Heat Transfer

AEROENG 3580

**Description / Conditions**

Transcript Abbreviation:
Heat Transfer

Course Description:
Fundamentals of conduction, convection, and radiation.

Course Levels:
Undegraduate (1000-5000 level)

Designation:
Required

**Course Detail**

Credit Hours (Minimum if “Range” selected):
3.00

Max Credit Hours:
3.00

Check if Repeatable:
Off

Maximum Repeatable Credits:
3.00

Allow Multiple Enrollments in Term:
No

Course Length:
14 weeks (autumn or spring)
12 weeks (summer only)

Off Campus:
Never
Campus Location:
Columbus

Instruction Modes:
In Person (75-100% campus; 0-24% online)

Prerequisites and Co-requisites:
Prereq: 3560 (560 and 570), and enrollment as AeroEng-BS student (No pre-majors can enroll in this class).

Electronically Enforced:
No

Exclusions:
Not open to students with credit for 570.

Course Goals and Learning Objectives

Course Goals / Objectives:
A fluency with the subject matter including: conduction, convection, and radiation.

Check if concurrence sought:
No

Contact Hours

Contact Hours:

<table>
<thead>
<tr>
<th>Topic</th>
<th>LEC</th>
<th>REC out-of-class</th>
<th>REC in-class</th>
<th>Weekly LAB in-class</th>
<th>Weekly LAB out-of-class</th>
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<tbody>
<tr>
<td>Viscosity and Navier-Stokes equations</td>
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<tr>
<td>Boundary Layer transition and turbulence</td>
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<tr>
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Grading and Texts

Grading Plan:
Letter Grade

Course Components:
Lecture
Grade Roster Component:
Lecture

Credit by Exam (EM):
No

Grades Breakdown:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Homework</td>
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<tr>
<td>Labs</td>
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<td>Midterm Exams</td>
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<td>Final Exam</td>
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Representative Textbooks and Other Course Materials:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
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<tr>
<td>Fundamentals of Aerodynamics</td>
<td>Anderson, John, Jr.</td>
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ABET Student Learning Outcomes

Embedded Literacies (UG courses only)

Embedded Literacies Info:

Attachments / Additional Notes or Comments

ABET Syllabus:
AEROENG_3580_ABET.pdf