

2006-2007 SUNY-ESF Service-Learning Course Descriptions

Class #	Class Title	Fall	Instructor	# Students Enrolled
CLL 410	Writing and Learning in the Community	Fall/Spring	Whitmore	30
<p>Students in this course worked through Syracuse University's Center for Public and Community Service for placement at various local community agencies. Weekly, students completed community service hours. In the fall, locations included: Syracuse Stage, Syracuse School District, Syracuse Library System, Peace Inc., Dorothy Day House and the New Environment Institute</p>				
EFB 215	Interpreting Science Through Art	Fall	Saunders	80
<p>The students in this course are writing and illustrating a new edition of the Faust Nature Trail Self-guiding Booklet. We have also provided programs for ESF's Fall Festival and for the Sportsmen's Conservation Field Days.</p>				
EFB 334	Wetlands	Fall	Ferlow	30
<p>See LSA 326</p>				
EFB 416/616	Intro to Environmental Interpretation	Fall	Saunders	43
<p>The Introduction to Environmental Interpretation is again provided the autumn public guided walks for Beaver Lake Nature Center and we are putting the finishing touches on the Science Trail there. We are also finishing the materials for a late winter Science Trail teacher workshop for Baltimore Woods, and for the spring Stalking Science Along Onondaga Creek Teacher Workshop planned for Clary Middle School. The students in this course and in Interpreting Science Through Art, are writing and illustrating a new edition of the Faust Nature Trail Self-guiding Booklet. We have also provided programs for ESF's Fall Festival and for the Sportsmen's Conservation Field Days.</p>				
EFB 486	Ichthyology	Spring	Stewart	60
<p>We do a stream gradient survey of fish distributions, and that information is passed to the DEC for their files on fish distributions in the State.</p>				
EFB 518	Systems Ecology	Fall	Hall	18
<p>18 students developed a model of the future of Argentina, with the students divided into four groups: demographic, energy, economic and agriculture. We hope to publish the results.</p>				
EFB	UMEB Seminar: Culture & Conserv Biology	Fall	Kimmerer	7
<p>We worked with Anne Moore at the Cayuga County New Visions program to conduct a one-day biological inventory of a natural area in Auburn to obtain baseline information on habitat types and biodiversity to inform proposal to evaluate the area for possible protection. 7 people for a 6-hour field trip.</p>				
EFB Interns	Student Conservation Association / Zoos / Other Agencies	Fall	Shields	13
<p>The Student Conservation Association (SCA) is a non-profit group in New Hampshire that was set up to service the federal government and college students as interns in government agencies NPS, BLM, and USF&WS, and Forest Service, primarily. The agencies provided them with a list of needs and students checked their lists to try matching. Annually, we have 5-10 students involved in SCA internships. Between Burnet Park and other local and more distant zoos (including NYC zoos, especially) in an average year 4-6 of our students have interned at Burnet Park, and 2 or 3 more elsewhere. Finally, 1 or 2 of our students also interned at Wildlife Rehabilitators.</p>				
ES Senior Syn	Community Projects Internships	Fall/Spring	Various	10
ERE 596	Senior Seminar / Independent Study	Fall/Spring	Various	10

