The text appears to be a catalog of course descriptions from a university program, likely related to environmental engineering. Each course entry includes course codes, titles, prerequisites, and brief descriptions of the course content. The courses cover various aspects of environmental engineering, including water resource management, solid and hazardous waste management, environmental control systems, and advanced topics in environmental science and engineering. The descriptions indicate that these courses are designed to provide students with a comprehensive understanding of environmental engineering principles and practices, as well as the ability to apply these principles to real-world problems.
7010 Mathematical Modeling in Energy and Environmental Management (3) S: Prereq.: OCS 4410 or equivalent. Advanced studies in the development of models of energy and environmental systems.

7040 Environmental Protection and Management (3) Prereq.: ENVS 4419. Environmental systems planning and management at local, state, and federal government levels using qualitative and/or quantitative methods; evaluation of alternatives, political action decision processes, and implementation and monitoring.

7041 Environmental Conflict Resolution (3) Prereq.: EXST 7003 or 7004 or 7005; ENVS 7040. Management-oriented approach to major phases of environmental policy formulation, implementation, evaluation; theoretical bases and analytical techniques.

7042 Environmental Conflict Resolution (Practical) (3) Prereq.: RNR 7100 and 7110 or permission of instructor. To mediate environmental conflicts and facilitate participatory group decision making among stakeholders.

7043 Environmental Law and Regulation (3) Introduction to basic principles of federal and state laws, regulations, and court decisions involving pollution of the environment, including the National Environmental Policy Act, Clean Water Act, Clean Air Act, Resource Conservation and Recovery Act, Oil Pollution Act; current topical legal issues.

7044 Regulation of Toxic Substances (3) Federal laws, regulations, judicial decisions, and policies regarding the development, production, use and disposal of toxic substances. Prerequisites: Prereq.: consent of instructor.

7045 Marine Environmental Policy (3) Prereq.: 6 hrs. of chemistry, 6 hrs. of life science. Advanced studies in the development of environmental policies that impart specialized biochemical function, as well as toxicity, mutagenicity, carcinogenicity.

7100 Introduction to Quality Management (3) Prereq.: ENVS 7061 or permission of instructor. Problems and approaches in water quality modeling, with particular attention to model uncertainty. Specific topics for application for management; basic modeling concepts, mechanistic models, empirical models, modern statistical methods, and uncertainty analysis applied to problems of euphotrophication, 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 and 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: Prereq.: CBS 7663 or consent of instructor. Same as CBS 7662 and BIOL 7662.

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

7625 Toxicology II (3) Prereq.: ENVS 7623 or consent of instructor. Toxicokinetics; xenobiotic transport, distribution, metabolism, excretion; principles of receptor interactions.

7626 Toxicology III (3) Prereq.: ENVS 7622 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.

7627 Toxicology IV: Genetic Toxicology (3) Prereq.: Prereq.: ENVS 7622 or consent of instructor. Toxicology and risk assessment of mutagens and clastogens. May be taken for a max. of 4 hrs. credit. Individual study of a specific environmental problem.

7901 Special Topics in Environmental Sciences (1-3) F,S,Su. Research and methodological review of current topics.

7995 Environmental Seminar (1-3) F,S,Su. Reports and discussions of student/faculty activities in environmental sciences.

7998 Environmental Colloquium (2) Non-thesis students only. May only be taken during semester of graduation. Written and oral presentation of a literature review on a selected environmental issue, as approved by the departmental non-thesis committee.

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

EXPERIMENTAL STATISTICS • EXST

General education courses are marked with stars (★).