7335 Water Quality Modeling for Management (3) Prereq.: ENVS 7061 or permission of instructor. Problems and approaches in water quality modeling, with particular attention to model uncertainty, model choice, and applications for management; basic modeling concepts, mechanistic models, empirical models, modern statistical methods and uncertainty analysis applied to problems of eutrophication, toxic substances, and trend assessment.

7385 Decision Theory and Environmental Risk Analysis (3) Fundamental principles and techniques involved in decision making and environmental risk analysis; methods for identifying decisions that optimize outcomes; rationality (utility) and interactive (game theory) decision theory, and application of decision theory to natural resources and environmental policy-making.

7622 Fundamentals of Carcinogenesis (3) S-E Prereq.: CBS 7603 or consent of instructor. Same as CBS 7622 and BIOL 7622.

7623 Toxicology I (3) Prereq.: ENVS 4477 or consent of instructor. Fundamental principles of toxicology, dose response relationship, design and conduct of acute and chronic toxicity tests, basic analytical toxicology, biochemical markers, basic principles of hazard evaluation and risk assessment, industrial toxicology, principles of toxicology applied to the environment and ecosystems.

7624 Toxicology II (3) Prereq.: ENVS 7623 or consent of instructor. Toxicokinetics; xenobiotic transport, distribution, metabolism, excretion; principles of receptor interaction.

7625 Toxicology III (3) Prereq.: ENVS 7623 or consent of instructor. Toxicology of major organ systems, to include dermal, pulmonary, hepatic, cardiovascular, renal, neural with both CNS and PNS, immune, gastrointestinal, and reproductive; target organ toxicology with mechanistic study of the pathophysiology of classic and prototype toxicants.

7626 Toxicology IV: Genetic Toxicology (3) Prereq: ENVS 7623 or approval of instructor. Also offered as BIOL 7626. Evaluation of induced heritable and/or phenotypic changes in the organism and individual cells (germline and somatic); emphasis on human and mammalian species; reproductive toxicology and teratogenesis; testing and screening agents for genotoxic activities; molecular genetic approaches to human and environmental biomonitoring.

7700 Integrated Environmental Issues (3) Multidisciplinary analysis of a current environmental issue. Discussion of topics from the perspectives of natural science, economics, social science, and political science. Integration and synthesis of information to develop a science-based approach to environmental decision-making.

7995 Environmental Seminar (1) F,S,Su Reports and discussions of student/faculty activities in environmental sciences.

8000 Thesis Research (1-12 per sem.) "S"/"U" grading.