Graduate Certificate in Tropical Biology and Conservation

The Graduate Certificate in Tropical Biology and Conservation is intended for students who wish to pursue a career in conservation biology or ecology from either a research or practical standpoint. Cooperating institutions include the Missouri Botanical Garden, St. Louis Zoo, Center for International Studies at UMSL, and the Departments of Economics, History, Political Science, and Social Work.

Admission
A student enrolled in UMSL who intend to receive a Graduate Certificate in Tropical Biology and Conservation must complete an application form available from the Graduate School. Students not enrolled in a course of graduate studies at UMSL must apply simultaneously to the University’s Graduate Admissions office. Students who have a baccalaureate degree or are enrolled in graduate work elsewhere may apply for admission to the certificate program without regular admission to the graduate program. Admission will be based on student motivation and academic qualifications.

The minimum admissions requirements include: (1) at least a 3.0 GPA for undergraduate coursework or a 3.2 GPA for 12 credit hours of graduate course work; and (2) current enrollment in the graduate program in biology at UMSL having satisfied the prerequisites of the certificate; or completion of a baccalaureate degree and having satisfied the prerequisites of the certificate program. The minimum prerequisites are undergraduate courses in ecology, evolution and genetics.

Requirements
The certificate is awarded after completion of 18 credit hours of core courses and electives with a minimum of 12 credits at the 5000 or 6000 level. Up to 3 credits may be taken at the 2000 - 3000 level upon permission of the Graduate Committee. Electives must include a minimum of 3 credits outside biology with a maximum of 7 outside biology. A maximum of 3 credits may be taken at institutions other than UMSL. Students may simultaneously earn a graduate degree and count credits earned in their degree program toward the certificate when appropriate.

Required Core Courses
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>POL SCI 6452</td>
<td>Public Policy Of Conservation And Sustainable Development</td>
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<tr>
<td>BIOL 6299</td>
<td>Internship In Conservation Biology</td>
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<tr>
<td>BIOL 6222</td>
<td>Advanced Tropical Ecology And Conservation</td>
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<tr>
<td>Or BIOL 6270</td>
<td>Advanced Global Climate Change</td>
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Electives
Biology
<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIOL 4182</td>
<td>Population Biology</td>
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<tr>
<td>Or BIOL 6182</td>
<td>Advanced Population Biology</td>
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<tr>
<td>BIOL 4402</td>
<td>Ornithology</td>
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<tr>
<td>BIOL 4422</td>
<td>Entomology</td>
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<td>BIOL 4501</td>
<td>Flowering Plant Families: Phylogeny And Diversification</td>
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<td>BIOL 5192</td>
<td>Community Ecology</td>
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BIOL 6102 Advanced Topics In Behavioral Ecology
BIOL 6112 Advanced Evolution Of Animal Sociality
BIOL 6192 Applications Of Geographic Information Systems
BIOL 6222 Advanced Tropical Ecology And Conservation
BIOL 6270 Advanced Global Climate Change
BIOL 6889 Graduate Seminar (when topic is relevant)

Economics
ECON 3300 International Economic Analysis
ECON 4550 Natural Resource Economics

History
HIST 3000 Selected Topics In History
HIST 6114 Readings in Latin American History (when topic is relevant)
HIST 6115 Historical Thinking in Theory and Practice I

Political Science
POL SCI 3480 Environmental Politics
POL SCI 3595 Studies In Comparative Politics
POL SCI 3830 International Political Economy
POL SCI 3850 International Organizations And Global Problem-Solving
POL SCI 3890 Studies In International Relations
POL SCI 4510 Comparative Public Policy And Administration
POL SCI 4850 International Law
POL SCI 6448 Political Economy And Public Policy
POL SCI 6480 Proseminar In International Relations

Social Work
SOC WK 4950 Seminar In Social Work Issues