

2009 Keio University Summer School at University of Washington "HUMAN SYSTEMS IN THE PACIFIC NORTHWEST BIOREGION"

The Human Systems in the Northwest Bioregion Program for Keio University students at the University of Washington (UW) has been created through collaboration between the University of Washington (UW) Program on the Environment (PoE) and International Outreach Programs (IOP). It is an intensive three-week course designed to introduce students from a wide range of academic and professional interests to issues and challenges encountered in an urbanizing area with plentiful natural resources. The Pacific Northwest Bioregion is a place of tremendous natural beauty with a human settlement history of thousands of years. However, urban development in the region has only occurred over the last 150 years. We are therefore perfectly situated as a 'natural laboratory' for studying and solving problems regarding the protection and use of natural resources, as well as social conflicts in an urban setting. Through first-hand experience, the Keio students will better understand pressures on natural resources in the Pacific Northwest and the impact of urbanization on the environment, improve their abilities to function using the English language, and broaden their horizons through a wide variety of valuable cultural and professional experiences. To accomplish these goals, students will learn from PoE instructors and guest teachers, work side by side with peer student assistants, and obtain communication skills from IOP instructors. These components are the core of our program:

1. HUMANS AND THE ENVIRONMENT taught by UW PoE Instructor

The state of Washington on the Pacific Northwest coast of the United States provides a dynamic and beautiful setting to study ecological and environmental issues. The Puget Sound Region's lush forests, multiple bodies of water and stunning mountain vistas will immerse students in an environment through which program concepts can be realized first-hand.

This course will offer a comprehensive overview of selected topics related to the human impact on the environment. The three themes of the program are 1) Northwest ecosystems critical for plants and animals (including humans), 2) cultural diversity of the Puget Sound, and 3) urban ecology in Seattle. The course is designed with the purpose of providing basic concepts, scientific principles, critical thinking, as well as different approaches to synthesis and characterization of the issues presented. The diverse ecology of the Pacific Northwest will serve as the setting for this investigation, with the intent that the skills acquired can be transferred to the environmental issues and challenges of other locales. In addition to the PoE instructor the course will be taught by a variety of professors and local experts from different fields of study. The course will also include in a visit to the UW off-campus facilities for lectures, seminars, and hands-on experiences. Student experiences in the course will include:

- Visiting field sites to experience design and tools of ongoing ecological research
- Viewing environmental issues in urbanizing areas from the perspectives of different disciplines (including ecology, economics, geography, and urban planning)
- Comparing environmental patterns and processes from forest ecosystems to island communities to downtown Seattle

2. DISCUSSION AND PROJECT PREPARATION led by UW PoE Peer Student Assistants

Keio University students will work extensively with University of Washington Students who will be participating in the Human Systems in the Northwest Bioregion Program as their graduation project. They will lead discussions of the lectures and field activities, participate in program activities, and assist Keio students with their program projects. Individuals will work with their Keio and UW peers to develop their projects on specific topics related to overarching themes and will have the opportunity to present their research to the larger group.

3. COMMUNICATION SKILLS FOR HUMAN SYSTEMS IN THE PACIFIC NORTHWEST BIOREGION PROGRAM taught by UW English Language Specialist

This course will include the following components:

- Analysis and discussion of journal and newspaper articles related to the course lectures
- Oral presentation skills
- Strategies for effective discussion leading
- Participation in question and answer sessions
- Conversational fluency practiced in professional and networking contexts
- Effective research skills for preparing the program final project

PARTICIPATING UW DEPARTMENTS

The Program on the Environment

The Program on the Environment (PoE) was established in 1997 to foster and promote interdisciplinary environmental education at the University of Washington (UW). PoE offers an undergraduate degree in Environmental Studies, a Minor in Environmental Studies, and two graduate certificate programs. In addition, PoE serves as a focal point for information exchange on environmental education and research opportunities at UW.

PoE's programs provide students knowledge in four domains of inquiry: natural sciences; social sciences; law, policy, and management; and ethics, values, and culture. PoE merges these fields through rigorous coursework and hands-on learning within the community to provide a unique opportunity for students and faculty to explore complex environmental issues from multiple perspectives.

As a focal point of environmental studies at UW, the Program on the Environment is well positioned to bring campus and community together and to educate future environmental leaders.

International Outreach Programs

For more than twenty years, the UW International Outreach Programs has been developing customized programs for institutions by combining our educational and planning expertise with new ideas brought to us by universities wishing to send their students abroad.

In today's expanding global market, international experience is becoming essential to an individual's academic and professional career. International Outreach Programs creates customized long- and short-term academic programs that help students and professionals meet the ever-changing intellectual demands of the globalized world. We design programs that inspire the individual, promote global understanding and foster strong and long-lasting interpersonal and professional relationships for the future.

