ENVIRONMENTAL POLICY/ ENVIRONMENTAL SCIENCE AND SUSTAINABILITY (BA/ MS)

Well-designed public policies are critical in maintaining and restoring a healthy environment. Public policies influence air and water quality, land use, biodiversity, and public health and shape crucial efforts to fight climate change. Our environmental policy program prepares students to craft and implement public policies that promote ecological conservation, environmental justice, and innovation toward a green economy.

With our Accelerated Bachelor's/Master's Program, Loyola SES students can boost their professional credentials and save time and money by completing an undergraduate degree along with a master of science in environmental science and sustainability degree in as little as five years. The economic and academic benefits are substantial.

Related Programs

Major

- Environmental Policy (BA) (https://catalog.luc.edu/undergraduate/environmental-sustainability/environmental-policy/environmental-policy-ba/)

Combined

- Environmental Policy/Digital Media and Storytelling (BA/MC) (https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/environmental-policy-digital-media-storytelling-ba-ms/)
- Environmental Policy/Global Strategic Communication (BA/MS) (https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/environmental-policy-global-strategic-communication-ba-ms/)
- Environmental Policy/Public Policy (BA/MPP) (https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/environmental-policy-public-policy-ba-mpp/)

Curriculum

Environmental Policy students complete coursework spanning a variety of disciplines pertinent to the understanding of environmental issues.

Code	Title	Hours
BA Requirements		
Core Curriculum		
ENVS 137	Foundations of Environmental Science I	3
ENVS 237	Foundations of Environmental Chemistry	3
ENVS 238	Foundations of Environmental Science Lab	1
ENVS 200	Environmental Careers and Professional Skills	1
ENVS 203	Environmental Statistics	3
ENVS 280	Principles of Ecology	3
ENVS 286	Principles of Ecology Lab	1
ENVS 310	Introduction to Environmental Law & Policy	3
PLSC 101	American Politics	3
PLSC 392	Environmental Politics	3
Justice and Ethics Choice		
Select one of the following:		3
ENVS 284	Environmental Justice	
PHIL 287	Environmental Ethics	
THEO 204	Religious Ethics and the Ecological Crisis	
Economics Choice		
ENVS 335	Ecological Economics	3
or ECON 328	Environmental Economics	
Engaged Learning Choice		
Select one of the following:		3
ENVS 226	Science & Conservation of Freshwater Ecosystems	
ENVS 267	Bird Conservation and Ecology	
ENVS 369	Field Ornithology	
ENVS 273	Energy and the Environment	
ENVS 283	Environmental Sustainability	
ENVS 340	Natural History of Belize	
ENVS 345	Conservation and Sustainability of Neotropical Ecosystems	
ENVS 350A	Solutions to Environmental Problems: Water	
ENVS 350B	Solutions to Environmental Problems: Biogas	
ENVS 350C	Solutions to Environmental Problems: Climate Action	
ENVS 350F	Solutions to Environmental Problems: Food Systems	
ENVS 391	Environmental Research	
ENVS 395	Environmental Internship	
Capstone Choice		
Select one of the following:		3
ENVS 390	Integrative Seminar	
ENVS 391C	Independent Environmental Research (Capstone)	
ENVS 395C	Environmental Internship (Capstone)	
BA Electives *(p. 2)*		*18*
See designated elective categories below		
MS Curriculum		
Required Courses		
ENVS 401	Sustainable Systems - Natural Science Perspectives	3
ENVS 402	Sustainable Systems - Social Science Perspectives	3
Choose One of Four Concentrations [1]		*9-12*
Environmental Law & Policy		
ENVS 410	Introduction to Environmental Law & Policy	
ENVS 411	Natural Resources and Land Use Law & Policy	
ENVS 412	Water Law & Policy	
ENVS 413	Energy Law & Policy	
Geographic Information Systems		
ENVS 480	Introduction to Geographic Information Systems	
ENVS 481	Advanced GIS Applications	
ENVS 482	Remote Sensing	
Sustainable Assessment and Planning		
ENVS 451	Introduction to Sustainability Concepts & Impacts	
ENVS 452	Sustainability Assessment & Reporting I	
ENVS 453	Sustainability Assessment & Reporting II	
ENVS 454	Sustainability Plan Development & Reporting	
Sustainable Business		

ENVS 433	Introduction to the Circular Economy	
ENVS 435	Ecological Economics	
ENVS 436	Design for Circular & Sustainable Business	
ENVS 463	Sustainable Business Management	
MS Electives (p. 3)		6-9
Students will take at least two courses from the list of electives		
Total Hours		**78**

[1] Students choosing the Geographical Information Systems track must take an additional elective course to meet a total credit hours for the MS.

