

# BIOSECURITY AND BIOLOGICAL INVASIONS CERTIFICATE

This certificate program provides the skill set necessary for the detection, surveillance, and management of agricultural and medical threats. Acquire critical thinking skills for the assessment, management, and communication of the biosecurity risks and challenges facing the 21<sup>st</sup> century.

## About this Program

- **College:** Agricultural and Life Sciences (<http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/>)
- **Credits:** 9-14 | Completed with minimum grades of C
- **Contact:** Email ([agunbiade@ufl.edu](mailto:agunbiade@ufl.edu)) | 352.294.6792
- Student Learning Outcomes (SLOs) (<https://public.tableau.com/app/profile/uf.oipr4918/viz/UFStudentLearningOutcomesCertificatesOnly/StudentLearningOutcomes/?publish=yes>)

*Certificates must comply with the Certificate Policy.*

## Department Information

The Entomology and Nematology Department prepares students for exciting careers in a large variety of fields. Entomology and Nematology majors can enter medical, veterinary, or dental school; progress to graduate study in entomology, nematology, or any of several other biological sciences such as ecology and evolutionary biology, horticulture, or zoology; or move directly to a variety of careers (including industry and government positions) in fields such as pest management, agriculture, ecotourism, biosecurity, science policy, and education

Website (<https://entnemdept.ufl.edu/>)

## CONTACT

Email ([entnem.advisors@ifas.ufl.edu](mailto:entnem.advisors@ifas.ufl.edu)) | 352.273.3974

P.O. Box 110620

1881 Natural Area Drive, Bldg. 970

STEINMETZ HALL

GAINESVILLE FL 32611-0620

Map (<http://campusmap.ufl.edu/#/index/0970>)

## Curriculum

- Beekeeping Certificate
- Combination Degrees
- Entomology and Nematology
- Entomology and Nematology Minor
- Entomology and Nematology Minor UF Online
- Landscape Pest Management Certificate
- Medical Entomology Certificate
- Pest Control Technology Certificate
- Urban Pest Management Certificate

The current drive for globalization, increased travel and trade in food and agricultural products, emerging infectious diseases, and the threat of bioterrorism makes the field of biosecurity an area of major and widespread importance. Biosecurity involves a strategic and integrated approach to excluding, eradicating, and managing threats to human, animal and plant life and health, the environment, and global trade. The overall goal of this certificate program is to equip students with the skill set necessary for the detection, surveillance, and management of agricultural and medical threats. This certificate provides critical thinking skills for the assessment, management, and communication of the biosecurity risks and challenges facing the 21<sup>st</sup> century. The Biosecurity certificate is designed to meet the career and professional needs of those interested in, or already in industry, public health, homeland security, international security, quarantine and pest management, and organizations involved in emergency preparedness, and general threat management.

## Required Courses | 9-14 Credits

Code	Title	Credits
ALS 4161	Exotic Species and Biosecurity Issues	3
ALS 4162	Consequences of Biological Invasions	3
ENY 4905	Problems in Entomology	1-5
Approved electives		2-3
<b>Total Credits</b>		<b>9-14</b>

## Approved Electives | 2-3 Credits

Code	Title	Credits
ENY 3225C	Principles of Urban Pest Management	3
ENY 3510C	Turf and Ornamental Entomology	3
ENY 4202	Ecology of Vector-Borne Disease	3
FAS 4932	Topics in Fisheries and Aquatic Sciences	1-4
FOS 4202	Food Safety and Sanitation	2
IPM 3022	Fundamentals of Pest Management	3
IPM 4114	Insect Pest and Vector Management	3
PLP 4101	Applied Plant Disease Management	3
SWS 4307	Ecology of Waterborne Pathogens	3

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