

# **Aviation Human Factors and Safety**

# **AVIATN 3300**

#### **Credit Hours:**

3.00 - 3.00

#### **Course Levels:**

Undergraduate (1000-5000 level)

## **Course Components:**

Lecture

## **Course Description:**

Consideration of Human Factors including all sensory, perceptive, cognitive and decision making dynamics as they are expressed in aviation. Consideration of aviation safety including incidents, accidents, crew resource management, and performance.

## **Prerequisites and Co-requisites:**

Prereq or concur: 3000.

#### **Course Goals / Objectives:**

- Develop an understanding of human factors in aviation safety, aircraft design, aviation systems, and aviation operations.
- Develop awareness of safety assessment and procedures.
- Develop an understanding of basic accident investigation ques, NTSB procedures, and accident incident causation.

## **Course Topics:**

- Visual, auditory, and vestibular systems.
- Fatigue and flight physiology.
- Perception, cognition, and decision making
- Human error, resilience, Crew Resource Management
- FAA Safety. NTSB accident investigation
- Safety data and event reporting
- Incident and Accident Causation Models
- Safety Management Systems for aircraft, airlines, and airports

# **Designation:**

Required