BA Electives

Code	Title	Hours
Society, Ethics, and Justice		
Select one of the following:		3
ENVS 204	Gender, Health & Environment	
ENVS 279	Climate and History	
ENVS 284	Environmental Justice	
ENVS 297	North American Environmental History	
ENVS 298	Special Topics (with SES approval)	
ENVS 338	Climate Change and Human Health	
ENVS 350A	Solutions to Environmental Problems: Water	
ENVS 350B	Solutions to Environmental Problems: Biogas	
ENVS 350C	Solutions to Environmental Problems: Climate Action	
ENVS 350F	Solutions to Environmental Problems: Food Systems	
ENVS 383	Human Dimensions of Conservation	
ENVS 391	Environmental Research (with SES approval)	
ENVS 395	Environmental Internship (with SES approval)	
ENVS 398	Special Topics (with SES approval)	
ENVS 399	Directed Readings (with SES approval)	
COMM 101	Public Speaking & Critical Thinking	
COMM 260	Environmental Journalism	
COMM 277	Organizational Communication	
COMM 306	Environmental Advocacy	
COMM 322	Guerilla Media	
COMM 379	Digital Sustainability	
ENGL 288	Nature in Literature	
PHIL 287	Environmental Ethics	
PSYC 277	Environmental Psychology	
SOCL 226	Science, Technology, & Society	
SOCL 252	Global Inequalities	
SOCL 272	Environmental Sociology	
SOCL 276	The Sociology and Politics of Food	
SOCL 278	Global Health	
THEO 204	Religious Ethics and the Ecological Crisis	
THEO 344	Theology and Ecology	
Policy, Economics, and Resource Management		
Select two of the following:		6
ENVS 298	Special Topics (with SES approval)	
ENVS 300	Introduction to Public Health	
ENVS 311	Natural Resources and Land Use Law & Policy	
ENVS 312	Water Law & Policy	
ENVS 313	Energy Law & Policy	
ENVS 327	Food Systems Analysis	
ENVS 332		
ENVS 333	Introduction to the Circular Economy	
ENVS 335	Ecological Economics	
ENVS 336	Design for Circular & Sustainable Business	
ENVS 338	Climate Change and Human Health	
ENVS 363	Sustainable Business Management	
ENVS 364		
ENVS 383	Human Dimensions of Conservation	
ENVS 384	Conservation Economics	
ENVS 389	Ecological Risk Assessment	
ENVS 391	Environmental Research (with SES approval)	
ENVS 395	Environmental Internship (with SES approval)	
ENVS 398	Special Topics (with SES approval)	
ENVS 399	Directed Readings (with SES approval)	
ECON 328	Environmental Economics	
GLST 305	Globalization and Environmental Sustainability	
MGMT 201	Managing People and Organizations	
PLSC 354	Global Environmental Politics	
Methods and Analysis		
Select one of the following:		3
COMM 260	Environmental Journalism	
ENVS 298	Special Topics (with SES approval)	
ENVS 327	Food Systems Analysis	
ENVS 352	Sustainability Assessment & Reporting I	
ENVS 353	Sustainability Assessment & Reporting II	
ENVS 354	Sustainability Plan Development & Reporting	
ENVS 380	Introduction to Geographic Information Systems	
ENVS 381	Advanced GIS Applications	
ENVS 382	Remote Sensing	
ENVS 384	Conservation Economics	
ENVS 388		
ENVS 389	Ecological Risk Assessment	
ENVS 391	Environmental Research	
ENVS 395	Environmental Internship	
ENVS 398	Special Topics (with SES approval)	
ENVS 399	Directed Readings	
ANTH 317	Ethnographic Methods	
BIOL 335	Intro to Biostatistics	
COMM 231	Conflict Management and Communication	
COMM 234	Interviewing for Communication	
COMM 277	Organizational Communication	
COMM 363	Research Methods in Advertising/Public Relations	
MARK 320	Marketing for Environmental Sustainability	
SOCL 206	Principles of Social Research	
SOCL 301	Statistics for Social Research	
SOCL 302	Qualitative Research	
STAT 203	Introduction to Probability & Statistics	
STAT 303	SAS Programming & Applied Statistics	

