

College of Information Technology & Engineering

SFT 465/565

Accident Investigation & Reconstruction

Instructor: Dr. Allan Stern
Office: 212 Communications Bldg.
Telephone: 696-3069
E-Mail: Stern@marshall.edu

Description:

An introductory course in accident investigation techniques designed to give insight into the recognition and collection of evidence, collecting and recording data and reconstructing the accident based on facts.

Text: Modern Accident Investigation and Analysis. Ferry, Ted S. John Wiley and Sons.

Purpose of the Course:

The purpose of this course is to gain an understanding of the need for and nature of accident investigation and to know the role of management, labor and other outside agencies which participate in the investigative process. The student will demonstrate skill in investigative procedures and methods for evidence collection by planning and preparing an investigation. Analysis and evaluation techniques will be applied to mishap reports and hazard investigation.

Course Objectives:

1. To provide information needed to determine injury rates, identify trends of problem areas, permit comparisons and satisfy workers' compensation requirements.
2. To identify the basic causal factors that contributed directly or indirectly to each accident.
3. To identify deficiencies in the management system.
4. To suggest corrective action alternatives for a given accident.
5. To suggest corrective action alternatives for the management system.
6. To determine that information is accurate and complete.

7. To determine that the description of the sequence of events leading to the accident is clear and complete.
8. To determine that the identification of the causal factors are clear and complete.
9. To review corrective actions already taken.
10. To make recommendations for corrective actions to reduce or eliminate the probability of recurrence of a similar accident.
11. To make recommendations for corrective actions to improve the management system.
12. To understand that it is imperative to review the report and have those involved sign off.

Class Work:

Mid Term examination

Final Examination

Out of class assignments

Graduate Students

Grad students will be required to prepare a detailed accident analysis case and present it to the class at the designated time and date.

**SFT 465/565
Schedule**

August 29	Orientation & Course Introduction	Chapter 1
Sept. 5	Preparing for Mishaps Investigation Process	Chapter 2
Sept. 12	Getting Underway	Chapter 3
Sept. 19	Human Aspects	Chapter 4
Sept. 26	Environment	Chapter 5
Oct. 3	Materials	Chapter 6
Oct. 10	Mid Term Examination Chapters 1 – 6	
Oct. 17	System Investigation	Chapter 7
Oct. 24	Basic Analytical Techniques	Chapter 8
Oct. 31	Crash Formulas	
Nov. 7	Where Did Management Fail The Mishap Report	Chapter 14 Chapter 16
Nov. 14	Legal Aspects of Investigation	Chapter 18
Nov. 21	Presentations Due	
Nov. 28	Thanksgiving	
Dec. 5	Final Exam	