

ECOLOGY

Learning outcomes

Master of Science (M.S.)

1. **Know:** Demonstrate knowledge of core principles and primary literature in their specialty area including comprehension of methods, results, and data analysis in the specialty area.
2. **Apply/Create:** Demonstrate ability to design and carry out a major research project in the discipline, including synthesis of previous work in the field, and assembling findings into a written work.
3. **Think:** Demonstrate ability to critically analyze work by others in their specialty area.
4. **Communicate:** Demonstrate ability to convey scientific ideas and results in clear, concise and original writing as well as in formal oral presentations to audiences in their specialty area.
5. **Professional Practice:** Demonstrate comprehension of and commitment to ethical standards in the discipline.

Doctor of Philosophy (Ph.D.)

1. **Know:** Demonstrate knowledge of core principles and primary literature in their specialty area, and across the field, including comprehension of methods, results, and data analysis in the specialty area, and across the field.
2. **Apply/Create:** Demonstrate ability to design and carry out a major research project in the discipline, including synthesis of previous work in the field, and assembling new findings into a written work that advances understanding in the field.
3. **Think:** Demonstrate ability to critically analyze work by others in their specialty area, and across the field.
4. **Communicate:** Demonstrate ability to convey scientific ideas and results in clear, concise and original writing as well as in formal oral presentations to diverse audiences.
5. **Professional Practice:** Demonstrate comprehension of and commitment to ethical standards in the discipline, and in interdisciplinary contexts.
6. **Teach:** Demonstrate the ability to teach key concepts of the discipline to students.