Environmental Electives		
Select two of the following:		6
COMM 260	Environmental Journalism	
ENVS 204	Gender, Health & Environment	
ENVS 207	Plants and Civilization	
ENVS 215 / BIOL 215	Ornithology	
ENVS 218	Biodiversity & Biogeography	
ENVS 223	Soil Ecology	
ENVS 224	Climate & Climate Change	
ENVS 226	Science & Conservation of Freshwater Ecosystems	
ENVS 227R	Ecology of the Mediterranean Sea	
ENVS 267	Bird Conservation and Ecology	
ENVS 273	Energy and the Environment	
ENVS 274	Chemistry of the Natural Environment	
ENVS 278	Hydrology	
ENVS 279	Climate and History	
ENVS 283	Environmental Sustainability	
ENVS 297	North American Environmental History	
ENVS 298	Special Topics (with SES approval)	
ENVS 300	Introduction to Public Health	
ENVS 301	Environmental Health	
ENVS 303	Introduction to Epidemiology	
ENVS 311	Natural Resources and Land Use Law & Policy	
ENVS 312	Water Law & Policy	
ENVS 313	Energy Law & Policy	
ENVS 319		
ENVS 320	Conservation Biology	
ENVS 322	Invasive Species	
ENVS 323	Environmental Microbiology	
ENVS 325	Sustainable Agriculture	
ENVS 326	Agroecosystems	
ENVS 327	Food Systems Analysis	
ENVS 330	Restoration Ecology	
ENVS 338	Climate Change and Human Health	
ENVS 340	Natural History of Belize	
ENVS 345	Conservation and Sustainability of Neotropical Ecosystems	
ENVS 350A	Solutions to Environmental Problems: Water	
ENVS 350B	Solutions to Environmental Problems: Biogas	
ENVS 350C	Solutions to Environmental Problems: Climate Action	
ENVS 350F	Solutions to Environmental Problems: Food Systems	
ENVS 351	Introduction to Sustainability Concepts & Impacts	
ENVS 352	Sustainability Assessment & Reporting I	
ENVS 353	Sustainability Assessment & Reporting II	
ENVS 354	Sustainability Plan Development & Reporting	
ENVS 369	Field Ornithology	
ENVS 380	Introduction to Geographic Information Systems	
ENVS 381	Advanced GIS Applications	
ENVS 385	Introduction to Global Health	
ENVS 387	Principles of Ecotoxicology	
ENVS 388		
ENVS 389	Ecological Risk Assessment	
ENVS 391	Environmental Research (with SES approval)	
ENVS 395	Environmental Internship (with SES approval)	
ENVS 398	Special Topics (with SES approval)	
ENVS 399	Directed Readings (with SES approval)	
ANTH 104	The Human Ecological Footprint	
ANTH 303	People and Conservation	
BIOL, CHEM, PHYS 300-level courses (with SES approval)		
Total Hours		**18**

MS Electives

Code	Title	Hours
ENVS 420	Conservation Biology	
ENVS 422	Invasive Species	
ENVS 425	Sustainable Agriculture	
ENVS 426	Agroecosystems	
ENVS 427	Food Systems Analysis	
ENVS 430	Restoration Ecology	
ENVS 435	Ecological Economics	
ENVS 438	Climate Change and Human Health	
ENVS 451	Introduction to Sustainability Concepts & Impacts	
ENVS 452	Sustainability Assessment & Reporting I	
ENVS 453	Sustainability Assessment & Reporting II	
ENVS 480	Introduction to Geographic Information Systems	
ENVS 481	Advanced GIS Applications	
ENVS 482	Remote Sensing	
ENVS 484	Conservation Economics	
ENVS 487	Principles of Ecotoxicology	
ENVS 488		
ENVS 489	Ecological Risk Assessment	
ENVS 491	Independent Environmental Research (upon approval)	
ENVS 498	Special Topics (upon approval)	
ENVS 498L	Special Topics with Lab (upon approval)	
ENVS 499	Directed Readings (upon approval)	
BIOL 495	Special Topics (Topic: Metagenomics)	
BIOL 416	Limnology Lec/Lab	
BIOL 418	Aquatic Insects Lecture & Laboratory	
BIOL 470	Biostats & Exp Design Lec/Lab	
MPBH 401	Environmental Health	
MPBH 402	Public Health Practice and Management	
MPBH 403	Introduction to Epidemiology	
MPBH 404	Biostatistics for Health and Biological Science	
MPBH 407	Public Health Policy: Concepts and Practice	
MPBH 409	Biostatistics I	
MPBH 412	Intro to Statistical Computing for Public Health	
MPBH 414	Introduction to Global Health	
MPBH 421	Biostatistics II	
MPBH 423	Intermediate Epidemiology	
MPP 401	Analytical Tools in Public Policy	
MPP 402	Cost Benefit Analysis	

