMisconductPolicy.pdf>.

Students with Special Needs: In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring/writing services, Disability Services) by visiting the Academic Dean's Office (San Ignacio Hall) or by going to <https://www.slu.edu/madrid/academics/student-resources>.

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course. Please contact Disability Services at disabilityservices-madrid@slu.edu or +915 54 58 58, ext. 230 for an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the student's eligibility for academic accommodations will be shared with course instructors via email from Disability Services. For more information about academic accommodations, see "Student Resources" on the SLU-Madrid webpage.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact Disability Services.

Fall 2017 Course Schedule:

Monday, September 4	Course presentation
Tuesday, September 5	
Wednesday, September 6	Understanding our environment
Thursday, September 7	
Friday, September 8	
Saturday, September 9	

Sunday, September 10	
Monday, September 11	Understanding our environment
Tuesday, September 12	
Wednesday, September 13	Biodiversity
Thursday, September 14	
Friday, September 15	
Saturday, September 16	
Sunday, September 17	Last Day to Drop a Class Without a Grade of W and /or Add a Class, choose Audit (AU) or Satisfactory/Unsatisfactory (S/U) Options
Monday, September 18	Biodiversity
Tuesday, September 19	
Wednesday, September 20	Bioinvasions
Thursday, September 21	
Friday, September 22	
Saturday, September 23	
Sunday, September 24	
Monday, September 25	Conservation of Populations and Communities
Tuesday, September 26	
Wednesday, September 27	Conservation of Populations and Communities
Thursday, September 28	
Friday, September 29	
Saturday, September 30	
Sunday, October 1	
Monday, October 2	World Terrestrial Biomes
Tuesday, October 3	
Wednesday, October 4	World Terrestrial Biomes
Thursday, October 5	
Friday, October 6	
Saturday, October 7	
Sunday, October 8	
Monday, October 9	Environmental Restoration
Tuesday, October 10	
Wednesday, October 11	Environmental Restoration and Mid-term review
Thursday, October 12	Fall Break
Friday, October 13	
Saturday, October 14	
Sunday, October 15	
Monday, October 16	Mid-term 14:30-15:45
Tuesday, October 17	
Wednesday, October 18	Desertification, Agriculture and Plantations
Thursday, October 19	Midterm Grades Due.
Friday, October 20	
Saturday, October 21	
Sunday, October 22	
Monday, October 23	Pollution Climate Change and Ozone Layer
Tuesday, October 24	
Wednesday, October 25	Energy and Renewables
Thursday, October 26	
Friday, October 27	
Saturday, October 28	
Sunday, October 29	
Monday, October 30	Waste Management Last Day to Drop a Class and Receive the Grade of W.

Tuesday, October 31	
Wednesday, November 1	University Closed
Thursday, November 2	
	Spring Registration Opens!
Friday, November 3	
Saturday, November 4	
Sunday, November 5	
Monday, November 6	Waste Management
Tuesday, November 7	
Wednesday, November 8	World aquatic biomes
Thursday, November 9	University Closed
Friday, November 10	
Saturday, November 11	
Sunday, November 12	
Monday, November 13	Fundamentals of environmental oceanography
Tuesday, November 14	
Wednesday, November 15	Water Issues
Thursday, November 16	
Friday, November 17	
Saturday, November 18	
Sunday, November 19	
Monday, November 20	Environmental Conservation
Tuesday, November 21	
Wednesday, November 22	Student presentations
Thursday, November 23	
Friday, November 24	
Saturday, November 25	
Sunday, November 26	
Monday, November 27	Student presentations
Tuesday, November 28	
Wednesday, November 29	Student presentations – Research Paper Due
Thursday, November 30	
Friday, December 1	
Saturday, December 2	
Sunday, December 3	
Monday, December 4	Applied environmental sciences
Tuesday, December 5	
Wednesday, December 6	University Closed
Thursday, December 7	
Friday, December 8	University Closed
Saturday, December 9	
Sunday, December 10	
Monday, December 11	Applied environmental sciences
Tuesday, December 12	
Wednesday, December 13	Review class
Thursday, December 14	Final Exam 15:30-17:30h
Friday, December 15	
Saturday, December 16	
Sunday, December 17	
Monday, December 18	Midyear Commencement!
Tuesday, December 19	
Wednesday, December 20	
Saturday, December 23	Grades Due to Registrar

