

FAQ's

What is the Summer Institute?

Foundations of Ecology in the Urban Context: Boston as a Field Study Model

The Summer Institute, sponsored by the Urban Ecology Institute, Boston College and the National Science Foundation, and led by Biology Professor & UEI Science Director Eric G. Strauss and Professor Mike Barnett of the Lynch School of Education, will explore the growing field of urban ecology and provide training on how to creatively use technology to learn science. The goals of the institute are to build a base for understanding how ecosystems evolve to accommodate urban development, establish sound scientific observation and sampling techniques for teachers and to implement in the classroom. The Summer Institute stresses hands-on methods for sharing urban ecology with middle and high school students, using Boston's ecosystems as a natural laboratory in order to provide ways for in-service teachers, out of school time professionals and pre-service teachers. The first two weeks will include an introduction to urban ecology field studies, water quality analysis of rivers as dynamic systems, and connections between the field, the classroom, and the community. During the second two weeks, high school students from the Boston Public Schools will join the group, and educators will have the chance to model their activities in authentic classroom environments. Participants have the option of receiving graduate credit from Boston College, however, additional fees may apply (see below for more details).

What are the benefits of participating in the Summer Institute?

In participating in this project, you will receive:

- ✓ Curriculum materials focusing on improving students' understanding of connections between their academic work and their future career options
- ✓ Opportunities for you to work alongside fellow teachers, scientists and educators
- ✓ Access to a stipend of up to \$2,800
- ✓ Up to 112 PDPs
- ✓ Experience using hand-held computers and laptops equipped with GIS technology and other information technologies
- ✓ Access to the project website with curriculum, videos, and other instructional resources

What are the Summer Institute Fees?

A lab fee of \$100/week applies ONLY to in-service teachers who do not represent high-need districts. This fee is waived for all teachers in BPS and other high-need districts. Also, this fee does apply to pre-service teachers who are NOT taking the course for credit.

When is the registration deadline?

Sunday, April 15th

Who usually participates in the Summer Institute?

The Summer Institute is designed for middle and high school educators and pre-service teachers. Others who may find the course relevant and useful include high school counselors and administrators, teachers of other subjects who wish to make connections to the local environmental issues, graduate students in education or environmental science programs, and non-profit professionals and community members wishing to learn more about urban ecology and information technology.

What are the course strands?

There are three strands of the Summer Institute from which to choose –

1. **Urban Ecology Field Studies** – Teachers, graduate students and Out of School Time professionals wishing to build a foundational understanding of Urban Ecology and related field teaching practices. **The Urban Ecology Field Studies strand is a good option for middle and high school science teachers of all kinds.** Biology teachers will learn how to teach their students about the diversity street trees and urban bird life at their school site or field site. Chemistry teacher will learn how to evaluate the chemical composition of the soil and water quality found at

- their study site. And, middle school teachers will learn how to incorporate a Boston-based Ecoscenario into the FOSS Populations and Ecosystems unit. This strand meets for 16-days (Monday-Thursday, July 9 – August 2).
2. **Bird Bioacoustics** – Teachers, graduate students and OST professionals participating in this strand will learn how to collect bird song using digital sound recording equipment and how to analyze recordings using Raven software. **The Bioacoustics strand is particularly well suited for Physics, Environmental Science and Biology teachers.** In addition to learning about basic urban ecological concepts, participants will gain experience in conducting bioacoustics field studies with local high school students during the second two weeks of the course. This strand meets for 16-days (Monday-Thursday, July 9 – August 2).
 3. **Urban Tree Inventory** – Teachers graduate students and OST professionals participating in this strand will learn about the form and function of the urban forest ecosystem by studying the health of street trees. **This strand targets Environmental Science, Biology, and Computer Science teachers.** Using handheld computers and GIS software, participants will gather and analyze data on trees. In addition to learning about basic urban ecological concepts, participants will gain experience in conducting urban forestry field studies with local high school students during the second two weeks of the course. This strand meets for 16-days (Monday-Thursday, July 9 – August 2).

What are the dates and times of the course?

The Summer Institute will meet Mondays through Thursdays, 8:30AM – 4:00PM, July 9- August 2 at Boston College.

Am I eligible for a stipend?

