



University Council

February 9, 2024

UNIVERSITY CURRICULUM COMMITTEE – 2023-2024

Susan Sanchez, Chair

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Law – Joe Miller

Pharmacy – Michelle McElhannon

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Public Health – Tamora Callands

Social Work – Harold Briggs

Veterinary Medicine – Shannon Hostetter

Graduate School – Rodney Mauricio

Ex-Officio – Provost S. Jack Hu

Undergraduate Student Representative – Gabriella Lewis

Graduate Student Representative – Kelsey Wohlford

Dear Colleagues:

The attached proposal from the College of Veterinary Medicine for a new Area of Emphasis in Infectious Diseases under the major in Comparative Biomedical Science (M.S.) will be an agenda item for the February 16, 2024, Full University Curriculum Committee meeting.

Sincerely,

Susan Sanchez, Chair

cc: Provost S. Jack Hu

Dr. Marisa Pagnattaro

## PROPOSAL FOR AN AREA OF EMPHASIS

**Date:** August 28, 2023

**School/College:** College of Veterinary Medicine

**Department/Division:** Infectious Diseases

**Program (Major and Degree):** Comparative Biomedical Science (M.S., M.S. Non-Thesis)

**Area of Emphasis Title:** Infectious Diseases

**CIP:** 01.8106

**Which campus(es) will offer this program?** Athens

**Proposed Effective Date:** Fall 2024

### **Area of Emphasis Description:**

The M.S. degree in Comparative Biomedical Sciences trains students in biomedical research and emphasizes interdisciplinary approaches in the scholarship of animal and human health. The Area of Emphasis in Infectious Diseases will allow students to focus their education and research on the causes and prevention of bacterial, fungal, viral, and parasitic diseases, and methods of identifying diseases and protecting humans and animals. Research topics within this area include development of advanced technologies to protect the human population from emerging diseases; new technologies to assure the safety and welfare of our food production and companion animals; and basic research on microbial pathogenesis, the molecular biology of microbial and parasitic pathogens, and the mechanisms of immunity.

Strengths of the diverse departmental graduate faculty include molecular virology, pathogenic bacteriology, classical and molecular parasitology, vaccinology, vector biology, ecology, disease modeling, and immunology. Students with B.S., M.S., or D.V.M. degrees are accepted for graduate training in this program.

### **1. Major Requirements:**

#### Required Courses (at least 24 hours):

CBIO(MIBO)(IDIS) 6100-6100D, Immunology (4 hours)

GRSC 7001, GradFIRST seminar (1 hour)

GRSC 8550, Responsible Conduct of Research (1 hour)

IDIS 8010, Advanced Studies in Infectious Diseases (4 hours)

IDIS 8160, Seminar in Infectious Diseases (1, must enroll for 4 semesters/4 hours)

IDIS 8170, Research in Progress Seminar (1 hour) or VETM 8001, Research Communications (1 hour)

VETM 7000, Master's Research (minimum of 6 hours)

VETM 7300, Master's Thesis (minimum of 3 hours)

#### Select two courses from the following (2 hours):

IDIS 8050, Special Topics in Ecology and Evolution of Infectious Diseases (1 hour)

IDIS 8250, Special Topics in Parasitology (1 hour)  
IDIS 8530, Special Topics in Structural Immunology (1 hour)  
IDIS 8540, Special Topics in Bacterial Pathogenesis (1 hour)  
IDIS 8550, Special Topics in Immunology (1 hour)  
IDIS 8590, Special Topics on Diseases Intervention (1 hour)

Select one course from the following (3 hours):

BIOS 7010, Introductory Biostatistics I (3 hours)  
BIOS 7010E, Introductory Biostatistics I (3 hours)  
POPH 8310L, Population Health Statistics I (3 hours)

If needed, a minimum of three hours can be chosen from the following courses in consultation with the student's graduate advisory committee:

CBIO 8080, Biomedical Grant Writing (3 hours)  
CBIO 8100, Advanced Immunology (4 hours)  
CBIO 8500, Biology of Parasitism (4 hours)  
EPID(ECOL)(IDIS) 8515, Modeling Infectious Diseases (4 hours)  
IDIS 7200-7200L, Veterinary Parasitology (3.7 hours)  
IDIS 7215-7215L, Large Animal Parasitology (1.3 hours)  
IDIS 8020, Vaccines: From Design to Development (3 hours)  
IDIS 8030, Parasites and Parasitic Diseases (3 hours)  
IDIS 8080L, Advanced Molecular Techniques (3 hours)  
IDIS 8300, Advanced Immunology: Innate Immunity (4 hours)  
IDIS 8350, Principles and Research Applications of Flow Cytometry (3 hours)  
IDIS 8591, Advanced Concepts of Virology (3 hours)  
MIBO(PBHL)(IDIS)(BHSI) 8260, Global Perspectives on Tropical and Emerging Infectious Diseases (1 hour)  
MIBO(POPH)(IDIS) 6450-6450L, Microbial Genetics and Genomics (4 hours)  
POPH(MIBO)(IDIS) 6650, Introduction to Virology (3 hours)  
POPH(IDIS)(MIBO) 8200, Molecular Virology and Experimental Design (5 hours)

## Documentation of Approval and Notification

**Proposal:** Create a new Area of Emphasis in Infectious Diseases under the major in Comparative Biomedical Science (M.S.)

**College:** College of Veterinary Medicine

**Department:** Infectious Diseases

**Proposed Effective Term:** Fall 2024

School/College:

- College of Veterinary Medicine Dean, Dr. Lisa Nolan, 8/28/23
- Infectious Diseases Department Head, Dr. Frederick Quinn, 8/28/23
- Graduate School Associate Dean, Dr. Anne Shaffer, 11/9/23

Use of Course Approvals:

- Cellular Biology Department Head, Dr. Dennis Kyle, 2/6/2024