Course Description
AVM2441 | Aviation Safety & Human Factors | 3.00 credits
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.

Course Competencies:
Competency 1: The student will demonstrate knowledge and understanding of aviation safety and human factors by:

1. Summarizing the historical development of safety and human factors issues in aviation
2. Defining human factors and the impact of human factors on aviation
3. Explaining the meaning of human error
4. Describing fatigue, its causes, and preventive measures
5. Discussing body rhythms and sleep as they apply to aviation safety
6. Identifying the importance of fitness as it relates to performance and human factors
7. Defining vision and visual illusions and discussing their relation to human factors
8. Recalling and explaining several visual illusions and how to prevent them
9. Pointing out the importance of motivation and leadership as they relate to human factors
10. Summarizing the importance of training and training devices in maintaining safety
11. Demonstrating how instrument displays, aircraft controls, space, and layouts increase safety
12. Categorizing ergonomics and the critical role it plays in safety and certification
13. Discussing documentation and the critical role it plays in safety and accident prevention
14. Breaking down the aviation safety program and discussing how it creates an environment of safety awareness and accident prevention

Competency 2: The student will analyze and interpret aviation safety and human factors from a variety of perspectives, including those of:

1. The pilot
2. The passengers
3. The airline (company)
4. The National Transportation Safety Board
5. The Federal Aviation Administration

Competency 3: The student will produce reasoned, critical responses to common concerns in aviation safety and human factors by:

1. 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
2. Reviewing reports citing human error as a cause of an accident and correlating the importance of human factors training
3. Developing positive attitudes towards fitness and how it is conducive to preventing human error
4. Generating, developing, organizing, and presenting ideas related to aviation customer service effectively

Learning Outcomes:
- Communicate effectively using listening, speaking, reading, and writing skills
- Create strategies that can be used to fulfill personal, civic, and social responsibilities
- Demonstrate knowledge of ethical thinking and its application to issues in society