Forestry and Environment Studies (F&ES)

* F&ES 255a / EVST 255a / GLBL 282a / PLSC 215a, Environmental Law and Politics: Global Food Challenges  John Wargo
We explore relations among food, environment, health, and law. We consider global-scale avoidable challenges such as: starvation and malnutrition, obesity, other food related human diseases, climate instability, soil loss, water depletion and contamination, microbial hazards, chemical contamination, food waste, dietary convergence, air pollution, energy, packaging, culinary globalization, and biodiversity loss. We focus on laws that influence the world's food system, including those intended to reduce or prevent environmental and health damages. Other laws protect rights of secrecy, property, speech, confidential business information, free trade, worker protection, equal opportunity, and freedom from discrimination. Ethical concerns of justice, equity, and transparency are prominent themes. Examples of effective law, consumer movements and corporate innovations provide optimism for the future of responsible food.

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* F&ES 261a / EPS 261a / EVST 261a, Minerals and Human Health  Ruth Blake
Study of the interrelationships between Earth materials and processes and personal and public health. The transposition from the environment of the chemical elements essential for life. After one year of college-level chemistry or with permission of instructor; EPS 110 recommended.
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* F&ES 285b / EVST 285b, Political Ecology of Tropical Forest Conservation  Amity Doolittle
Study of the relationship between society and the environment focusing on tropical forest conservation. Global processes of environmental conservation, development, and conflicts over natural resource use and control; approaches to conserving trees and forest cover using strategies that support biodiversity and rural agricultural livelihoods; specific focus on tropical forest landscapes dominated by agriculture and cattle ranching practices using Panama and Colombia as a case studies. The course includes an optional field trip during Spring Break: March 6-March 15 in Colombia. Admission is by application only. Applications open in late November and close December 9; class list is determined by December 17. so

* F&ES 290b / EVST 290b, Geographic Information Systems  Charles Tomlin
A practical introduction to the nature and use of geographic information systems (GIS) in environmental science and management. Applied techniques for the acquisition, creation, storage, management, visualization, animation, transformation, analysis, and synthesis of cartographic data in digital form.

F&ES 315a / E&EB 115a, Conservation Biology  Linda Puth
An introduction to ecological and evolutionary principles underpinning efforts to conserve Earth’s biodiversity. Efforts to halt the rapid increase in disappearance of both plants and animals. Discussion of sociological and economic issues.
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* F&ES 344b / EVST 444b, Aquatic Chemistry  Gaboury Benoit
A detailed examination of the principles governing chemical reactions in water. Emphasis on developing the ability to predict the aqueous chemistry of natural, engineered, and perturbed systems based on a knowledge of their biogeochemical setting. Calculation of quantitative solutions to chemical equilibria. Focus on inorganic chemistry. Topics include elementary thermodynamics, acid-base equilibria, alkalinity, speciation, solubility, mineral stability, redox chemistry, and surface complexation reactions.
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* F&ES 422a / ANTH 409a / ER&M 394a / EVST 422a / GLBL 394a, Climate and Society from Past to Present  Michael Dove
Discussion of the major currents of thought—both historic and contemporary—regarding climate, climate change, and society; focusing on the politics of knowledge and belief vs disbelief; and drawing on the social sciences and anthropology in particular.

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