

ECON 4220

Environmental Economics and Policy

Maymester 2026 | Georgia State University | Andrew Young School of Policy Studies

This course introduces students to contemporary environmental problems and the design of appropriate policy responses. Topics include urban air quality, water pollution, tropical deforestation, and global warming. Open to all majors with interests in public policy and the environment.

Instructor

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Performance & Evaluation

Assessment	Weight
Participation (2 Discussions)	5%
Econ & the Environment Fundamentals (Midterm Exam)	25%
Economics & Environment Final Project	30%
Final Comprehensive Exam	40%

Plus/Minus Grading Scale

Range	Grade	Range	Grade
99–100	A+	77–79	C+
93–98	A	73–76	C
90–92	A–	70–72	C–
87–89	B+	60–69	D
83–86	B	Below 60	F
80–82	B–		

Important Notes from Your Professor

Time Management is Critical

This course involves substantial reading in a short time frame. Many readings are essential for understanding the portfolio project. No late submissions will be accepted.

Primary Take-away

The most important component of this course is your term project. Students are required to submit their project individually. No late submissions will be accepted.

Course Modality

This course is conducted entirely online and structured to accommodate individual learning speeds. Three optional live sessions are offered to address questions submitted online beforehand. Sessions are recorded for accessibility.

Required Textbook

All required readings are available through links in iCollege. There is no required textbook. The following book may provide additional context for the project:

Bryson, J. (2018). Strategic Planning for Public and Nonprofit Organizations (5th ed.). San Francisco: Jossey-Bass.

Academic Integrity & AI Policy

No credit will be given for AI-generated writing.

All submitted work must be your own. Use of AI tools (e.g., ChatGPT, Claude) to write or substantially draft your work is not permitted and will result in a grade of zero.

Course Schedule & Assignments

Module	Section	Tasks	Due
Course Intro	Welcome & Orientation	<ul style="list-style-type: none"> Read course overview Download and review this syllabus Complete the pre-survey 	Live Class 1: on 5/12 @ 11 AM
Module 1 Economics & the Environment	1.2 Our Environment	<ul style="list-style-type: none"> Watch The Ecological Footprint Explained (2:49) Watch Managing Natural Resources: Making More with Less (3:45) 	—
	1.3 Principles of Economics	<ul style="list-style-type: none"> Read Boundless Economics – The Study of Economics Watch What is Economics? (2:54) 	—
	1.4 Environmental Economics	<ul style="list-style-type: none"> Read 10 Things Everyone Should Know About Environmental Economics — Stephen Smith Read National Bureau of Economics Research, Environmental and Energy Economics Program Report Watch Environmental Econ: Crash Course Economics #22 (8:22) 	—
	1.5 Env. Economics – Components & Topics	<ul style="list-style-type: none"> Read Three Pillars of Sustainability: In Search of Conceptual Origins (2018) Watch Growing Green Economies (3:34) 	—

Module	Section	Tasks	Due
		<ul style="list-style-type: none"> Project: Rank Topics and Delegate Work 	
	1.6 Economic Models	<ul style="list-style-type: none"> Watch Environmental Economics by Bozeman Science (9:20) 	—
	1.7 Environmental Policy	<ul style="list-style-type: none"> Read Environmental Policy Read A Win-Win-Win Innovation In Environmental Policy — Forbes Watch Aquaculture & Sustainability – Science for Environment Policy (4:38) Discussion 1: Environmental Policy 	Post: 5/12 Respond: 5/14
Module 2 Study of Env. Economics	2.2 Economic Perspectives	<ul style="list-style-type: none"> Read Microeconomics and the Environment (pp. 5–7) Read The Environmental, Economic, and Social Components of Sustainability — Wanamaker (2019) Read Role of Economics in Analyzing the Environment and Sustainable Development (2019, pp. 5233–5238) 	—
	2.3 Economic Efficiency	<ul style="list-style-type: none"> Read How Property Rights Could Save the Environment — Megan McArdle Read How Economic Efficiency Could Be Achieved — Ajith Polwatte Read The Corporate Agenda for Environmental Property Rights — Sharon Beder Read & Watch Economic Efficiency — Investopedia Answer Class Questions 1: Perspectives & Efficiency 	—
	2.4 Tragedy of the Commons	<ul style="list-style-type: none"> Read & Watch The Tragedy of the Commons — Investopedia 	—
	2.5 The Invisible Hand	<ul style="list-style-type: none"> Read The Invisible Hand at Odds with Environmentalists — Craig S. Marxsen Watch The Invisible Hand (1:35) 	—
	2.6 Concepts in Env. Economics	<ul style="list-style-type: none"> Read Concepts 	—
	2.7 Market Failure – Externalities	<ul style="list-style-type: none"> Read Introducing Market Failure; Externalities in Depth; Government Policy Options Watch Market Failures, Taxes, and Subsidies: Crash Course Economics #21 (2:40) Answer Class Questions 2: Equilibrium 	—
	2.8 Market Failure – Public Goods	<ul style="list-style-type: none"> Read Public Goods — Matthew Kotchen Read Why Government Should Spend More on Public Goods — Tim Worstall 	—

