ME 410 Course Information -- Fall 2003

This course is intended to:

- Familiarize the student with the basics of IC engines: definitions, concepts, engine types and configurations.
- Teach the students some beginning level modeling techniques related to IC engines, and the calculation of some useful information from them.
- Encourage the student to research topics of interest in the field of IC engines, and to present the findings of this research in a professional manner.
- Be a forum for conversations among people who are interested in the subject of IC engines.
- Be fun.

Professor Information

Jerry Fine  
C109  
ext. 8353  
Office Hours: 8-9, 10-11 am M,T,R,F. (Some Wednesdays)  
Jerry.Fine@Rose-Hulman.edu

Course Policy Information

Homework.

There will be a number of homework assignments. Their purpose is to give you practice in applying the course material and to prepare you for the tests. The homework should be kept in a loose-leaf notebook, or in a directory on your hard drive. Use of the program EES for the program is encouraged, and on some problems it is mandatory.

Textbook Information

The text is Internal Combustion Engine Fundamentals by John B. Heywood. (McGraw Hill, 1988). It is in the bookstore. This text is supposedly the best, and will provide good support for course learning, as well as becoming an invaluable part of the reference library of an engineer interested in IC engines. Refer to the schedule for the daily reading assignments.

Class Participation

There will also be a class participation factor, so plan to attend and take part in the activities. Among these activities will be a five minute informal presentation on any topic that interest you regarding IC engines. We will usually have one of these every day. There will be a sign up on Day 1. Homework will be assigned at times, but it is optional.

Writing Assignment Information

Write a 3-4 page paper on any engine related topic which interests you. This page limit does not include graphics and tables. Keep the whole thing to less than 8 pages.

Assume the audience for this paper is your immediate supervisor. This person is technically competent, so you do not have to supply lengthy explanations or background material. The
paper should begin with an executive summary or abstract. Include a table of contents, with sections, headings and page numbers. Also include a list of references. The abstract, table of contents and list of references do not count in the 3-4 page limit.

If you receive a grade less than A- (90%) you may rewrite your paper and resubmit it for an improved grade. The new grade will be the average of the grades for the original and the rewrite.

An outline is due on Wednesdayday, September 24, 2003.
The original must be submitted by Friday, October 24, 2003.
The rewrite is due on the last class.

Grading

Your grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Tests and Final Exam Avg.</td>
<td>60%</td>
</tr>
<tr>
<td>Writing Assignment</td>
<td>20%</td>
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</tbody>
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The final exam will count as two tests. If your test average is above 80%, the final is optional.