ROSE-HULMAN INSTITUTE OF TECHNOLOGY

Department of Mechanical Engineering

ME422 FEFEA

HOMEWORK GUIDELINES

NOTE: The ability to solve an engineering problem is worthless if the engineer is unable to communicate the solution to those who need it.

A. FORMAT

- 1. Put your <u>name</u> and <u>box number</u> in the <u>top right corner</u> of <u>each</u> page.
- 2. Use only one side of each page.
- 3. Start each new problem on a new page.
- 4. Specify each problem number.
- 5. Each solution must be both legible and comprehensible.
- 6. Staple pages together.
- 7. Have problems in the order in which they were assigned.
- 8. Use *real* green engineering paper instead of tearing pages out of a notebook.

B. COHERENCE & CORRECTNESS

- 1. Your work should be CLEAR and COMPLETE. In particular, note the following.
 - a. Use words to connect your steps. Communicate to me what you are doing and why.
 - b. The solution should be worked through with symbols and the equations should be <u>reduced</u> into final form prior to substitutions of any numbers.
 - c. Comments or observations made from your solution and results should follow your solution. Often trends based on changes of parameters are useful, e.g., how does solution accuracy vary with increasing basis degree?
- 2. Your work should be CONCISE. Don't provide all the work and preliminary calculations from your scrap sheets. Present a complete but <u>lean</u> version of your work with just enough details that each step can be followed clearly.
- 3. Check your work. In particular,
 - a. check the readability of your solutions.
 - b. consider the reasonableness of the trends and calculated values.
 - Maple or Mathematica may be used to CHECK your solutions but these packages will be unavailable for exams.

C. MISCELLANEOUS

- 1. Graded homework may be reworked if at least a partial solution is submitted by the due date. Late homework will not be accepted.
- 2. An acceptable partial problem will include the following steps:

Known.

Schematic and Given Data.

Find.

It <u>must</u> also have **an attempted Analysis** with a <u>clear</u> statement or question indicating <u>why</u> you are **stumped**. A hint may then be provided when the incomplete solution is returned.

HW Guidelines Page 1 of 1