2009 TENTATIVE SCHEDULE

Day	Date	Morning Activity	Afternoon Activity
Mon	8/3	8:55 Arrive at SeaTac from Narita (Transportation to UW by Shuttle Express) ETA 10-10:30 Dorm Check-In [dormitory TBD Front Desk, will stay in dormitory TBD]	12:30 Welcome Reception, Program Orientation and Introduction to American Classroom Education [Room in dormitory TBD] 2:00-3:30 Introduction to 'Humans and the Environment in the Northwest Bioregion' [Instructor TBD, Instructor TBD, English Instructor TBD and Peer Advisors, Room TBD] 3:30: UW campus tour [UW Roommates & Peer Advisors]
Tue	8/4	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:20 Introduction to Environmental Planning in the Puget Sound [UW faculty TBD, Room TBD]	1:30-2:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 2:30-4:20 Meet for Ecosystem Activity [Instructor TBD, LOCATION TBA]
Wed	8/5	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:20 Restoration Ecology Lecture [UW faculty TBD, Room TBD]	1:30 Meet for UW Aboretum Restoration Project Vist & Activities [Instructor TBD, Outside classroom, TBD] 4:30 Return to campus
Thu	8/6	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:20 Urban Growth & Development Lecture [Instructor TBD, Room TBD]	12:30 Meet for field trip [Burke Museum Café] 12:30-5:30 Field trip to Issaquah Highlands and South Lake Union [Instructor TBD, UW Vans]
Fri	8/7	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:20 Ecological Design & Planning Lecture [Instructor TBD, Room TBD] (Bring money for bus & lunch or a packed lunch)	1:00 Meet at Burke Museum Cafe 1:00-5:30 Field trip to High Point Development and Seattle City Hall [Instructor TBD, UW Vans]
Sat	8/8	FREE	FREE
Sun	8/9	FREE	FREE
Mon	8/10	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:00 Review Lecture [Instructor TBD, Room TBD]	1:30-2:50 Introduction to final projects [Instructor TBD & Instructor TBD, Room TBD] 3:00-5:00 Final project preparation [UW Peer Assistants, Room TBD]
Tue	8/11	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:50 "Salmon Ecology and Water Quality" Lecture [UW faculty, Room TBD]	1:00 Meet for WAC for Water Quality Measurement Activity [Fran Solomon and Instructor TBD, Outside classroom building] 4:30 Return to campus
Wed	8/12	9:00-9:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:00-11:20 Planning Models & Process Lecture [Instructor TBD, Room TBD]	12:45 Meet for field trip [Burke Museum Café] 1:00-4:00 Field trip to the Duwamish [Instructor TBD, UW Vans]

Thu	8/13	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:50 Forest Ecology Lecture [Instructor TBD, Room TBD]	1:30-2:50 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 3:00-4:20 Landscape Ecology Lecture & overnight field site Trip Preparation [Instructor TBD, Room TBD]
Fri	8/14	7:30 Meet for Weekend Field Trip [Burke Museum] 7:45 Depart for overnight field site [UW Vans] (Bring a packed lunch)	ACTIVITIES at/near overnight field site 6:30 Dinner
Sat	8/15	ACTIVITIES at/near overnight field site 8:00 Breakfast, Pack Sack Lunch	ACTIVITIES at/near overnight field site 6:00 Dinner
Sun	8/16	ACTIVITIES at/near overnight field site 7:30 Breakfast, Pack Sack Lunch	overnight field site ACTIVITY Return to UW Dorms ETA 3:15
Mon	8/17	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:30 Urban Ecology Lecture [Instructor TBD, Room TBD]	1:30-5:00 Final project activities [UW Peer Assistants, Room TBD]
Tue	8/18	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:30 Urban Ecology Lecture [Instructor TBD, Room TBD]	1:30-5:00 Final project activities [UW Peer Assistants, Room TBD]
Wed	8/19	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:50 Project preparation [UW Peer Assistants, Room TBD]	1:30-5:00 Practice Talks [UW Peer Assistants & instructors, Room TBD and Room TBD]
Thu	8/20	9:00-10:20 Communication Skills for Humans in the Environment [English Instructor TBD, Room TBD] 10:30-11:50 Project preparation [UW Peer Assistants, Room TBD]	1:30-5:00 Practice Talks [UW Peer Assistants & instructors, Room TBD and Room TBD]
Fri	8/21	9:00-12:00 Final Project Presentations [Room TBD]	1:10-4:00 Final Project Presentations [Room TBD] 4:00-5:00 Program Debriefing [Room TBD] 6:00-7:30 Closing Ceremony [Campus Room TBD] (Dinner will be served)
Sat	8/22	10:00 Dorm Check-Out [dormitory TBD] 10:45 Meet Instructors [in front of dormitory TBD] 11:00 Depart for SeaTac Airport by Shuttle Express	2:40 Depart Seatac to Japan

Group Project Topic Sample (2007 result)

Introduction

This field intensive course explores the relationships between humans and the Pacific Northwest Bioregion. We focus on a core theme of sustainability, and will present students with various definitions, including the Brundtland Report and an internationally recognized non-profit located in Seattle (Sustainable Seattle). The six student projects will allow students to explore specific issues of sustainability under the guidance of course instructors and assistance from the peer advisors. The projects offer students the opportunity to become familiar with: different regional issues of sustainability; different measurements of sustainability; and different aspects of justice in relation to sustainability. Students are required to present their work in written and oral formats.

