



# Aircraft Performance and Weather

## AVIATN 2300

**Credit Hours:**

3.00 - 3.00

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**Course Levels:**

Undergraduate (1000-5000 level)

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**Course Components:**

Lecture

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**Course Description:**

Weather theory, patterns, data, and analysis. Data formats and sources. Consideration of weather conditions as they relate to aircraft and flight performance.

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**Prerequisites and Co-requisites:**

Prereq: Aviatn 2000 and 2100.

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**Course Goals / Objectives:**

- Provide working knowledge and understanding of weather conditions as they relate to aviation considerations.
  - Provide working knowledge and understanding of aircraft capabilities in various weather environments.
  - Application of weather data to trip and flight planning.
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**Course Topics:**

- Atmospheric energy, temperature, density, and pressure
  - Textual and graphical weather representations.
  - Wind, moisture, and stability
  - Air masses, clouds, ceilings and visibility.
  - Turbulence, icing, and hazards
  - Aircraft structural and operational characteristics and behavior in various weather scenarios.
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**Designation:**

Required