## Assessment Plan Department of Fire Protection and Safety Technology, Division of Engineering Technology.

## **Department Specific Objectives**

- Provide an accredited curriculum of study that will combine general education courses with career oriented courses to provide a unique academic preparation for the loss control profession in such a manner as to meet the needs of government, business and industry in the United Sates and the world marketplace.
- Stress fundamental concepts necessary for design and implementation of effective loss control programs in a variety of industrial and government settings.
- Develop an understanding of the standards and regulations that affect the operation and development of effective loss control programs.
- Address current professional and career criteria required of entry-level fire protection, safety, and occupational health practitioners.
- Provided an integrated course of study including mathematics, physical sciences, engineering sciences, written and verbal communication, humanities and the social sciences that prepares the graduate to be productive in the chosen career and a valuable member of the community.
- To provide a curriculum which is attractive and challenging to the traditional student, junior college transfer and the non-traditional student making a mid-life career change.
- To develop a graduate that is a generalist capable of immediate productive employment.

## **Student Outcomes for Fire Protection and Safety Technology**

- 1. Demonstrate knowledge and application of mathematics, science and engineering concepts in loss control situations.
- 2. Demonstrate application of fire prevention and protection principles in concrete situations
- 3. Demonstrate understanding of the management of physical hazards, personnel procedures and environmental risks.
- 4. Demonstrate resourcefulness, independence and persistence in gathering information and solving problems in loss control.
- 5. Demonstrate skills in the identification, analysis, and solution of safety and health problems.
- 6. Demonstrate the ability to understand and correctly interpret standards regulations and codes applicable to fire protection, safety, occupational health and environmental protection.
- 7. Recognize hazardous conditions and appropriate fire protection, safety and health responses.
- 8. Demonstrate understanding and competence in using metrics to assess fire protection, safety and occupational health conditions.
- 9. Demonstrate a well-rounded development in humanities and social sciences, which prepare the graduate to be a productive member of the community.

A self-study of the results of individual and course assessments will be made at least every 6 years. The department will make this assessment in conjunction with preparation for accreditation by the Accreditation Board for Engineering And Technology (ABET). A written plan of action will be developed as a result of this self-study.

## Assessment methods

Individual students and graduates

A portfolio will be assembled over the academic career of each student. Selected samples of course material will be selected to assess the progress of the student toward meeting the eight identified outcomes that are specific to loss control.

Portfolios of the graduating class will be reviewed and assessed by a committee of the faculty. The committee will make recommendations for specific improvements to the curriculum.

Students will take a capstone course (FPST 4684). Seniors will take students will develop a significant project for this course in a team setting.

Mid-level assessment will be performed before students may enter into the upper division courses of the curriculum. Only those best meeting achieving success in the preparatory work will be admitted to the upper division courses. This will be implemented after approval of an enrollment management plan that includes selective admission to upper division courses.

Students will be encouraged to take nationally standardized tests such as the Associate Safety professional (ASP), The Certified fire Protection Specialist (CFPS), the fundamentals of Engineering (FE) and the (NICET) certification examinations. Reports from the results of these examinations will be used to evaluate strengths and weaknesses of the curriculum with respect to the students' chosen career paths.

Post graduation assessment.

A survey will be sent to a sample of recent graduates annually to assess the relevance of material to the entry-level requirements of the employers that hire OSU Fire Protection & Safety Technology graduates.