Stipends are available only to Boston Public School certified, full-time teachers who are interested in studying ITEEST materials - urban trees, bioacoustics, or the Boston-based Ecoscenario. They are also available to those individuals already piloting the Bioacoustics or Tree Inventory curriculum units. If after all eligible BPS participants have received their stipends, there are ITEEST funds left over for non-BPS teachers who are interested in urban trees, bioacoustics, or the Ecoscenario. We will award stipends to choice teachers who represent high-need districts. ONLY teachers who will study trees, bioacoustics, or the Ecoscenario are eligible for stipends. The stipend schedule is as follows:

| <i>Level of Participation</i> | <i>Stipend Available for Eligible Teachers</i> |
|--|--|
| 8-day course on general UEI Field Studies, July 10-July 20 | \$700/week |
| 16-day course , including 8-days of general UEI Field Studies and a focus on either Bioacoustics or Urban Forestry (7/10-7/20) AND 8-days of teaching practicum with students (7/24-8/3) | \$700/week, for total of \$2800 |
| Pilot Projects – School Year 2006-07 Attending follow-up workshops and implementing Bioacoustics or Urban Forestry Pilot Projects with students | \$50/workshop (total of four workshops) \$1000 for pilot project implementation |

When should I expect to receive my stipend?

According to the National Science Foundation who is funding Summer Institute, stipends have to be given after the institute has ended. They will be mailed and probably should arrive 2-3 weeks at the end of summer institute, depending on how efficient BC can be in getting them out.

What does the daily schedule look like?

A typical will include:

- ✓ A short lecture
- ✓ A hands-on field trip or experience using technology in the field and computer lab.
- ✓ A school-to-career activity

Please see the general outline of last year’s institute (below) as a guide for the 07 iteration. While the specific activities may change, the weekly goals will remain the same.

Summer Institute 2006 Week One

Goals: Review the foundations of urban ecology and introduce the project strands.

| | Mon, 7/10 | Tues, 7/11 | Wed, 7/12 | Thurs, 7/13 |
|------------|--------------|-------------------|----------------|--------------|
| All Groups | Introduction | Bird Biodiversity | Urban Forestry | Bioacoustics |

Summer Institute 2006 Week Two

Goals: Gain competency with the content and field protocols of your chosen topic. Prepare for student arrivals.

| | Mon, 7/17 | Tues, 7/18 | Wed, 7/19 | Thurs, 7/20 |
|-------------------|------------------------------------|--|---------------------------------|---------------------------------------|
| UEI Field Studies | Water quality – safety and testing | Water quality 2 – macro-invertebrates | Designing studies with students | Community Connections and Env Justice |
| Bioacoustics | Using the technology | Using the technology and Designing studies with students | Career Connections | Designing studies with students |
| Street Trees | Using the technology | Using the technology and Designing studies with students | Career Connections | Designing studies with students |

The schedule for the second two weeks (with high school students), will be largely determined by the participants during the first two weeks of the Institute.

What are the course requirements/assignments?

Course readings and assignments will be posted at bcurbanecology.org. Additional assignments may be required if you are taking the course for academic credit (optional, with additional cost incurred by the participant)

How do I register for the Institute?

You may register for the UEI Summer Institute by filling out and mailing or faxing in the registration form found on the institute brochure. You may also fill out a registration form on-line: go to www.bcurbanecology.com and click “Register.” Payment of registration fees are due at time of registration.

How do I become a UEI Teacher?

Teachers, both in-school and in out-of-school time programs, may join the UEI Field Studies Program by contacting Peter Piazza at 617-552-0938 or via email at piazza@bc.edu. You will receive more information about the program, a description of program expectations and an application form to be completed, signed by your principal or supervisor and returned to our office.

How do I get to the Summer Institute?

Registered participants will receive a welcome packet with information on the meeting location for the course. Driving directions to Boston College's main campus can be found on the Boston College website (www.bc.edu). The campus is located near the B-line of the T.

How can I take the course for graduate credit? And, are scholarships available?

The course number is *ED 551.01*. It is a Lynch School of Education graduate level course. Students wishing to register for graduate credit through Boston College (who are not already registered Boston College students) must register as a Special Student through the Registrar's office and pay the course tuition (\$1,040 per credit). Graduate students from other universities may also look into their school's credit policy for taking courses or independent studies. Such students may be able to receive credit from the program in which they are already enrolled. Some schools may have vouchers for course credit – check with your school to see if a voucher is available.

There may be a limited number of scholarships for partial tuition (two of the three credits) available for Boston Public School teachers. Those interested in applying for scholarships should contact Peter Piazza at (617) 552-0938 or via email at piazzap@bc.edu.

Is lunch provided?

Coffee will be provided on days when the Institute meets at Boston College in the morning (not on days that begin in the field). Please bring a brown bag lunch. There will be brown bag lunch presentations on some days. Lunch will be provided for participating *high school students* at no cost as part of the Summer Food Service Program for Boston youth.

Who should I contact if I have more questions?

Mike Barnett
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617.552.0658

Or

Peter Piazza
In-School Education Program Director
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