

# Hazard Identification and Control in Production Agriculture ASM 326

## Course Description\*:

ASM 326, *Hazard Identification and Control in Production Agriculture and Related Businesses*, is a 2 credit hour course that focuses upon hazards often found on farms and in agriculturally related business work places. Covered topics include how to recognize classes of hazards related to machinery, equipment, structures and confined spaces, animals, chemicals and outdoor and indoor environments. Activities focus on learning prevention and control strategies and applying these techniques and strategies through field visits to operating farms. Evaluation includes quizzes, a final exam, and a final project report involving field visits and inspections.

ASM 326 course provides students with fundamental level understanding of hazards and hazardous situations that contribute to production agriculture's unenviable record of unintentional work injury and death. ASM 326 is an upper-level elective for the Industrial Safety and Health program in the Department of Energy & Geo-Environmental Engineering, College of Earth & Mineral Sciences, and would be an elective in both the ABE and ASM programs.

Prerequisite: 3<sup>rd</sup> semester or higher

Offered: Fall semesters

## Why take ASM 326:

Agriculture is the second most hazardous industry in America. The agricultural industry, including farming operations, agricultural support services and related businesses, has become increasingly concerned about injury prevention in recent years. Agricultural operations and related businesses are becoming larger, more diverse, and are hiring more non-family and non-farm reared labor than ever before. Students will become knowledgeable about the types of hazards they may encounter in any future production agriculture related employment. Agricultural and small businesses that do not have an organized safety and health program are exposed to significant economic and legal liability. This course increases employment opportunities.

## Instructional Objectives:

Upon successful completion of this course, students will be able to:

- 1) describe the extent and range of occupational injury and disease on farms and in agriculturally related rural businesses;
- 2) describe principles of hazard identification and control;
- 3) recognize hazards found on farms and in agriculturally related rural businesses;

- 4) develop methods for preventing or controlling hazards found on farms and in related businesses;
- 5) evaluate work sites for hazards based on standardized hazard auditing tools.

Course Outline (brief):

Week 1	Agricultural injury and disease
Week 2	Principles of hazard identification and control
Week 3 & 4	Tractors and self-powered machines
Week 5 & 6	Agricultural machinery and industrial equipment
Week 7 & 8	Animals and animal operations
Week 9 & 10	Agricultural structures
Week 11 & 12	Farm and rural business workshops
Week 13	Outdoor work environments
Week 14 & 15	Agricultural chemicals
	Final exam

Evaluation Methods:

- Quizzes 35%
- Final exam 35%
- Final paper project 35%

\*Course content and syllabus is subject to change.