Emphasizing the Inter-Dependence of the Natural and Social Sciences

Wesfield Department of Environmental Science

conveniently located just minutes from the Massachusetts Turnpike, Exit 3, five miles from Route 91. We are also easy to access from Springfield and points east on Route 20; from Connecticut and points south on Route 202; from Amherst and points north on Route 91; and are only half an hour from the Berkshires at Exit 2 on the Massachusetts Turnpike. For an even more convenient University experience, Westfield State offers many online courses and programs that can be accessed from work or home.

For more information contact:

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or visit our website at:
http://www.wsc.ma.edu/environmentalscience/

WESTFIELD STATE is conveniently located just minutes from
the Massachusetts Turnpike, Exit 3, five miles from Route 91.

Typical Driving Times

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
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<tbody>
<tr>
<td>Springfield</td>
<td>25 mins.</td>
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<tr>
<td>Holyoke</td>
<td>25 mins.</td>
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<tr>
<td>Chicopee</td>
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<tr>
<td>Ludlow</td>
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<tr>
<td>South Hadley</td>
<td>30 mins.</td>
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<tr>
<td>Easthampton</td>
<td>30 mins.</td>
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<tr>
<td>Northampton</td>
<td>35 mins.</td>
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<tr>
<td>Granby</td>
<td>35 mins.</td>
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<tr>
<td>Enfield</td>
<td>35 mins.</td>
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<tr>
<td>Palmer</td>
<td>40 mins.</td>
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<tr>
<td>Windsor Locks</td>
<td>40 mins.</td>
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<tr>
<td>Worcester</td>
<td>45 mins.</td>
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<tr>
<td>Pittsfield</td>
<td>50 mins.</td>
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Overview

We’re Shaping the Future

WESTFIELD STATE UNIVERSITY’S DEPARTMENT OF ENVIRONMENTAL SCIENCE offers an interdisciplinary major in Environmental Science. In 2010, the University expanded the former Environmental Science Program to create the Department of Environmental Science (ENVS). This reflects the demand for the major – ENVS is one of the fastest growing majors on campus – and the University’s broad commitment to and emphasis on environmental issues. Westfield State recently placed second in the nation in the RecycleMania Tournament, earning the EPA’s Environmental Merit Award for 2010. Westfield State is one of few universities in the country to have an entire department dedicated to Environmental Science; our program is one of the largest and oldest environmental science programs in the Northeast.

Located on the edge of the Berkshire Mountains, Westfield State University is uniquely situated between mountains, rivers, forests, and other natural ecosystems on one side and urban areas such as Springfield, Holyoke, and Northampton on the other. This location provides numerous opportunities for hands-on field learning experiences. The major combines coursework in Environmental Science, Biology, Geography, Regional Planning, and other departments, disciplines, while emphasizing the interdependence of the natural and social sciences. Students select from such courses as Environmental Analysis, Environmental Biology, Ecology, Aquatic Biology, Marine Biology, Environmental Impact Analysis, Land Resource Analysis, Green Cities, Water Resource Management, and Geographic Information Systems (GIS).

The primary mission of the department is our emphasis on fieldwork and hands-on learning, such as the Water Resource Management course’s canoe trips on the Westfield River and nearby lakes, and the Marine Biology’s 3-day field trip to the Maine coast each spring to collect marine samples. Classes are small providing much one-on-one contact with faculty. The major culminates in a capstone experience: either a Senior Internship, where students work off campus in an environmental position that matches their interests, or a Senior Seminar / Independent Study, where students do independent research on an environmental topic working under the guidance of a faculty mentor. Because of the interdisciplinary nature of the major, students have the flexibility to tailor their coursework and educational experience to suit their personal interests and goals for the future.

Students typically get jobs working for environmental consulting firms; industries concerned about pollutants and toxic waste by-products; local, state, or federal government agencies; or environmental conservation groups and non-profits. The work often involves planning development; monitoring compliance with environmental laws; monitoring air, groundwater, or surface water quality; and remediating environmental damage.

Requirements

In addition to satisfying the college common core, the Major consists of 35-40 credits. All Students must take at least 21 credit hours from the list below at WSU.

A. Required Courses (10-11 hours):
   - BIOL 0102 Environmental Biology
   - ENVS 0106 Environmental Analysis
   - BIOL 0128 Biological Concepts
   - ENGL 0392 Business & Tech. Writing

B. Areas of Study (22-26 hr. by advisement; choose one required and one option from each category, plus one additional optional course):
   - Natural Dimensions (required):
     - BIOL 0201 General Ecology
     - BIOL 0202 Conservation
     - BIOL 0208 Marine Biology
     - BIOL 0211 Botany of Higher Plants
   - Human Dimensions (required):
     - GARP 0225 Legal Issues
     - or
     - BIOL 0233 Env. Legislation options:
     - ENV 0238 Env. Impact Anal.
     - ENV 02551 Water Resource Pln/Mgt
     - GARP 0217 Global Issues
   - Technology/Methods Dimensions (required):
     - GARP 0346 Quantitative Methods options:
     - ENV 0236 Environmental Analysis II
     - GARP 0243 Remote Sensing
     - GARP 0244 Intro. Geog. Info. Systems
     - PHYS 0201 Organic Chemistry I
     - PHYS 0211 Instrumental Analysis
     - PHYS 0310 Adv. Instrumental Analysis

C. Senior Thesis/Seminar or Internship (Pick 1 by advisement; 3 hours)
   - ENVS 0350 Senior Internship
   - or
   - ENVS 0391 Senior Seminar

**Required Core Classes**
   - GARP 0102 Physical Geography (core)
   - PHYS 0109 General Chemistry I (core)
   - PHYS 0111 General Chemistry II (core)
   - PHYS 0103 Physical Geology / Lab (core)