

Biology Concentration Course Descriptions

EVSB 7050 / Environmental Risk Assessment / Lec. 2. Lab 2. Cr. 3.

- Prerequisite: BIOL 6060, EVSC 6010, or consent of instructor. Assessment of ecological risk associated with new chemicals and effluents, existing chemicals and mixtures of chemicals, and human actions.

EVSB 7060 / Ecological Toxicology / Lec. 2. Lab. 2. Cr. 3.

- Prerequisite: BIOL 6060, EVSC 6010, or consent of instructor. A study of the mechanisms of toxicity in terrestrial and aquatic ecosystems, including the measurement of response, uptake, metabolism, and excretion of toxicants; design and

EVSB 7150 / Population and Community Ecology / Lec. 3. Cr. 3.

- Prerequisite: BIOL 2130 or equivalent, or consent of instructor. Empirical and theoretical concepts in ecology at the population and community levels, including population growth and regulation, species interactions, community assembly and dynamics, metapopulation ecology, and landscape ecology.

EVSB 7210 / New and Re-emerging Environmental Human Pathogens / Lec. 3. Cr. 3.

- Prerequisite: 7 hours of microbiology courses or equivalent. Aspects of emerging human pathogens, including case histories of outbreaks, methods of detection in food and water, and techniques for enumeration and identification.

EVSB 7220 / Molecular Ecology and Evolution Seminar / Lec. 1. Cr. 1.

- Prerequisite: BIOL 2130 and BIOL 4150, and consent of instructor. Review of current literature concerning application of modern molecular techniques to solve ecological and evolutionary questions. Course may be taken up to 3 times for credit.

EVSB 7230 / Molecular Ecology and Evolution / Lec. 3. Lab. 3. Cr. 4.

- Prerequisite: Graduate standing or consent of instructor. Role of molecular techniques in the study of ecology and evolution, including techniques used to study phylogeny, microorganism detection, population structure, gene flow, and kinship.

EVSB 7310 / Plant Ecology / Lec. 3. Lab. 3. Cr. 4.

- Prerequisite: BIOL 2130, 5240, or consent of instructor. Interrelationships between plants and their environment, and evaluation of community structure.

EVSB 7320 / Aquatic Botany / Lec. 3. Lab. 3. Cr. 4.

- Prerequisite: EVSB 7310 or consent of instructor. Anatomy, ecology, morphology, physiology, reproductive biology, evolution, and taxonomy/systematics of aquatic plants.

