THE UNIVERSITY of **MISSISSIPPI**

M E 529: Aerodynamics
MECHANICAL ENGINEERING

Application of fluid mechanics concepts to describe the flow field and to calculate lift and drag forces as well as moments around wings and bodies at both subsonic and supersonic speeds. This is accomplished via the following methods: application of ideal flows and superposition to aerodynamic situations; introduction to conformal mapping, thin-wing and slender body theories; application of linearized potential flow for compressible flow in both subsonic and supersonic aircraft; shock- expansion theory.

3 Credits

Prerequisites

- Engr 323: Fluid Mechanics

One-way corequisites

- M E 401: Thermo-fluid Dynamics

Instruction Type(s)

- Lecture: Lecture for M E 529

Subject Areas

- Mechanical Engineering