1 Ecological Design

Advisor: Dooling

In a neighborhood of their choice (either in the US or in Japan), students will develop an ecological design addressing ecological functioning and social functioning. Ecological functioning includes (but not limited to): increased water percolation in soil, increased water absorption of soil; reduced water use for site maintenance; reduced water runoff and peak flow during floods; increasing vegetative diversity; increased removal of toxins in water. Social functioning includes (but not limited to): increased pedestrian use of site; increased social contact between neighbors; increased property values of property; reduced water consumption.

Outcome: Students will present their ecological design, define the goals of their design, and explain the rationales for their design. They will develop measurements for site monitoring, and discuss the ecological and social implications of their work. The specific outcome will include a formal design accompanied by a narrative in report form.

2 Green Building Evaluation

Advisor: Dooling

Focusing on a building of their choosing, students will calculate the ecological footprint of the building using the LEED (silver, gold, platinum) evaluation and compare it to the Japanese CASBEE evaluation. Students can use data for calculations from Seattle's City Hall (data are available) and modify them for their own project. Students have the option of scaling up their analyses, and make calculations for the block or neighborhood level.

Outcome: Students will present their comparisons in graphs and tables, accompanied by a narrative report. They will make suggestions for improving LEED certification criteria and CASBEE measurements based on specific definitions of sustainability. They also have the option of addressing issues of global climate change, specifically exploring how buildings might be constructed differently in increasing temperatures.

3 Urban Growth Patterns and Management

Advisor: Kondo

Students will describe some of the benefits and consequences of different types of development occurring around the Seattle Metropolitan Area, from compact urban development to suburban sprawl to exurban development. They will also explore and critique some potential solutions such as theories of "Smart Growth." Students will visit two or three development sites along an urban gradient and characterize them using specific metrics such as housing density, nearest business district, modes of transportation, demographics, and ecological characteristics.

Outcome: Students will present their development comparisons in graphs, tables, and images, accompanied by a narrative report. They will make suggestions for improving theories of Smart Growth or policies of growth management. They could also bring in issues of global climate change: how will each type of development perform under changing requirements and conditions of climate change? How do theories of Smart Growth or policies of growth management address climate change?

4 Grassroots Environmental Action

Instructor: Rivera

Working with a local intentional community students will apply an ethnographic approach to understand the perspectives of community members on "bottom-up" or grassroots action. Students will conduct participant observation and interviews within an intentional community. They will identify both practices and worldviews of community members on environmental sustainability, direct democracy, and grassroots development. Students will also need to place (or situate) the community they study within larger grassroots movements. They can compare their findings with a

grassroots organization or project in Japan.

Outcome: Students will present their research from the perspective of the community members they talked with and the student's own experiences within the communities. Combining their research and class material students will analyze the strengths and difficulties of grassroots projects in achieving sustainability.

5 Native Americans and the Environment

Instructor: Rivera

Students will research the history of Seattle or Puget Sound from the perspective of Native Americans and identify cultural and environmental impacts from the development of the city. Students will compare the cultural and environmental issues faced by Native Americans with the Ainu in Japan. Applying what they have learned from their research and from participating in this class, students will make recommendations for projects (cultural and/or physical) and that will address some of the cultural and environmental impacts faced by Native Americans populations in the Seattle area.

Outcome: Students will present a short history of Seattle, identify subsequent cultural and environmental impacts on Native peoples, compare their situation with the Ainu in Japan, and make recommendations for projects to address/ease impacts. Students should be prepared to defend how and why they selected to address these specific issues and the costs and benefits of their recommended projects for the Seattle population as a whole.

6 Marine Resources and Human Health

Advisor: Simon

Students will perform water quality tests along the waterfront in three Seattle area locations- Lake Washington, Lake Union, and Elliot Bay. Students will assess ambient pollution levels and relate them to observed local land cover, urban development and nearby sources of pollution. Once students have identified types and sources of pollution they will then examine the issue of salmon consumption in the Puget Sound. What level of awareness do Seattle residents have concerning the health affects of both farmed and wild fish? In order to answer this question, students will conduct short surveys at local food outlets. Students will then compare public perceptions with scientific evidence gathered by the National Ocean and Atmospheric Administration (NOAA).

Outcome: Students will present their findings in two parts. First, they will discuss the relationship between locally measured pollution levels and nearby features in the built environment. Second, students will engage an ongoing national debate concerning the health benefits/drawbacks of farmed and wild fish. Here, students will compare the public's understanding of this issue with the science being reported by federal agencies.