



SAINT LOUIS UNIVERSITY
MADRID

BIOL 1200 M01: Ecological Issues and Society
Spring 2018

Class Days and Time: T/R, 12:30-13:45

Classroom: PRH 5

Prerequisite(s): None

Credit(s): 3

Instructor: María José Morell

Instructor's Email: mariajose.morell@slu.edu

Instructor's Campus Phone: 91 554 58 58, ext. 232

Office: PAH-206

Office Hours: M/W 11:30-13:30, T/R 11:30-12:30 and upon request

Course Description: This course provides scientific insights into a variety of popular press topics and everyday decisions about ecological issues. Other topics presented: population harvesting and the collapse of fisheries, the 'destruction' of habitats by fire, pest outbreaks and control, lawn and garden decisions, and global warming; and how ecological principles apply to political and personal decisions. Satisfies the Science Core requirement.

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

- A. Know and understand the core concepts of biology:
 - evolution as the unifying principle of biological science;
 - the relationship between structure and function;
 - transfer of energy and matter within and among organisms and the environment;
 - transmission, flow and processing of information;
 - the interconnectedness of biological systems.
- B. Connect and integrate their knowledge and understanding across all scales of biological organization, from cells and molecules to organisms and ecosystems.
- C. Understand the process by which scientific knowledge is constructed, analyzed and interpreted.
- D. Graduates will use scientific reasoning and appropriate techniques to propose research questions, articulate hypotheses, design and conduct experiments, represent results, and interpret data to draw appropriate conclusions.
- E. Graduates will be self-directed learners who seek information independently and use it to grow their knowledge base.
- F. Graduates will be able to effectively communicate their understanding of biology and/or their research findings, to diverse audiences and in multiple formats.

Student Learning Outcomes

Program Objectives	Student Learning Outcomes	Assessment Method
A	A.1. Describe the climates, terrestrial and aquatic biomes, disturbance and species distribution. A.2. Describe the exponential and logistic growth models. A.3. Describe the community interactions, disturbance and diversity.	Weekly quizzes Partial and Final Exams . Conceptual questions . Apply knowledge questions

	A.4. Describe the energy flow and chemical cycling. A.5. Describe the processes of bioremediation and restoration. A.6. Describe how human activities affect ecosystems. A.7. Describe sustainable development.	. Class discussions
B	B.1. Apply the knowledge of the different ecological levels, to understand how they are interconnected. B.2. Understand how the biotic and abiotic factors affect species, populations, communities and ecosystems.	Weekly quizzes Partial and Final Exams . Conceptual questions . Apply knowledge questions . Class Discussions
C	C.1. Understand the steps of the scientific method, and develop a critical thinking. C.2. Apply the scientific method to understand how it has been used to identify structures and to describe biological processes.	Weekly quizzes Partial and Final Exams . Conceptual questions . Apply knowledge questions . Class Discussions
D	D.1. Prepare presentations and debates on the main ecological topics and discuss the possible sustainable solutions.	. Student presentations . Debates
E	E.1. Research on various topics to prepare presentations and debates.	. Student presentations . Debates
F	F.1. Communicate clearly and effectively when describing processes and structures.	Partial and Final Exams . Student presentations . Debates

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: There is no text book. Links to help on projects will be posted on Blackboard.

Campbell, et al. 2015. Biology A Global Approach (10th ed.). Pearson, San Francisco, CA.

Cunningham, William and Cunningham, Mary Ann. Environmental Science. A Global Concern (13th ed.). Mcgraw-Hill International Edition

Mastering Biology (www.masteringbiology.com)

Additional Bibliography and Web Sites:

Biology texts are held in the library. There is wide selection and it's advisable to go and have a browse. In particular, the following are recommended:

- Biochemistry (Stryer)
- Biology: Concepts and Connections (Campbell, Mitchell, Reece)
- Life: the science of biology (Purves, Orions et al)

Attendance Policy: It is mandatory to attend all classes unless a reasonable excuse is given. Any unexcused absences in excess of 3 will result in a lowered grade and even in automatic failure in the course.

Legitimate conflicts and excuses require written documentation. The documentation must be presented on the day the student returns to the university. Excuses that will NOT be considered include personal travel arrangements, non-University sponsored events, a conflicting appointment, or an illness that does not prevent you from coming to the exam.

Students will be responsible for any announcements, information, problems or course changes that are made in all lectures. Students are expected to arrive on time to the lectures. Repeated lateness will not be tolerated.

Course Requirements and Grading Rationale/System:

Group Project - Students will be required to work in groups, assigned by the lecturer. Each group will prepare research papers on specific topics, and Power Point presentations. Each paper will be presented orally by all the components of the group on the assigned date. More information regarding the group project will be included on Blackboard.

Debates – All students should participate in different topics debates, basing their for or against posture on reliable information and facts.

