Programs with an Emphasis on Sustainability and Environmental Issues

**South Africa: Parks and People**
Penn State students travel to South Africa, take classes, and conduct research and service projects in the parks and in the communities that surround them. During the 10 weeks, Penn State students will be joined at different times by students and staff from several partner universities in South Africa as well as nature reserve staff and local community members. The program is directed by Penn State faculty and courses will be taught by Penn State faculty in collaboration with South African faculty.

The program encompasses disciplines ranging from earth sciences, ecology and land use management to community relations, livelihoods assessment, indigenous knowledge systems and entrepreneurship. It brings together the natural and social sciences in projects that address issues of community and human development, environmental protection and health, water, food and energy security as these relate to the achievement of the Millennium Development Goals. A core element of the program is to integrate education with on-going research and service learning programs in the parks and the surrounding communities.

*Courses (led by PSU faculty members)*
- GEOG 497E (3 credits) Societies and Environments
- GEOG 497F (3 credits) Fire, Biogeochemistry
- GEOG 497G (3 credits) Learn to Live with Change
- GEOG 497I (1 credit) Global Citizenship
- GEOG 496A (5 credits) S. Africa Independent Study

**Mangu’la, Tanzania: Parks and People (Summer)**
This is a 9 credit, faculty-led service-learning program based at the Udzungwa Ecological Monitoring Centre on the Udzungwa Mountains National Park in Tanzania. The program will focus on biodiversity conservation in the 21st century: maintaining biological diversity and the essential services provided by functioning ecosystems in a world increasingly dominated by humans. As people grow in number and place greater demands on the earth’s resources, human impacts increasingly threaten nature and natural systems. The main solution remains protected areas, however, they increasingly appear as isolated islands of nature amidst a sea of human development with resource extraction often affecting the protected areas themselves. Establishing functioning boundaries for protected areas and expanding conservation into connecting corridors between protected areas, re considerable challenges.

The Penn State Study Abroad Program at Udzungwa Mountains National Park will focus on local communities in the vicinity of the park. With the park to the west and commercial agricultural fields to the east, these villages have little access to land and other resources necessary to meet their basic needs. We will focus on these communities in an attempt to understand 1) their current activity patterns, 2) their current needs, and 3) through community planning identify strategies that successfully integrate conservation with development to meet these needs. Led by faculty conducting research in and around the park, the program will also involve partners from Tanzanian universities, Tanzanian government agencies, other universities, and international non-government organizations to expose students to the highest levels of interdisciplinary expertise.

*Courses (led by PSU faculty members)*
- LARCH 499E: Seminar: People and Protected Areas (3 credits)
- LARCH 499F: Studio: Community Design in the Vicinity of Udzungwa Mountains National Park (5 credits)
- LARCH 499G: Colloquium: The Contribution of Service-Learning to Students and Community (1 credit)
AESOP: Senegal, Studies in International Development
AESOP: Kenya, Studies in International Development
AESOP: India, Studies in International Development

Courses (required)
- Study of the local language
- International Development: Critical Perspectives on Theory and Practice
- MSID Country Analysis
- Community Internship in Global South

In International Development course and internship, students are able to tailor course focus/internship organization to fit specific focus such as environmental studies/ecology and sustainable agriculture. Past internships include:
- Working with youth group developing income-generating projects
- Working with a clinic on AIDS education
- Promoting sustainable agriculture
- Working with communities to develop eco-tourism
- Contributing to a rural adult literacy project
- Working in a shelter for street children
- Assisting women with micro-business proposals
- Working at family health care clinic

School for Field Studies: Kenya, Wildlife Management

Courses (set curriculum)
- Techniques of Wildlife Management
- Wildlife Ecology
- Environmental Policy and Socioeconomic Values
- Directed Research
- Introduction to Swahili Language and East African Tribal Communities

Sample Directed Research Topics
- Amboseli and Tsavo National Parks: multi-day excursions illustrating the management implications of high concentrations of animals in a confined area. The impact of the elephants, whose trumpeting punctuates the night, are clearly visible by daylight.
- The role of privately owned conservation areas in Maasai group ranches as nuclear areas for potential wildlife dispersal and migration routes within the Amboseli Ecosystem in Kenya.
- Impact of humans and large mammals such as elephants on plant communities in group ranches and implications of these on wildlife conservation and human livelihoods.

School for Field Studies: Costa Rica, Sustainable Development Studies

Courses (set curriculum)
- Tropical Ecology and Sustainable Development
- Economic and Ethical Issues and Sustainable Development
- Principles of Resource Management
- Language, Culture and Society of Costa Rica

Sample of Directed Research Topics
- Management practices of Carara National Park.
- Evaluation of the socioeconomic benefits of Costa Rica's national parks for neighboring communities.
- Impact of road traffic noises on the avifauna of national parks.
• Evaluation of ecosystem services, such as biodiversity conservation and carbon sequestration, in agroforestry systems.

