

SFTY409e Aviation Safety

Level: 4

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

E-Learning: BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

This course covers all facets for an aviation safety program including both flying safety and safety of ground operation. Major problem areas in aviation safety, safety program evaluation, and impact of accidents on industry are covered. Focus is on human factors, basic accident prevention programs, and the roles of various government and industry organizations have in preventing accidents.

Topics:

- Introduction and Review of Syllabus
- The Regulatory Framework
- Regulatory Organization and Rulemaking
- The National Transportation Safety Board
- Occupational Safety and Health Administration
- Environmental Protection Agency
- Reporting and Recording of Safety Data
- Review of Safety Statistics
- Accident Causation Models
- Risk Management
- Human Factors in Aviation Safety
- Airport Safety
- Aviation Security
- Airline Safety

Learning Outcome:

- Explain the evolution of Federal aviation safety laws and regulations and describe their effectiveness in improving the safety of flight in air carrier operations.
- Evaluate the various methods of how safety is measured and the current safety data systems, and compare and contrast their capabilities and limitations in measuring safety.
- Categorize the types of human errors that are causal factors in aircraft accidents and assess the effectiveness of what is being accomplished to reduce human error.
- Identify and assess the many safety practices and procedures that are used in aircraft ground operations to reduce the number and type of accidents and injuries.
- Design a risk management program that can be applied to the management of flying and non-flying segments of the aviation industry.
- Explain how Occupational Safety and Health standards and Environmental Protection Agency regulations effect ground operations and their economical accomplishment.
- Propose and explain the duties and responsibilities of safety managers within the airlines and defend the expense of this position within the aviation industry.
- Compare and contrast the available key elements of a safety program and develop a basic effective aviation safety program for a flying organization including risk management.

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
TUTOR-MARKED ASSIGNMENT	100
Sub-Total	100

Examinable Component	Weightage (%)
Sub-Total	

Weightage Total **100**