

Course Competency

AVM 2441 Aviation Safety & Human Factors

Course Description

This course will provide the student with an understanding of human factors and safety concepts as they apply to aviation. There will be an evaluation of aircraft accidents and their causal factors. Accident prevention measures are stressed as integral parts of an aviation safety program. (3 hr. lecture)

Course Competency	Learning Outcomes
<p>Competency 1:The student will demonstrate knowledge and understanding of aviation safety and human factors by:</p>	<ol style="list-style-type: none"> 1. Social Responsibility 2. Ethical Issues 3. Communication
<ol style="list-style-type: none"> 1. a. summarizing the historical development of safety and human factors issues in aviation. b. defining human factors and the impact of human factors on aviation. c. explaining the meaning of human error. d. describing fatigue, its causes and preventive measures. e. discussing body rhythms and sleep as they apply to aviation safety. f. identifying the importance of fitness as it relates to performance and human factors. g. defining vision and visual illusions and discussing their relation to human factors. h. recalling and explaining several visual illusions and how to prevent them. i. pointing out the importance of motivation and leadership as they relate to human factors. j. summarizing the importance of training and training devices in maintaining safety. k. demonstrating how instrument displays, aircraft controls, space and layouts increase safety. l. categorizing ergonomics and the critical role it plays on safety and certification. m. discussing documentation and the critical role it plays in safety and accident 	

<p>prevention. n. breaking down the aviation safety program and discussing how it creates an environment of safety awareness and accident prevention.</p>	
<p>Competency 2:The student will analyze and interpret aviation safety and human factors from a variety of perspectives, including those of:</p>	<ol style="list-style-type: none"> 1. Critical thinking 2. Communication
<ol style="list-style-type: none"> 1. a. the pilot b. the passengers c. the airline (company) d. the National Transportation Safety Board e. the Federal Aviation Administration 	
<p>Competency 3:The student will produce reasoned, critical responses to common concerns in the aviation safety and human factors by:</p>	<ol style="list-style-type: none"> 1. Communication 2. Critical thinking
<ol style="list-style-type: none"> 1. a. analyzing and solving problems assigned by the instructor related to aviation customer service. The solution(s) given by the student will count towards the final grade of the course. b. reviewing NTSB reports citing human error as a cause of an accident and correlate the importance of human factors training. c. developing positive attitudes towards fitness and the manner in which it is conducive to preventing human error. d. generating, developing, organizing, and presenting ideas related to aviation customer service effectively. 	

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