



University Council

October 12, 2018

UNIVERSITY CURRICULUM COMMITTEE – 2018-2019

John Maerz, Chair

Agricultural and Environmental Sciences – Elizabeth Little

Arts and Sciences – Jonathan Evans (Arts)

Trenton Schirmer (Sciences)

Business – Richard Gooner

Ecology – Sonia Altizer

Education – Morgan Faison

Engineering – E.W. Tollner

Environment and Design – Brad Davis

Family and Consumer Sciences – Patricia Hunt-Hurst

Forestry and Natural Resources – Joseph Dahlen

Journalism and Mass Communication – James Hamilton

Law – Randy Beck

Pharmacy – Robin Southwood

Public and International Affairs – Jeffrey Berejikian

Public Health – Anne Marie Zimeri

Social Work – Harold Briggs

Veterinary Medicine – Susan Sanchez

Graduate School – Amy E. Medlock

Ex-Officio – Interim Provost Libby V. Morris

Undergraduate Student Representative – Ali Elyaman

Graduate Student Representative – TBD

Dear Colleagues:

The attached proposal from the College of Veterinary Medicine for a new Area of Emphasis in Integrative Biomedical Physiology under the major in Comparative Biomedical Sciences (M.S., Non-Thesis) will be an agenda item for the October 19, 2018, Full University Curriculum Committee meeting.

Sincerely,

John Maerz, Chair

University Curriculum Committee

cc: Interim Provost Libby Morris
Dr. Rahul Shrivastav

PROPOSAL FOR AREA OF EMPHASIS

1. **School/College:** College of Veterinary Medicine
2. **Department/Division:** Physiology and Pharmacology
3. **Major:** Comparative Biomedical Sciences (M.S., Non-Thesis)
4. **Major Requirements:** See below
5. **Area of Emphasis Title:** Integrative Biomedical Physiology
6. **Proposed starting date:** Fall 2019
7. **Area of Emphasis Description:** See below

Current Degree Requirements for Comparative Biomedical Sciences (M.S. Non-Thesis)

Core: (12 credits)
VETM 8001 – Research Communications (1 credit)
GRSC 8550 – Responsible Conduct of Research (1 credit)
10 credits additional graduate only courses
Concentration courses: All 6000-level or higher coursework in the area of study
Electives (6 credits): Related 6000-level or higher courses outside of the department
Oral Exam based on Written Report
Minimum Total Credit Hours: 30

In lieu of a thesis, the student must write a written report, such as a literature review, based on the material covered in the area of concentration.

Area of Emphasis in Integrative Biomedical Physiology

Program Description

The Department of Physiology and Pharmacology in the College of Veterinary Medicine proposes an Area of Emphasis in Integrative Biomedical Physiology to be offered under the non-thesis option of the M.S. in Comparative Biomedical Sciences. This area of emphasis under the non-thesis option is intended for graduate students who plan to pursue professionally-oriented careers outside of academia and are interested in advanced study in comparative biomedical physiology and pharmacology. The area of emphasis is designed to provide foundational knowledge and professional skills that will prepare students for careers in a broad range of biomedical professions such as veterinary medicine, human medicine, biomedical engineering, and biomedical or diagnostic technology.

TABLE 1: Proposed Curriculum

Core Foundational Knowledge Courses (10 hours)	Core Professional Skills (7 hours)	Sample Electives (minimum of 13 hours; 6 hours from outside Dept)
VPHY 7111, Principles of Physiology I (4 hours)	VETM 8001, Research Communications (1 hour)	VPHY 6XXX, Physiology of Disease Mechanisms (3 hours) (NEW)
VPHY 7112, Principles of Physiology II (3 hours)	GRSC 8550, Responsible Conduct of Research (1 hour)	VPHY 6XXX, Neuro-endocrine Physiology (3 hours) (NEW)
VPHY 7XXX Physiology Capstone (3 hours) (NEW)	VPHY 6930, Research Methods (3 hours)	VPHY 8960, Molecular Toxicology (3 hours)
	VPHY 8900, Physiology-Pharmacology Seminar (2 hours)	VPHY 8400, Neuro-physiology (3 hours)
		EHSC 7490, Principles of Toxicology (3 hours)
		PHRM 8020, Molecular Pharmacology of Disease and Therapeutics (4 hours)
		VBDI 7180-7180L, Comparative Microscopic Anatomy of Domestic Animals (3 hours)
		BINF(BCMB) 6005, Essential Computing Skills for Biologists (2 hours)

Blue highlighted cells represent Area of Emphasis core courses; Gold highlighted cells represent M.S. in CBS core requirements;

TABLE 2: Sample Program of Study

FALL SEMESTER	SPRING SEMESTER
VPHY 7111, Principles of Physiology I (4 hours)	VPHY 7112, Principles of Physiology II (3 hours)
VPHY 6930, Research Methods (3 hours)	PHRM 8020, Molecular Pharmacology of Disease and Therapeutics (4 hours)
VETM 8001, Research Communications (1 hour)	VBDI 7180-7180L, Comparative Microscopic Anatomy of Domestic Animals (3 hours)
VPHY 8900, Physiology-Pharmacology Seminar (1 hour)	VPHY 7XXX Capstone Project (3 hours) (NEW)
VPHY 6XXX Physiology of Disease Mech. (3 hours) (NEW)	VPHY 8900 Physiology-Pharmacology Seminar (1 hour)
GRSC 8550, Responsible Conduct of Research (1 hour)	
EHSC 7490, Principles of Toxicology (3 hours)	
Total credit hours 16	Total credit hours 14

Blue highlighted cells represent AE core courses; Gold highlighted cells represent M.S. in CBS core requirements

Approvals on File

Proposal: New Area of Emphasis in Integrative Biomedical Physiology under the major in Comparative Biomedical Sciences (M.S., Non-Thesis)

College: College of Veterinary Medicine

Proposed Effective Term: Fall 2019

School/College:

- Physiology and Pharmacology Department Head, Dr. Gaylen Edwards, 6/1/2018
- College of Veterinary Medicine Dean, Dr. Lisa Nolan, 8/21/2018

Graduate School:

- Graduate School Dean, Dr. Suzanne Barbour, 8/30/2018