Module	Section	Tasks	Due
	2.9 Other Market Failures	<ul style="list-style-type: none"> • Read Do Monopolies Undermine the Environment? — Jason D. Scorse • Read The Coase Theorem is widely cited in economics. Ronald Coase hated it. — Timothy B. Lee • Read The Role of Government in the Transition to a Sustainable Economy — Steven Cohen • Answer Class Questions 3: Market Failures 	—
	2.10 Trade-Offs	<ul style="list-style-type: none"> • Read Green Tape: Environmental Regulation May Not Cost as Much as Feared • Read Discount Rates: A Boring Thing You Should Know About (with Otters!) — David Roberts 	—
	2.11 Valuation	<ul style="list-style-type: none"> • Read Valuing the Environment — Sharon Beder • Read Should We Put A Dollar Value On Nature? — Judith D. Schwartz • Read Environmental Values: How To Ensure the Environment is Properly Accounted For • Answer Class Questions 4: Trade-Offs & Valuation 	—
Module 3 Env. Economics & Policy	3.2 Market-Oriented Environmental Policies	<ul style="list-style-type: none"> • Read Types of Market-Oriented Environmental Tools — Khan Academy 	—
	3.3 Efficiency and Cost-Effectiveness	<ul style="list-style-type: none"> • Read Optimal Pollution • Read Is Carbon Dioxide a Pollutant? • Read Economic Considerations: Cost-Effective and Efficient Climate Policies • Read Carbon Pricing Most Cost-Effective Way to Reduce Carbon Emissions, says OECD — Oliver Milman • Read Where Carbon is Taxed • Read What's a Carbon Tax? • Answer Class Questions 5: Emissions Taxes and Cost Effectiveness 	—
	3.4 Carbon Tax vs. Cap-and-Trade	<ul style="list-style-type: none"> • Read Tradable Pollution Permits as a Remedy for the Negative Externality — Eric Dahlberg • Read Carbon Tax and Cap and Trade • Watch Carbon Pricing, Explained With Chickens (3:37) • Watch Carbon Tax and Cap and Trade (8:56) • Watch Calculating Cap and Trade vs. Carbon Tax (8:54) 	—

Module	Section	Tasks	Due
		<ul style="list-style-type: none"> • Answer Class Questions 6: Cap-and-Trade and Cost-Effectiveness 	
	Midterm Exam	<ul style="list-style-type: none"> • Available on iCollege → Quizzes • Window: May 26 @ 8:00 AM through May 27 @ 11:59 PM. • Once started: 90-minute time limit 	May 26 @ 8:00 AM through May 27 @ 11:59 PM
	3.5 Stationary-Source Pollution	<ul style="list-style-type: none"> • Read Economic Incentives versus Command and Control — Best Approach for Solving Environmental Problems? • Read Southern California Air Quality Board Set to Vote On Stricter Emissions Standards • Read The US Sulphur Dioxide Cap and Trade Programme and Lessons for Climate Policy • Read Cap and Trade Curbed Acid Rain — EDF 	—
	3.6 Mobile-Source Pollution	<ul style="list-style-type: none"> • Read Mobile Sources of Air Pollution • Read Why the Government's CAFE Standards Should Be Repealed, Not Increased • Read What Are the CAFE Standards, and Why Do They Matter? • Read Did 'Cash-for-Clunkers' Work as Intended? 	—
	3.7 Water Pollution	<ul style="list-style-type: none"> • Read Program Overview: Total Maximum Daily Loads (TMDL) • Read How Tap Water Became Toxic in Flint, Michigan • Read Economic Incentives to Control Water Pollution in Developing Countries — Colombia Case Study • Read 5 Years After BP Oil Spill, Effects Linger And Recovery Is Slow • Discussion 2: Pollution 	Post: 5/22 Respond: 5/26
	3.8 Environmental Justice	<ul style="list-style-type: none"> • Read The Benefits of Cleaning Superfund Sites • Read Job Safety • Read The Political Economy of Environmental Justice — H. Spencer Banzhaf (RFF) 	—
	3.9 Sustainable Development & Urbanism	<ul style="list-style-type: none"> • Read Sustainability, Well-Being, and Economic Growth • Read Environmental Protection & the States: Race to the Bottom or Race to the Bottom Line? • Read NAFTA's Impact on Mexico • Read Environmental Kuznets Curve 	—

Module	Section	Tasks	Due
	3.10 Climate Change	<ul style="list-style-type: none"> • Read What is Climate Engineering • Read Can Game Theory Help Solve the Problem of Climate Change? • Read The Deepest Cuts • Read Does a Carbon Tax Work? Ask British Columbia • Read ETS, RIP? The Failure to Reform Europe's Carbon Market • Read Fact or Fiction?: Natural Gas Will Reduce Global Warming Pollution • Read A Road Map for Natural Capitalism 	—
	3.11 Final Project Submission	<ul style="list-style-type: none"> • Upload Final Project on iCollege: Assignment → Final Project 	5/30 @ 11:59 PM
Module 4 Course Conclusion	Final Exam	<ul style="list-style-type: none"> • Available on iCollege → Quizzes • Window: June 2 @ 8:00 AM – June 3 @ 11:59 PM • Once started: 150-minute time limit • 20 multiple choice questions and 4 written questions (need to answer all 20 multiple choice question and all 4 written questions) • No AI tools permitted 	6/2 @ 8 AM till 6/3 @ 11:59 PM

Support Statements

Inclusivity

AYSPS is committed to providing a learning environment that respects diversity. All members are asked to share their unique experiences, be open to the views of others, honor the uniqueness of colleagues, and communicate respectfully.

Students with Disabilities

Register with the GSU Office of Disability Services at disability.gsu.edu/services/how-to-register. Once you have an Accommodation Plan, email a copy to your instructor. Contact: (404) 413-1560 | dismail@gsu.edu

Veterans & Serving Military

Contact the Military Outreach Center at (404) 413-2331 | military.gsu.edu. Please notify your instructor immediately if there is any possibility of activation or deployment. Thank you for your service.

Online Course Evaluations

Your constructive assessment of this course plays an important role in shaping improvements for all courses in this program. Please take time to fill out the online course evaluations at the end of the term.