

ENVS 410 — Environmental Monitoring & Waste Management

Instructor: Dr. Chip Fox
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Class Meets: Monday, 4:30–7:10, SCI 122
Labs: scheduled for Wednesday, 1:00–3:00

Course Description: The various sample collection and analytical techniques are emphasized as they relate to detection and control of pollution. Technical and regulatory aspects of handling, control, and management of various hazardous and nonhazardous wastes. Prerequisite: EnvS 321 (Intro to Environmental Toxicology)

Expectations: Attend all sessions. More than four unexcused absences may result in a drop of one letter grade. Five or more absences may result in being dropped from the course. Successfully pass two mid-term exams and a comprehensive final. Actively participate in and complete three teamwork environmental monitoring research projects and papers.

Required Texts: Artiola, J.F., I.L. Pepper, M. Brusseau (2004) Environmental Monitoring and Characterization. Amsterdam: Elsevier Academic Press

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|--------------------|----------------------|------------|----------------------|
| Evaluation: | 3 Exams @ 100 points | 300 | A = 90% = 360 points |
| | 3 Research projects | <u>100</u> | B = 80% = 329 |
| | TOTAL | 400 | C = 70% = 280 |
| | | | D = 60% = 240 |
| | | | F < 60% < 240 |

Due Dates for Projects:

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|-----------|----------|
| Project 1 | Feb 18 |
| Project 2 | March 24 |
| Project 3 | April 28 |

Topical Syllabus

| Week | Topic |
|------|--|
| 1 | U.S. Waste Problem, and Municipal Wastes |
| 2 | Municipal Waste and Hazardous Waste Landfills |
| 3 | Integrated Waste Management |
| 4 | Environmental Monitoring; Statistical Analysis |
| 5 | Environmental Law Primer; Statistical Analysis |
| 6 | CERCLA and RCRA |
| 7 | Exam I: The Manifest System, Statistical Analysis |
| 8 | Exports & Imports of hazardous waste; Statistical Analysis |
| 9 | Material Safety Data Sheets |
| 10 | Subsurface Contaminant Transport |
| 11 | Subsurface Contaminant Transport |
| 12 | Exam II: Site Remediation |
| 13 | Environmental Audits |
| 14 | Investigating a Hazardous Waste Site |
| 15 | Left Overs |
| 16 | Final Exam —Monday, May 5 |

Caveats Box

Disabilities — Requests from students with disabilities for reasonable accommodations must go through the Academic Support Committee. For more information, please contact the office of Advisement Services, BA 314, 903-886-5133.

Behavior — All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. Students who are disruptive to class activities will be dropped from the class and may face further disciplinary action.

Plagiarism — Plagiarism is a criminal activity. You must cite all sources of information. Unreferenced copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles can result in a score of zero for your assignment and may result in further disciplinary action.