MPP 403	Public Budget and Finance
MPP 405	Statistical Methods & Analysis for Public Policy I
MPP 406	Statistical Methods & Analysis Public Policy II
MPP 408	Political Feasibility Analysis
SOCL 414	Statistical Methods Analysis I
SOCL 415	Statistical Methods of Analysis II
STAT 403	SAS Program & Applied Statistics
STAT 407	Statistical Design
STAT 436	Topics in Biostatistics
ENVS 410	Introduction to Environmental Law & Policy
ENVS 411	Natural Resources and Land Use Law & Policy
ENVS 412	Water Law & Policy
ENVS 413	Energy Law & Policy
ENVS 432	
ENVS 433	Introduction to the Circular Economy
ENVS 436	Design for Circular & Sustainable Business
ENVS 454	Sustainability Plan Development & Reporting
ENVS 463	Sustainable Business Management
ENVS 464	
ENVS 483	Human Dimensions of Conservation
ENVS 491	Independent Environmental Research (upon approval)
ENVS 498	Special Topics (upon approval)
ENVS 499	Directed Readings (upon approval)
MPBH 407	Public Health Policy: Concepts and Practice
MPP 400	Policy Design and Analysis
MPP 404	Public Policy Process
PSYC 460	Social Psychological Theory
PSYC 461	Attitude and Attitude Change
PSYC 486	Methods of Program Evaluation
SOCL 412	Qualitative Methods in Social Research
SOCL 446	Knowledge, Power & Expertise
SOCL 463	Sociology & Natural Environment

Suggested Sequence of Courses

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student's completion of requirements depends on course offerings in a given term as well as the start term for a major or graduate study. Students should consult their advisor for assistance with course selection.

Suggested Sequence of Courses - Research Track

Course	Title	Hours
Year One		
Fall		
ENVS 137	Foundations of Environmental Science I	3
PLSC 101	American Politics	3
	Hours	**6**
Spring		
ENVS 203	Environmental Statistics	3
ENVS 237	Foundations of Environmental Chemistry	3
ENVS 238	Foundations of Environmental Science Lab	1
Justice & Ethics Choice		3
	Hours	**10**
Year Two		
Fall		
ENVS 200	Environmental Careers and Professional Skills	1
ENVS 280	Principles of Ecology	3
ENVS 286	Principles of Ecology Lab	1
	Hours	**5**
Spring		
ENVS 310 or PLSC 392	Introduction to Environmental Law & Policy or Environmental Politics	3
Environmental Science Elective		3
Methods and Analysis Elective		3
	Hours	**9**
Year Three		
Fall		
ENVS 310 or PLSC 392	Introduction to Environmental Law & Policy or Environmental Politics	3
	Hours	**3**
Spring		
ENVS 335 or ECON 328	Ecological Economics or Environmental Economics	3
Environmental Electives		3
Policy, Economics, and Resource Management Electives		3
	Hours	**9**
Year Four		
Fall		
Engaged Learning Choice		3
400 Level Policy, Economics, & Resource Management Elective		3
400 Level Methods & Analysis Elective		3
	Hours	**9**
Spring		
Capstone Choice		3
400 Level Policy, Economics, & Resource Management Elective		3
400 Level Environmental Science Elective		3
	Hours	**9**
Year Five		
Fall		
ENVS 402	Sustainable Systems - Social Science Perspectives	3
400 Level Required Concentration Course		3
400 Level Required Concentration Course		3
	Hours	**9**
Spring		
ENVS 401	Sustainable Systems - Natural Science Perspectives	3
400 Level Required Concentration Course		3
400 Level Required Concentration Course		3
	Hours	**9**
	Total Hours	**78**