FOR 476/676	Tourism Planning	Fall	Kuehn	15
<p>FOR 476/676 (Tourism and Commercial Recreation) is currently working on a service learning project for the village of Hancock, New York, which is seeking ways to attract more visitors. The class is currently putting together a tourism plan that identifies strategies for enhancing the appearance of the community, for improving visitor access to local natural and historic resources, and for implementing promotional strategies designed to attract visitors. Students spent one weekend in Hancock meeting with community leaders and assessing local attractions and resources. Community members will be participating in an on-campus facilitated tourism planning session, as well. A written tourism plan, resulting from the class' efforts, will be available in the spring of 2007.</p>				
FOR 202	Intro to Sociology	Fall	Morrison	37
<p>Students in the class were required to complete 20 hours of community service with an agency of their own choice. They worked through SU's Center for Public and Community Service, students have chosen placements in the following agencies: Center for Nature Education, American Cancer Society, Beaver Lake Nature Center, Fair Housing Council of CNY, Food Bank of CNY, Sarah House, Dorothy Day House, Westcott Community Center, Near Eastside Adventures, Boys and Girls Club, and the MOST. Students were required to relate their community service experiences to the sociological theories they learned in class through written assignments.</p>				
LSA 326	Design Studio III	Fall	Hoffman, Stribley	29
<p>Save the County, a non-profit land trust, submitted a request through the CCDR for assistance in developing inventory, analysis and programming of a piece of property that was being offered as a donation by a local developer. Located along the Seneca River in the Town of Clay, and within a rapidly developing part of the region, the site is primarily DEC and Army Corp. designated wetlands but has the potential to serve valuable natural systems and passive recreational needs. The students in the studio facilitated a meeting with representatives from Save the County, the Town planning, recreation and highway departments, and the developer, to get a better understanding of stakeholders values and needs, and their perspectives on the site and its management. They also walked the site with stakeholder representatives, and visited the site several times for more in-depth understanding of wetlands and plant materials through their coursework in EFB 334 with Visiting Instructor Don Ferlow. The students created a series of posters documenting their comprehensive inventory of natural and cultural conditions, and each student prepared an illustrative conceptual design strategy that was presented at a review with Save the County and the develop representatives.</p>				
LSA 422	Design Studio 3	Fall	Toland	21
<p>Worked with Maren King and the CCDR on the Sodus Point Visioning Plan this semester. My students looked into different strategies as a way to assist CCDR in helping the community.</p>				
CLL 410	Writing and Learning in the Community	Spring	Whitmore	19
<p>Students in this course worked through Syracuse University's Center for Public and Community Service for placement at various local community agencies. Weekly, students completed community service hours. Spring locations included: Edward Smith Elementary School, the Utica Zoo, Home Headquarters, SU Ambulance, and the New Environment Institute. Students' writing projects for the course will connect to these service experiences.</p>				
EFB 446/646	Ecology of Mosses	Spring	Kimmerer	18
<p>This year our entire class is conducting a survey of the moss flora of a forest which has been proposed as a nature preserve, but which lacks the supporting data to document the diversity of the vegetation. Our class will prepare a scientific report on the mosses of the area as well as an educational brochure for distribution to citizens groups and a powerpoint presentation for use by the citizens group in their advocacy efforts.</p>				
EFB 417/617	Perspectives of Interpretive Programming	Spring	Saunders	40

1) "Eco-Expo" program for Gifford Zoo celebrating local aquatic ecosystems, for April 22, Earth Day event, 1000- 2000 expected. 2) Science Trail: design-construction with publications for Corcoran High School; 3) Science Trail: design-construction with publication for The Centers for Nature Education; 4) Science Trail: design-construction for Beaver Lake Nature Center; 5) Connecting Classrooms to Nature: Teacher Workshop, Corcoran High School; 6) Corcoran High School Cultural and Historical Interpretation Self-guiding Trail Booklet for the visiting public; "Nature in Your Backyard" TV vignettes.

ENS 796 / EST 496	Environmental and Energy Audit	Spring	Smardon/Drew	18
Students will be organizing into teams to do a net carbon sequestration assessment for the Rand track in SW Syracuse. The City of Syracuse is interested how much carbon is stored on the 400 acres which could be traded on a carbon exchange market. We will also look at other natural functions and services provided by this undeveloped area.				

FOR 480/680	Urban Forestry	Spring	Morrison	40
Students in the course prepared a neighborhood management plan with specific goals and objectives related to urban forest management. The exercise was designed to: 1) introduce students to broad-scale planning in urban forestry and 2) gain experience in dealing with public constituents. Each student group drew a consensus tract to serve as a study area in which they acted as the urban forester. They assessed the management issues in the area and the needs and desires of the residents. Students also interviewed homeowners to obtain information on public preferences toward their urban forest. The projects culminated in written final reports that addressed how the forest could be made better.				

FEG 489	Ecological Engineering in the Tropics: Honduras	Spring	Endreny	16
<p>Group 1: 3 students in an ESF Senior Engineering Design class. They will gather data on stormwater erosion in Sandy Bay, Roatan, a Honduran island off the north coast of mainland Honduras. They have been asked to develop ecologically-sensitive designs to reduce sediment erosion caused by the increased development of houses and roads on the hills. This sediment is washing out to the sea and wetlands, covering fragile and stressed turtle grass beds, mangroves, and reefs. Design ideas include bioretention basins, which are known by some as rain gardens. They can infiltrate stormwater to trap sediment, recharge watertables, and reduce the volume and scour of rill and gully runoff.</p> <p>Group 2: 2 students in the ESF Engineers without Borders (EWB) chapter. They will gather data on 2 potable water projects, one near La Ceiba another near Yoro, for communities that do not have a drinking water supply system. They will also spend their last couple of days working with the Group 1 students to take runoff and erosion measurements at Sandy Bay (students in the Group 1 are also in EWB chapter). They will also work their first 2 days with Group 3 students taking measurements for a river erosion restoration project.</p> <p>Group 3. 9 students at ESF and myself, in a course called Ecological Engineering in the Tropics. We are looking at how land use management practices in watersheds impact the health of receiving waters and their habitats. Land use is changing to more development of roads, houses, and monoculture. Impacts to receiving waters including river degradation from erosive scour, mangrove and sea grass degradation from sedimentation and water level fluctuations, and reef siltation and competition with more nutrient tolerant weeds. We will travel mostly in the North Coast of Honduras, visiting the wet and dry sides of the Pico Bonito National Park, and visit the Honduran island of Utila, and examine stormwater impacts of archeological excavation in Copan.</p>				

