EVT 257 Environmental Risk Assessment

Course Description: A course that utilizes risk assessment methods to evaluate and manage danger in the event of chemical, biological, or radiological exposure. Topics include: operational risk management approaches, and understanding toxicological values. Students provide transportation to off-campus field trips.

Prerequisites(s): EVT 160 and EVT 220 **Corequisite(s):** No corequisite

Lecture Hours: 1	Lab Hours: 2	Credit Hours: 2
Lab Fee: 70	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	☒ Classroom
Semesters Offered: □ Fall	☒ Spring	□ Summer

Course Primary Text:

Title: Materials Provided by the Instructor	Edition:
Author(s):	
Publisher:	

Supplemental Materials:

Handouts
Effective Media Communication during Public Health Emergencies: A WHO Field Guide Hyer, R.N., Covello, V.T. (provided by Instructor)

Course Outcomes:

1	EVT Students will apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined environmental engineering problems.
2	EVT Students will design solutions for well-defined environmental engineering technology problems and assist with the engineering design of systems, components, or processes appropriate to the discipline.
3	EVT Students will apply written, oral and graphical communication in well-defined technical and non-technical environments, while identifying and using appropriate technical literature.
4	EVT Students will perform standard tests, measurements and experiments then analyze and interpret the results.
5	EVT Students will perform effectively as a member of a technical team.

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Course Topics:

Week 1	NAS Risk Assessment Paradigm CBR-Specific Considerations
Week 2	Planning and Scoping Problem Formulation
Week 3	Exposure Assessment
Week 4	CAMEO / MARPLOT / ALOHA / US EPA Website
Week 5	Evaluating Toxicity
Week 6	Evaluating Toxicity – TABLE TOP
Week 7	MID-TERM Field Trip
Week 8	Risk Characterization
Week 9	Risk Characterization – TABLE TOP
Week 10	Risk Management
Week 11	Risk Management – TABLE TOP
Week 12	Risk Communication
Week 13	Risk Communication – TABLE TOP
Week 14	Presentations
Week 15	Final Exam

Methods of Evaluation/Assessment

□ Formative: □ Summative

List assessment activities (e.g. quizzes, discussions, essays, research papers, debates, oral presentations, exams):

Powerpoints
Handouts
Quizzes
Exams
Presentations
Oral Presentations
Guest Speakers

Field Trips

Course Keeper: Barbara Ann Browne

Date Completed: 07/07/20