Learning Outcomes

Master of science (M.S.)

1. Know: Graduates will demonstrate in depth knowledge of the core theories and methods as well as within one or more sub-specialties in the field of entomology. The core demonstration will include the application of insect ecology, physiology, systematics, and natural history, to problems in agriculture, chemical ecology, pollinator ecology, biotechnology, and integrated pest management.

2. Create: Graduates will be able to creatively synthesize theory and current literature to generate new ideas or hypotheses in the entomological sciences, devise critical tests of hypotheses, and/or develop unique solutions to entomological problems.

3. Apply: Graduates will be able to carry out independent and original research studies that address current problems in the field of entomology.

4. Critical thinking: Graduates will be able to critically analyze work by others in their field of specialty.

5. Communicate: Graduates will be able to convey ideas or arguments in clear, concise, well-organized papers and proposals as well as in formal, oral presentations.

6. Professional practice: Graduates will demonstrate the ability to collaborate in a collegial and ethical manner with other professionals within their field or with diverse scientific backgrounds. Graduates will demonstrate the PSU core values of Integrity, Respect, Responsibility, Discovery, Excellence, and Community.

Doctor of Philosophy (Ph.D.)

1. Know: Graduates will demonstrate in depth knowledge of the core theories and methods as well as within one or more sub-specialties in the field of entomology. The core demonstration will include the application of insect ecology, physiology, systematics, and natural history, to problems in agriculture, chemical ecology, pollinator ecology, biotechnology, and integrated pest management.

2. Create: Graduates will be able to creatively synthesize theory and current literature to generate new ideas or hypotheses in the entomological sciences, devise critical tests of hypotheses, and/or develop unique solutions to entomological problems.

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