FEG 489	Eng. Planning & Design	Spring	Daley	14
---------	------------------------	--------	-------	----

Design of Small-scale Wind Turbine(s), SUNY ESF

SUNY ESF has a plan to make the campus “Net Carbon Zero” by 2015. The campus administration, faculty, staff and students are interested in supporting sustainable practices that reduce or offset energy consumption. Significant capital expenditures are anticipated to offset the use of fossil fuels by SUNY ESF. Notable progress has been made by the campus in procuring biomass, solar and fuel cell conversion technologies. Wind-derived power is expected to be a small but important element of the overall plan, accounting for approximately 5KW of generating capacity. The campus properties, located around central New York and the Adirondack Park region, offer significant opportunity for efficient and smart use of small-scale wind turbine.

Design of Pedestrian and Bicycle Routes, Town of Dewitt, NY

The Town of Dewitt, located immediately east of the City of Syracuse, has an extensive but incomplete network of bicycle and pedestrian routes used for recreation. The Syracuse Metropolitan Transportation Council (SMTC) is the State-designated Metropolitan Planning Organization (MPO), responsible for administering the continuous and comprehensive transportation planning process in Onondaga County. The primary goals of Bicycle and Pedestrian Plan for Onondaga County are to preserve and enhance the area's bicycling and pedestrian network, and to improve the safety, attractiveness, and the overall viability of cycling and walking as legitimate transportation alternatives in the SMTC MPO area.

Maple Drive in the Town of Dewitt is a potential connection between the public access trailhead of the Erie Canal Park and the bicycle path network in the County. It is expected that property values would increase with the implementation of a safe walking route. Alternative modes of transportation, such as walking and biking, are a sustainable practice that reduces reliance on fossil-fueled vehicles. Unfortunately, the route is hilly and the road shoulders virtually non-existent, creating conflicts between bicycle/pedestrian use and vehicular use. A solution is sought that would allow safe use by pedestrians, bicycles while minimizing cost of construction and maintenance by the Town.

Design of Stormwater Management System, Roatan, Honduras

A project has come to the attention of Dr. Endreny and the Engineers Without Borders group: a stormwater management project in Roatan, an island of the coast of Honduras. Watershed Discharge Management is the needed vision for an integrated management of environmental resources on Roatan Island. The long term goal for the watershed is to establish a watershed headwater-outlet partnership that enables effective effluent discharge management to protect the reef and support sustainable use of groundwater, and serves as a necessary replicable model for other watersheds in the Bay Islands and abroad. A diversity of practices is needed that may include water retention ponds, mangrove re-establishment, waste management, zoning, and protection easements. Such a partnership secures sustainability and maintenance. The principle is to protect an environmental resource that supports economic growth on the island while enhancing the, ever diminishing, capacity to recharge the fresh water table. This approach is particularly critical to watershed management of Sandy Bay Creek that has one of the highest population growth rates, poverty and urban development without adequate urban planning, stormwater routing, or cheap alternative sources for fresh water.

- Take advantage of stream bank restoration activities.
- Reduce peak runoff energy thereby reducing erosive forces and encouraging settling of sediments.
- Promote in-stream infiltration to enhance baseflow and recharge the shallow riparian aquifer used as a source of domestic water supply.

