

# AV 235 : HUMAN FACTORS

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## Transcript title

Human Factors

## Credits

4

## Grading mode

Standard letter grades

## Total contact hours

40

## Lecture hours

40

## Course Description

An introduction to the field of human behavior and characteristics as critical factors in the design and operation of electronic/machine systems. Emphasis is on crew resource management and human factors, including the study of human performance in complex systems with an examination of personality, stress, anxiety, fatigue, communication skills, decision-making, situational awareness, analysis of aviation and accidents, and practical application of human factors and performance to modern aviation.

## Course learning outcomes

1. The student will learn human behavior and characteristics as critical factors in the design and operation of electronic/machine systems.
2. Student will comprehend crew resource management and human factors, including the study of human performance in complex systems with an examination of personality, stress anxiety, fatigue, communication skills, decision-making, situation awareness, analysis of aviation incidents and accidents, and practical application of human factors and performance to modern aviation.

## Content outline

- Basic Concepts and Human Factors Overview
- The Human In Flight; Physiology
- Sensory Systems
- Human Factors in Maintenance
- Information Processing
- Managing Workload
- Avoiding and Managing Error
- Organizational Perspectives
- Safety Systems
- Human Behavior and Decision Making
- Fatigue and Performance
- Crew Resource Management
- Advanced Cockpit Automation

## Required materials

Requires textbook and/or online learning materials.