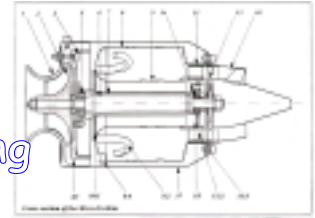


A COURSE ANNOUNCEMENT FOR SPRING 2002

Department of Aerospace Engineering



THEORY & DESIGN OF TURBOMACHINERY



Tuesday and Thursday
1:00-2:15 pm 320 Sackett

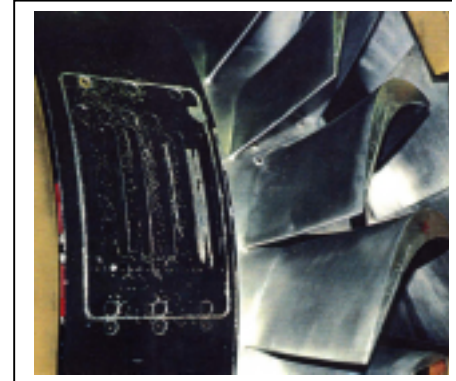
Instructor:

Dr. Cengiz Camci

223 Hammond Building

C-Camci@psu.edu

865-9871



This course deals with aerothermal theory and design of all types of turbomachinery including aircraft engine compressors and turbines, spacecraft turbomachinery, ground based gas turbine systems, pumps and hydraulic turbines.

- ↪ ONE DIMENSIONAL ANALYSIS OF TURBOMACHINERY SYSTEMS
- ↪ OVERALL PERFORMANCE CONSIDERATIONS
- ↪ THEORETICAL PREDICTION OF CASCADE FLOWS
- ↪ THREE DIMENSIONAL INVISCID FLOWS
- ↪ AERODYNAMIC LOSS MECHANISMS AND EFFICIENCY
- ↪ EXPERIMENTAL METHODS IN AEROTHERMAL RESEARCH
- ↪ COMPUTATIONAL DESIGN METHODS FOR TURBOMACHINERY SYSTEMS

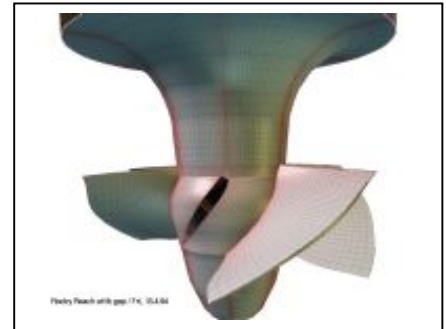


Grading Criteria:

Homework assignments	25/100
Mid-term exam	25/100
Design project	25/100
Final exam	25/100

Text Book:

Fluid Dynamics and Heat Transfer
of Turbomachinery, (B.Lakshminarayana)
John Wiley, Inc., December 1995



Additional details about the course is available from the instructor