**Euroscholars**

Provides international research experiences within a number of different European Universities. Students study scientific reasoning, research methods, theoretical principles, and scholarly communication. Students are a part of an international research group and conduct research under the supervision of a professor. Some current projects include:

• Sustainable drinking water production: detection and removal of micropollutants
• Governing Water: The Contribution of International Law to Cooperation on Transboundary Freshwater Resources
• Testing a generalized model of pristine forest dynamics
• The distribution of environmental resources in Africa
• Experimental Projects in Atmospheric and Climate Research: Development and Application of Isotope Techniques
• Risk assessment of exposure to chemical, biological or physical agents on human health and ecosystems

**AESOP: Merida, VENUSA**

Te VENUSA program offers courses at a language and culture study center specializing in English for Venezuelan students and Spanish studies for US students. This program offers courses in beginning, intermediate, and advanced Spanish language, Spanish culture and history, Caribbean and Spanish-American literature, Latin American studies, international business, tropical ecology, and field botany. Current course options include:

• Geography of Venezuela
• Tropical Ecology
• Field Botany in the Andes

**CIEE: Perth, Murdoch University- Sustainability and the Environment**

The Sustainability and the Environment program offered at the CIEE Study Center at Murdoch University helps to understand the complexities and opportunities regarding the many facets of sustainability. The various topics covered in the program are sustainability, conservation biology, and public policy through unique course offerings available through this program. Courses Include:

• Sustainability and Social Justice: The Non Profit Sector
• Sustainable Development Internship/Project
• Disasters and Risk Management
• Climate Change Adaptation: Policy and Practice
• Introduction to Sustainable Development
• Approaches to Sustainable Development
• Special Topics in Sustainable Development: The Future in a Time of Crisis
• Economics for Sustainability

**IES: Freiburg, Environmental Studies**

Organized in cooperation with the Forest Ecology and Management Program, IES Abroad students take a series of modules that focus on methods and practice for sustainable management of natural resources both in Freiburg's local ecosystem and in ecosystems worldwide. Students study topics such as human effects on the environment, ecological processes within ecosystems, and the management of natural resources, with emphasis on the adaptive management of forests. Courses Include:

• Ecology and Management of Forest Landscapes in Southwest Germany and the Swiss Alps
• Global Environmental Changes
• Tree Structure and Function
• Applied Environmental Statistics
• Change of Ecosystems as a Result of Long-Term Human Activities in Southwest Germany and the Swiss Alps
Florence, Institute at Palazzo Rucellai, Sustainable Agriculture and Food Studies

The Sustainable Agriculture and Food Studies program at Palazzo Rucellai is distinctive both for its interdisciplinary and comparative approach to food, nutrition and sustainability, and its combination of in-class teaching, field work and study tours. Students on this program will have the opportunity to experience a particularly rich food culture with innovative approaches to issues of environmental and economic sustainability, quality oriented food production and nutrition, as well as food promotion and hospitality industry. Strong focus will be placed on the issues of organic farming, sustainable agriculture, and the defense of bio-diversity. Courses include:

- The History of Food and Agriculture in Italy
- Environmental Economics: Sustainable Rural Development in Tuscany
- The Mediterranean Diet
- The Florence Experience: Intensive Italian Language Course
- Pathways to Intercultural Competence

Arcadia: London Internship Program (Semester option)

Arcadia: London Internship Program (Summer option)

Program offers 3 day/week practical fieldwork placement while becoming fully immersed in the London professional and cultural life. On-site coordinators find internship opportunities to fit individual student academic and professional objectives. Students participate in significant projects and Arcadia provides an academic context for the student work. Past internships related to sustainability have included:

- Marketing Project with Carbon Neutral, “Sustainable marketing: What is it and how is it done?”
- Parliamentary Internships, “Moving to Expand Renewable Technologies throughout the United Kingdom: An Analysis of the Effects and How it Can be Done” and “Teaching Sustainable Development”
- Information Technology Internship with Skipso, “Sustainable Innovation

CIEE: Santo Domingo

Instituto Tecnológico de Santo Domingo (INTEC) Sample Courses

- Bio-Geography of the Dominican Republic
- Ecology
- Economic Development
- Enterprise Economics
- Environmental Contamination
- Environmental Education
- The Human Being and Nature
- The Human Being and Society
- Introduction to the Dominican Fauna
- Introduction to Planning and Management of Natural Resources
- Introduction to Studies of Environmental Impact

CIEE: Palma de Mallorca (Summer)

This program offers courses in Spanish language, globalization, and immigration. The CIEE Study Center at Universitat de les Illes Balears allows students to complete 3 credits of Spanish and one core course on globalization and immigration, a course cross listed in RPTM/HRIM/KINES. Courses Include:

- Mediterranean Marine Environment
- Palma in the Mediterranean
- Globalization, Human Migration, and Tourism: The Balearic Islands as a Case Study
Other Program Options

The following programs allow students to enroll in courses available at the University with other degree seeking students. These programs offer a variety of course options in the hard sciences, social sciences, and humanities. Many of these Universities have their own sustainability initiatives. Many of the programs also encourage students to integrate within the local community through student and volunteer opportunities.

- Arcadia: National University of Ireland, Galway
- Limerick: University of Limerick
- Dublin: University College Dublin, College of Life Sciences
- IES: Dublin, Trinity College Honors Program
- Bath: University of Bath
- Southampton: Marine Science and Engineering, University of Southampton
- Brighton, University of Sussex
- Leeds: University of Leeds
- Cairo: American University in Cairo
- Engineering and EMS: Middle East Technical University, Turkey
- CIEE: Cape Town, Arts and Sciences
- Christchurch: Lincoln University
- IES: The University of Sydney
- Melbourne: RMIT University
- Perth: University of Western Australia
- Arcadia: Brisbane, University of Queensland
- Melbourne: Monash University
- Melbourne: University of Melbourne
- Sydney: University of New South Wales
- Hamilton: University of Waikato
- Wellington: Victoria University of Wellington