PhD in Toxicology

Core Toxicology Requirements for all students: 9 hours
EHSC 7490    Principles of Toxicology 3 hours
BIOS 7020 or    Introductory Biostatistics II 3 hours
    FANR 6750/6750D (or equivalent)
and either:
    VPHY 8960 (Molecular Toxicology) or FISH 8350 (Fundamentals of Ecotoxicology) 3 hours

Areas of Emphasis for the ITP: 9 hours from Ecological Toxicology or Mechanistic Toxicology

Students may choose from one of the 2 areas of emphasis. To fulfill the Toxicology requirement, a student must take at least 9 credit hours (usually three courses) from your chosen area of emphasis listed below. According to the Graduate School, a doctoral program of study should consist of 16 or more hours of 8000- and 9000-level courses, exclusive of 9000 (research) or 9300 (dissertation writing). Therefore, the additional required 4+ credit hours may come from either of the areas of emphasis listed below or from any related area approved by your Major Advisor and Committee.

Ecological Toxicology. Faculty in this emphasis area are primarily focused on understanding the effects and influence of xenobiotics on the environment and organisms that live in the environment. Using a wide range of scientific methods, faculty are involved with species ranging from black flies, fish, amphibians, daphnia, bacteria, mussels, crocodiles and birds.

SPRING
- Intro Biostats I     BIOS 7010         3 hours
- Fundamental Env. Health Sci    EHSC 7010    3 hours
- Advanced Air Quality    EHSC 7080    3 hours
- Occupational & Env Diseases    EHSC 8400    3 hours
- Design of Experiments for Research Workers    STAT 8200    3 hours
- Immunotoxicology    VBDI 8200    2 hours
- Principles of Physiology 2*    VPHY 7112    3 hours
- Molecular Toxicology    VPHY 8960    3 hours
- Occupational Hygiene and Safety    EHSC 7150/L    3 hours

FALL
- Advanced Topics in EHS    EHSC 8010    3 hours
- Chemical and Microbial Risk Assessment    EHSC 8110    3 hours
- Biomarkers    EHSC 8250    3 hours
- Aquatic Micro Health    EHSC 8310    3 hours
- Environmental Genomics    EHSC 8460/L    3 hours
- Experimental Design (Statistics)    FANR 6750    3 hours
- Cell Pathology    VPAT 8020    4 hours
- Principles of Physiology 1*    VPHY 7111    4 hours
- Mammalian Cell Physiology    VPHY 8010    3 hours
- Neurophysiology    VPHY 8400    3 hours

SUMMER
- Fundamentals of Ecotoxicology    FISH 8350    3 hours

OTHER DATES
- Organ Systems Toxicology Every odd Spring    PHRM 8940    4 hours
- Ecotoxicology (Not Grad Only) Not on regular basis    FISH (EHSC) 6600    3 hours

OTHER COURSES (May be offered)
- Global Environmental Health    EHSC 7410    3 hours
Mechanistic Toxicology. Faculty in this emphasis area have research interests in understanding the details of how xenobiotics interact with mammalian and non-mammalian species at the level of DNA, proteins, signaling pathways, cells and or even organs. A large number of tools or research methods exist to study mechanisms of action of chemicals and pathogens on biological systems.

SPRING

- Intro Biostats I
- Occupational Hygiene and Safety
- Occupational & Env Diseases
- Design of Experiments for Research Workers
- Immunotoxicology
- Principles of Physiology 2*
- Molecular Toxicology

FALL

- Biomarkers
- Experimental Design (Statistics)
- Cell Pathology
- Principles of Physiology 1*
- Mammalian Cell Physiology
- Neurophysiology

SUMMER

- Fundamentals of Ecotoxicology

OTHER DATES

- Organ Systems Toxicology
- Ecotoxicology (Not Grad Only)

*VPHY 7111/7112 are offered in series covering different body systems; students may take one or both in the series, however, only one course can be used towards the emphasis requirement.

Research/Writing: 3 hours

Minimum hours required: 30 hours

Additional Graduate School Requirements:

Doctoral Degrees. All courses on the program of study must fall within a six-year time limit. The six-year limit begins with the semester the student was admitted into the program and registered for courses and ends with the last semester before the beginning of the sixth year. For the Doctor of Philosophy degree this program of study must carry a minimum of 30 hours of course work, three hours of which must be dissertation writing (9300). The doctoral program of study for a student who bypasses the master's degree must contain a minimum of 16 hours of 8000- or 9000-level courses and four additional hours of University of Georgia courses open only to graduate students. Courses not allowed on a program of study are directed study courses, 9005 (Graduate Seminar), GRSC 7770, GRSC 9270, and ELAN 7768/7769.