

**The University of Findlay  
College of Science**

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

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|---|---|
| <b>Course Number/Title:</b>                     | ESOH 153<br>Emergency Response Technician Level Training  |
| <b>Credit Hours:</b>                            | 1 Semester Hour   |
| <b>Class Time/Place:</b>                        | See Academic Schedule on web<br>Fostoria Road Facility  |
| <b>Prerequisites:</b>                           | ESOH 150 and Sophomore Standing   |
| <b>Instructor:</b>                              | Tyler Pendleton, <a href="mailto:pendleton@findlay.edu">pendleton@findlay.edu</a> 419/434-<br>Kevin Smith, <a href="mailto:ksmith@findlay.edu">ksmith@findlay.edu</a> , 419/434-4691<br>Dr. Timothy Murphy, <a href="mailto:murphy@findlay.edu">murphy@findlay.edu</a> , 419/434-4588   |
| <b>Office Hours:</b>                            | Hours by appointment  |
| <b>Course Description</b>                       | This course provides participants with practical knowledge concerning response operations for emergency incidents involving hazardous materials. The course emphasizes the incident command system (ICS), methods of mitigation and control at an emergency response, safety issues considered in an emergency response, and termination procedures.        |
| <b>Relationship to the Conceptual Framework</b> | 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 |
| <b>Course Objectives</b>                        | <b>Please see attached detailed list of Goals and Objectives</b>  |

**General Education Learning Outcomes Addressed**

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|--|----|
| Goal 1. Students will take courses which expose them to a range of basic religious beliefs and diverse ethical perspectives and which encourage them to develop their own perspectives on global issues.               |    |
| Goal 2. Students will become familiar with the historical, scientific, literary, and/or philosophical content of a range of disciplines.   |    |
| Goal 3. Students will acquire and practice skills for reading, writing, speaking, listening, abstract inquiry, critical thinking, logical reasoning, and using computers and related technology.                       | XX |
| Goal 4. Students will develop an appreciation for and means of analyzing art, literature, music, communication, science, and/or theatre.   |    |
| Goal 5. Throughout their general education experience, students will analyze and reflect upon the challenges facing our global society as well as the importance of being a life-long learner and responsible citizen. | XX |

**Required Textbooks and other materials**      Manual provided to course participants

**Knowledge Base**      A variety of table top exercises and hands-on activities will be used to increase the students understanding of the subject matter.

**Instructional Strategies**

|                                     |   |                                 |   |
|-------------------------------------|---|---------------------------------|---|
| Case Analysis                       | X | Library and Internet Research   |   |
| Debate                              |   | Practice/drill                  | X |
| Discovery/Independent Research      |   | Problem solving                 | X |
| Discussion/Questioning/Interviewing | X | Reading assignments             |   |
| Experiential Learning               |   | Role playing/simulation games   | X |
| Field Experience                    | X | Service Learning                |   |
| Group Presentation                  | X | 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                    | X | Professional Evaluation   |   |
| Homework Assignments              |   | Quizzes                   |   |
| Internet Research                 |   | Research project          |   |
| Journaling                        |   | Other                     |   |
| Lab Performance                   | X |                           |   |
| 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

Grade cut offs are as follows: A= >93%, B= >85%, C= >78%, D= >70% and F= <70%

### 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.*

### Course Policies and Practices

- Attendance is mandatory, if you are to be absent notify the instructor in advance
- Extra credit is **not available** in this course
- Long sleeved shirts, long pants and proper enclosed foot protection, no open toe shoes. All other basic safety equipment will be supplied by the SEEM
- Students shall be expected to wear safety shoes, hard hats, eye protection and ear protection where appropriate and when told to do so.

### Final Exam Date

Per course schedule

### 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

**Tentative Course Outline (Course outline is subject to change throughout the semester)**

**Day 1**

- 7:00 a.m. Introduction and Course Overview  
Course Objectives  
Introduction to Emergency Response
- 8:15 a.m. Regulatory Overview  
29 CFR 1910.120 (q)
- 9:15 a.m. Hazardous Materials Recognition and Identification  
Occupancy and/or Location  
Container/Vehicle Shape  
Markings and Colors  
Placards and Labels  
Shipping Papers  
Senses
- 10:15 a.m. Informational Resources  
MSDS, 2000 ERG and NIOSH Exercises
- 11:00 a.m. Lunch
- 12:00 Incident Command
- 1:00 p.m. Student Exercise – SCBA Checkout
- 1:30 p.m. Response Operations – Size up, Strategy and Tactics
- 2:30 p.m. Incident Control – Offensive and Defensive Techniques
- 3:30 p.m. Student Exercise – Dress-out in Level B PPE
- 6:00 p.m. Adjourn

**Day 2**

- 7:00 a.m. Direct Reading Instruments
- 8:00 a.m. Safety Plans and Termination Procedures
- 9:00 a.m. Simulated Incident

|           |                    |
|-----------|--------------------|
| Noon      | Lunch              |
| 1:00 p.m. | Simulated Incident |
| 4:30 p.m. | Course Summation   |
| 5:00 p.m. | Exam               |
| 6:00 p.m. | Adjourn            |

**Course/College Specific Information** The regular Emergency response technician course involves 40 hours of class time, this course however, for full time ESOH students has been shortened to 20 hours so it will not be redundant with the OSHA 40 hour course which is a prerequisite for this course. Students will be tested on the OSHA 40 hour course materials as well as the ER Technician course materials presented in this course and must achieve a score of 70% on the final exam to pass this course. Topics that will not be covered in this course (because they were taught in the OSHA 40 hour) that will be on the test include: toxicology, PPE, respiratory protection, characteristics and terminology, decontamination and control zones.

**The University Of Findlay  
ESOH 153**

**EMERGENCY RESPONSE TECHNICIAN LEVEL TRAINING**

**COURSE GOALS AND OBJECTIVES**

**Course Objectives: Students will meet the training requirements illustrated in 29 CFR 1910.120(q)(6)(i), (ii), and (iii). More specifically, upon completion of this course, course participants should be able to:**

1. Students will demonstrate ability to recognize presence and hazards and risks associated with hazardous materials
2. Students will display the ability to identify, classify and verify hazardous materials through the use of resources, use of direct reading instruments and the use of the North American Emergency Response Guide Book
3. Students show knowledge of the notification requirements for hazardous material releases
4. Students will demonstrate the ability to control a hazardous material release scene
5. Students will display ability to function with an assigned function of the Incident Command System
6. Students will demonstrate the ability to select and use proper chemical protective equipment
7. Students will be able to show the ability to select and implement proper decontamination procedures
8. Students will display ability to perform basic offensive and defensive control, confinement and containment techniques
9. Student will perform proper termination procedure through debrief and critique
10. Students will demonstrate knowledge of basic chemical, toxicological and radiological terminology and behavior