

**The University of Findlay
School of Environmental and Emergency Management
Spring Semester 2005**

*The Mission of the University is to equip our students
for meaningful lives and productive careers.*

| | |
|---|--|
| Course Number/Title: | ESOH 425 - Risk Assessment |
| Credit Hours: | 4 Credits |
| Class Time/Place: | Wednesday 6:00 to 8:00 pm Brewer 102 |
| Prerequisites: | Determined by the SEEM at the time of registration |
| Instructor: | Dr. Timothy J. Murphy, Assistant Professor The University of Findlay 1000 North Main Street, Brewer 112 Findlay, Ohio 45840 Phone: 419/434-4588; Fax: 419/434-4822 email: murphy@mail.findlay.edu |
| Office Hours: | By Appointment |
| Course Description | To provide prospective environmental, safety and occupational health workers with the necessary skill for assessing and minimizing risk to their organization and themselves. Specific emphasis will be placed upon quantifying the risk |
| Relationship to the Conceptual Framework | Since 1986 the University of Findlay has been actively involved in the development of integrated educational programs to assist industry and communities in the management of environmental, safety and health programs. This course is part of a series of courses designed to develop environmental professionals for both industry and the public sector. |

Copyright

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, without the prior written permission of the author, Timothy J. Murphy.

| | |
|---|---|
| Course Objectives | Define Risk, Risk Assessment and Risk Management Understand basic methodology for quantitative risk assessment and its application to a variety of contaminants and pathways. Understand methodology for quantifying risk assessment and it's application to a variety of contaminants and pathways Perform calculation on pollution problems to determine risk |
| Required Textbooks and other materials | None |
| Knowledge Base | Portions of the following publications will be used: <u>Risk Assessment Methods, Approaches for Assessing health and Environmental Risks</u> , Covello, V. T. & M. W. Merkhofer, 1993, Plenum Press, New York <u>Risk Assessment Guidance for Superfund Sites, Volume I Human Health</u> , 1989, USEPA, Washington, DC <u>RCRA Results Based Corrective Action Guidance Document</u> , 1999, USEPA, Washington DC Various articles and exercises provided by instructor Other Resources: Various Web Sites Journal of Environmental Management Journal of Risk and Uncertainty |

Instructional Strategies

| | | | |
|-------------------------------------|---|---------------------------------|---|
| Case Analysis | x | Library and Internet Research | x |
| Debate | x | Practice/drill | |
| Discovery/Independent Research | x | Problem solving | x |
| Discussion/Questioning/Interviewing | | Reading assignments | x |
| Experiential Learning | | Role playing/simulation games | |
| Field Experience | | Service Learning | |
| Group Presentation | | Video/Audio Review and Critique | x |
| Laboratory Experiences | | Other | |
| Lecture | x | | |

Methods of Assessment

| | | | |
|-----------------------------------|---|---------------------------|---|
| Abstracts | | Participation | x |
| Attendance | x | Peer Evaluation | |
| Capstone Project | | Portfolio | |
| Case Study | | Portfolio Lab Performance | |
| Exams | x | Presentations | |
| Group Projects | | Professional Evaluation | |
| Homework Assignments | x | Quizzes | x |
| Internet Research | x | Research project | |
| Journaling | | Other | |
| Lab Performance | | | |
| Oral/written review of literature | | | |

Grading

The students total points earned in the course divided by the total points possible will determine the course grade.

Grading Scale/Distribution

Exams/quizzes are 40%, Class participation is 10% and Homework assignments are 50% of the total grade for the class. Grade cut offs are as follows: **A= >90%, B= >80%, C= >70%, D= >60% and F= <60%**

NOTE: This course is considered in your major and as such a passing grade is "C" or higher

Honor Code

I will not knowingly engage in any dishonorable behavior, cheat, steal, lie or commit any act of plagiarism during my academic work, course, or endeavor. If I observe an act which I believe violates the University's Honor Code, I may, in my discretion, report it to the appropriate personnel.

Copyright

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, without the prior written permission of the author, Timothy J. Murphy.

Course Policies and Practices

Note that class meetings and presentations will contain the tools needed to learn how to analyze and manage risk. Exams will be based primarily upon the meetings and presentations; however material from the readings will also be included! The two are complementary.

Course Requirements

All assignments are to be turned in, in electronic format.

1. Homework: Read all presentations and reading assignments prior to the scheduled meetings. Reference material and reporting is the major part of the work in this course. You should approach your assignments with this in mind to accurately identify the facts presented as well as the significance of principles behind the facts. You are required to turn in all assignments as scheduled for full credit. Late work will receive partial credit. All assignments must be completed to pass the course.
2. Classes: Class meetings are scheduled for once a week for two hours during the semester. Class-room meetings will consist of discussions, question and answer and lectures. Therefore, attendance is necessary.
3. Papers: All papers shall be written in business format as detailed below unless otherwise directed.
4. Computer Files: All attachments must be 'print ready'.
File name: Your last name, the course and the assignment. For example, if your last name were Murphy Test 1 in ENVM999 e: murphy_ENVM999_test1. **Header:** Your name and the course number needs to be formatted so that it appears on every page of your assignment, project, or test. This helps when materials are printed on shared network printers or faxed to our central communications office

Course Expectations

Students should come prepared to discuss all assigned readings in class. The best learning occurs from thoroughly preparing in advance of discussion. Remember, a portion of your grade is based on participation in the chats.

Participants may only submit original work products, copying portions of material from texts, other papers etc. is considered plagiarism and will be dealt with in the most severe manner allowable by the University. Students are encouraged to exchange ideas and study together, *BUT the assignments, case studies, reports, papers and exams are individual work products, and must be done on an*

Copyright

individual basis. Any assignment, case study, report, paper or exam prepared in whole or part by anyone other than the student submitting the work will cause that work to receive a grade of ZERO.

All tests, quizzes, case studies reports, research papers, become the property of the instructor.

Any student caught cheating, and/or plagiarizing on a quiz, paper will be dealt with in the most severe fashion possible. This may include dismissal or failure from the course. Cheating includes taking or using stolen information from another student or source.

ANY assignments, case study or exam NOT submitted on time will receive a full letter grade deduction.

Note: Written product, specifically Assignments and Reports, will primarily determine your grade. The Final Exam will consist of short answer and case study analysis, and your ability to support your position and influence the reader to understand and logically follow your position. With this in mind, the student should master the art of concise writing. You are expected to use proper spelling and grammar at all times for all assignments. **ANY MATERIAL copied from any source, if not quoted and cited properly will be considered plagiarism and dealt with accordingly.**

| | |
|---|--|
| Final Exam Date | To be Determined |
| Special Services | If you are a student with a disability, it is your responsibility to register with the Office of Disability Service and notify your instructor one week prior to any needed service so that reasonable accommodations can be made for you. |
| Course and Instructor Evaluation | Written Evaluations on University approved forms |
| Additional Information | None |
| Tentative Course Outline (Course outline is subject to change throughout the semester) | To be determined. |