FOR/EFB523	Tropical Ecology	Spring	Drew	16
Tropical Ecology convenes in the spring term every year; this year we took 16 students to Dominica, W.I. for 10 days of field study. Students do field research projects, which are written up and turned over as a bound volume to the Division of Forestry, Wildlife and Parks in Dominica. Another copy is placed in the library of the Archbold Tropical Research and Education Center at Springfield, the site of our work. These projects provide information in a useable form to Division employees who manage the biotic resources of the island and to other groups like ours who come to the Archbold Center for study. In addition, this year, several of our students worked on field guides - 1) common birds of Springfield, and 2) freshwater stream habitats. Others working at Springfield will use these field guides. Both the bound volumes and the field guides are examples of service learning projects that arise out of our teaching of Tropical Ecology on the island.				
LSA 470/670	Urban Design	Spring	Curry/Peters	11

Lodi-Burnet-James (LBJ) Neighborhood Plan. Continuing a long tradition of community service to the City of Syracuse, this studio is generating an urban design plan for the Lodi-Burnet-James Neighborhood in Syracuse that, as a component of the Comprehensive Plan, sets a course for the future of the area. As part of their work the students are preparing an in-depth inventory of existing conditions, an analysis of the data to identify problems, opportunities and constraints, project goals and objectives, and developing policy, program and physical project recommendations. Throughout the semester the students are working regularly with a steering committee selected specifically for this project and are interacting with local officials, practicing professionals, and area residents and business people.

LSA 470/670	Community Design	Spring	Doble/King	7
-------------	------------------	--------	------------	---

The North Side Peace Garden - The Franciscan Ministries submitted a request through the CCDR for design assistance to work with the Vietnamese community and other neighborhood residents to create a Peace Garden on a vacant site on Syracuse's Northside. The students are developing and facilitating a series of participatory workshops that engage community members in an open dialogue to share their ideas and evaluate alternative design proposals. This project is also serving as a pilot program to establish a cooperative service program with the Upstate New York chapter of the American Society of Landscape Architects. A member of the ASLA is volunteering his time to participate in some of the studio activities and it is the intent that he will prepare the design development and construction documents to actually construct the garden. Other partners on this project include Home Headquarters, Syracuse Neighborhood Initiative and the City of Syracuse. This studio is also designing and facilitating the community participation component of the SUNY ESF Campus Master Plan. Based on the results of those activities they will prepare draft goals for presentation and review by the Master Plan Committee. It is the intent that their work that will serve as the foundation for the master plan.

LSA 470/670	Studio in Landscape and Urban Ecology	Spring	Carter	13
-------------	---------------------------------------	--------	--------	----

This studio is simultaneously engaging in three projects.

Project 1 (4 students) – The completion of an urban forestry plan and property development code for the Southwest Community of the City of Syracuse. This project is building on work done by the USDA Forest Service, on previous work done in this studio and on studies in Santiago, Chile. The intention is to discover how the urban forest might serve as productive infrastructure, particularly with regard to air quality improvement, and how it might also become part of the Syracuse Building Code. The project will also seek to discover how much vegetation is socially and psychologically acceptable to neighborhood residents. The studio is being assisted by Dr. David Nowak, Team Leader at the USDA Forest Service Research Station and Water Dixie, Executive Director, Jubilee Homes, Inc. *Project 2 (4 students) – The development of a conceptual master plan for the west shore of Onondaga Lake.* This project is being done in service to the Honeywell Corporation and the Village of Solvay, the Town of Camillus and the City of Syracuse. The intent is to plan for community access to the water, new recreation and education opportunities, brownfield remediation, park and woodland development and the establishment of a joint Onondaga Nation/SUNY ESF scientific and cultural center on the lakeshore. The studio is being assisted by Prof. Douglas Daley, Department of Environmental & Natural Resource Engineering. *Project 3 (5 students) – The development of an urban forest/urban landscape framework for the redevelopment of the Food Distribution Center at Hunt's Point, The Bronx.* The client is the Bronx Overall Economic Development Corporation and the SUNY Center for Brownfield Studies. The intention is to explore how urban forestry and urban landscape design might ameliorate the impact of 15,000 trucks per day and thousands of workers in a location that is home to a permanent residential population and with major issues of air, soil and water quality, and major quality of life issues. The studio is being assisted by Preston Gilbert and Prof. Douglas Daley of the SUNY Center for Brownfield Studies.

Ranger School	Timber Inventory / Forest Comprehensive Plan	Spring	Bridgen	27
---------------	--	--------	---------	----

Twenty seven students conducted a timber inventory of the 40-acre Griffin Forest in the Town of Fine. We spent half the day measuring species, diameters, tree quality, as part of a cooperative agreement between the Ranger School and the Town. We are working in association with the Clifton-Fine Central School in creating a forest comprehensive plan.