The final grade is calculated as follows:

Midterm exam: 30%

Final exam: 30%

Projects and Debates: 30%

Homework assignments: 10%

Grading System

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-	70-72.9%
D	60-69.9%
F	0-59.9%

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 counselor is accepted. Exams that are missed illegitimately result in a score of F. Grades for these students will be based on the remaining exams. Missing more than one exam results in an F grade.

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](#) at:. 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 (marta.maruri@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 <http://www.slu.edu/madrid/learning-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.

Spring 2018 Course Schedule:

JANUARY	
Wednesday 10	First Day of Classes.
Thursday 11	Introduction
Friday 12	
Monday 15	
Tuesday 16	Assessment
Wednesday 17	
Thursday 18	Ecology Overview
Friday 19	
Sunday 21	Last Day to Drop a Class without a Grade W and/or Add a Class; Last Day to Choose Audit (AU) or Pass/No Pass (P/NP) Options
Monday 22	
Tuesday 23	Earth Climate / Terrestrial Biomes

Wednesday 24	
Thursday 25	Terrestrial Biomes / Aquatic Biomes
Friday 26	No Classes Application Deadline for Spring Semester Degree Candidates
Monday 29	
Tuesday 30	Species Ecology
Wednesday 31	
FEBRUARY	
Thursday 1	Population Ecology
Friday 2	
Monday 5	
Tuesday 6	Population Ecology cont.
Wednesday 7	
Thursday 8	Community Ecology
Friday 9	
Monday 12	
Tuesday 13	Community Ecology cont.
Wednesday 14	Ash Wednesday Registration for Summer 2018 Begins
Thursday 15	Ecosystem Ecology
Friday 16	
Monday 19	
Tuesday 20	MIDTERM EXAM
Wednesday 21	
Thursday 22	No Classes (Winter Break)
Friday 23	
Monday 26	
Tuesday 27	Professors' Deadline to Submit Midterm Grades Conservation and Global Change
Wednesday 28	
MARCH	
Thursday 1	Conservation and Global Change cont.
Friday 2	
Monday 5	
Tuesday 6	Human Population // Projects (Paper and Power Point) due
Wednesday 7	
Thursday 8	Students Project
Friday 9	Last Day to Drop a Class and Receive a Grade of W
Monday 12	
Tuesday 13	Food, Soil and Pest Management
Wednesday 14	
Thursday 15	Last Day to Submit Transfer Application for Fall Semester Students Project
Friday 16	
Monday 19	
Tuesday 20	Water Resources
Wednesday 21	
Thursday 22	Students Project
Friday 23	
Monday 26	<i>Semana Santa</i> Holiday (Campus Closed)
Tuesday 27	
Wednesday 28	
Thursday 29	<i>Jueves Santo</i> (Campus Closed)
Friday 30	<i>Viernes Santo</i> (Campus Closed)

APRIL	
Monday 2	
Tuesday 3	Energy Resources
Wednesday 4	Registration for Fall 2018 Semester Begins
Thursday 5	Students Project
Friday 6	
Monday 9	
Tuesday 10	Air Pollution, Climate Change, Ozone Depletion
Wednesday 11	
Thursday 12	Students Project
Friday 13	
Monday 16	
Tuesday 17	Environmental Hazards and Human Health
Wednesday 18	
Thursday 19	Students Project
Friday 20	
Monday 23	
Tuesday 24	Solid and Hazardous Waste
Wednesday 25	
Thursday 26	Students Project
Friday 27	
Monday 30	
MAY	
Tuesday 1	<i>Día del Trabajador (Campus Closed)</i>
Wednesday 2	<i>Día de la Comunidad (Campus Closed)</i>
Thursday 3	Spring 2018 Final Day of Classes Assessment
Friday 4	Spring 2018 Final Exams
Monday 7	
Tuesday 8	
Wednesday 9	
Thursday 10	
Friday 11	University Housing Move-out Date
Saturday 12	Commencement
Sunday 13	Professors' deadline to submit spring 2018 final grades

Final Exam Schedules Spring 2018

	4 May (Fr)	7 May (Mn)	8 May (Tu)	9 May (Wd)	10 May (Th)
08:30-11:30	Mn classes that meet at 9:00 & 9:30	Mn classes that meet at 10:00	Mn classes that meet at 11:00 & 11:30	Tu classes that meet at 9:30	Tu classes that meet at 8:00
12:00-15:00	Tu classes that meet at 11:00	Mn classes that meet at 13:00	Tu classes that meet at 14:30	Mn classes that meet at 12:00 & 12:30	Tu classes that meet at 12:30
15:30-18:30	Mn classes that meet at 14:30	Tu classes that meet at 17:00 & 17:30	Mn classes that meet at 16:00	Tu classes that meet at 16:00	Mn classes that meet at 17:30
19:00-22:00	---	---	Mn classes that meet at 18:30 & 19:00	Tu classes that meet at 19:00	---