I. COURSE INFORMATION
Lecture Times: Mondays, Wednesday 3:00 – 4:15 PM.

Prerequisite: Thermodynamics and Fluid Mechanics

II. PROFESSOR INFORMATION
Dr. Morteza Eslamian, ST-207C
Office Phone: 361-825-3652
Office Hrs: M-W 11:00-12:00 AM
E-mail Address: morteza.eslamian@tamucc.edu
URL: http://www.sci.tamucc.edu/~meslamian

III. TEXTBOOK

IV. COURSE DESCRIPTION
This course is an introduction to heat transfer and covers conduction, convection, and radiation heat transfer. Calculus will be used to solve some of the heat transfer problems in this course. The course topics are:

(i) Basic concepts of heat transfer
(ii) Conduction
(iii) Conduction in cylinders and spheres
(iv) Finned surfaces
(v) Transient conduction
(vi) Forced and natural convection
(vii) Radiation
(viii) Emissivity and Kirchhoff’s law
(ix) Heat exchanges

V. COURSE OUTCOMES
1. Students will gain an intuitive understanding of heat transfer concepts.
2. Students will learn to think creatively with initiative when confronted with an engineering problem.

3. Students will learn to write complete and logical solutions to the problems.

VI. EVALUATION

The methods of evaluation and the criteria for grade assignments are:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Midterm Exam</td>
<td>40</td>
</tr>
<tr>
<td>Final</td>
<td>50%</td>
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Grading Scale: A = 100-90; B = 80-89; C = 70-79; D = 60-69; F = below 60

VII. CLASS POLICIES

Student collaboration: Collaboration on homework is acceptable, but individual work on the homework submitted is expected. Although it will help many of you to understand the ideas better if you explain them to each other, you should also have the ability to perform independent work as is demonstrated in solving the homework problems.

Calculations should be submitted in an organized and neatly presented form. Box the answers to each problem. All work, including the assumptions, must be shown. Appropriate units must be included on all answers. Pages are to be numbered and stapled at the upper-left corner.

XII. SUPPORT SERVICES FOR STUDENTS WITH DISABILITY

Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Driftwood 101 (DW-101), at 825-5816.

XIII. ACADEMIC HONESTY

The engineering and engineering technology professions are based on truth, honesty, integrity, and professionalism. Scholastic dishonesty will not be tolerated. See the University Catalog sections on Academic Integrity and Academic Honesty.