Suggested Sequence of Courses - Professional Track

Course	Title	Hours
Year One		
Fall		
ENVS 137	Foundations of Environmental Science I	3
PLSC 101	American Politics	3
	Hours	**6**
Spring		
ENVS 203	Environmental Statistics	3
ENVS 237	Foundations of Environmental Chemistry	3
ENVS 238	Foundations of Environmental Science Lab	1
Justice & Ethics Choice		3
	Hours	**10**
Year Two		
Fall		
ENVS 200	Environmental Careers and Professional Skills	1
ENVS 280	Principles of Ecology	3
ENVS 286	Principles of Ecology Lab	1
	Hours	**5**
Spring		
ENVS 310 or PLSC 392	Introduction to Environmental Law & Policy or Environmental Politics	3
Environmental Science Elective		3
Policy, Economics, and Resource Management Electives		3
	Hours	**9**
Year Three		
Fall		
ENVS 310 or PLSC 392	Introduction to Environmental Law & Policy or Environmental Politics	3
Environmental Electives		3
	Hours	**6**
Spring		
ENVS 335 or ECON 328	Ecological Economics or Environmental Economics	3
Policy, Economics, and Resource Management Electives		3
	Hours	**6**
Year Four		
Fall		
Engaged Learning Choice		3
400 Level Policy, Economics, & Resource Management Elective		3
400 Level Methods & Analysis Elective		3
	Hours	**9**
Spring		
Capstone Choice		3
400 Level Policy, Economics, & Resource Management Elective		3
400 Level Environmental Science Elective		3
	Hours	**9**
Year Five		
Fall		
ENVS 402	Sustainable Systems - Social Science Perspectives	3
400 Level Required Concentration Course		3
400 Level Required Concentration Course		3
	Hours	**9**
Spring		
ENVS 401	Sustainable Systems - Natural Science Perspectives	3
400 Level Required Concentration Course		3
400 Level Required Concentration Course		3
	Hours	**9**
	Total Hours	**78**

School of Environmental Sustainability Graduation Requirements

All SES students are required to complete a foreign language requirement and a writing intensive requirement. The SES language requirement can be fulfilled by 1) earning college credit at the 102-level or above; or 2) demonstrating proficiency via the SES foreign language proficiency examination. The SES writing intensive requirement is fulfilled by successfully completing two Loyola WI courses (max of one per semester). Writing intensive courses have a “W” in the section number.

Additional Undergraduate Graduation Requirements

All Undergraduate students are required to complete the University Core, at least one Engaged Learning course, and UNIV 101. SCPS students are not required to take UNIV 101. Nursing students in the Accelerated BSN program are not required to take core or UNIV 101. You can find more information in the University Requirements (https://catalog.luc.edu/undergraduate/university-requirements/) area.

Learning Outcomes

- Describe the need for government intervention and the policy process. [BA]
- Explain the major US federal environmental laws and international agreements. [BA]
- Recognize the role of state and local innovation in environmental policy. [BA]
- Engage in environmental policy advocacy, development, and implementation. [BA]
- Evaluate the effectiveness of the policy toward environmental sustainability. [BA]
- Deepen your understanding of complex socio-ecological systems and their connection with sustainable development goals. [MS]
- Increase your ability to make accurate and ethical evidence-based decisions from scientific literature. [MS]
- Expand your capacity to communicate environmental science and sustainability issues to the scientific community, professional colleagues, policy makers, and the general public. [MS]
- Demonstrate competence of in-depth knowledge and skills through completion of an original research project and thesis. [MS]

SES Shared Learning Outcomes

All SES majors share the following Program Learning Objectives, in addition to their unique major-specific Program Learning Objectives:

1. Articulate the foundational principles of natural and social sciences and humanities essential to solving environmental problems.

2. Critically evaluate the accuracy and credibility of information relating to environmental topics.

3. Employ knowledge and skills to design and implement solutions that contribute to a just and sustainable world.

4. Exemplify the values of environmental and social justice through actions to care for our common home and one another.