

ME 433 – Homework #0 (due by 8 pm on June 16)

1. Introductions

- 1) With what name/nickname do you prefer to be addressed?
- 2) What is your hometown/country?
- 3) What degree are you pursuing and when do you plan to graduate?
- 4) What previous experience do you have with combustion engines?
- 5) Why did you take this course? What are your goals for the course?
- 6) What are two unique skills/experiences you bring to this class that you and the class might use as a resource?
- 7) Where/when did you take the following courses and what grades did you receive?
chemistry, statics, thermodynamics, heat transfer, fluid mechanics, diff eqns
- 8) What engineering analysis software tools (i.e Excel, MathCAD, EES, Matlab, TKSolver) have you used in problem solving? What is your level of proficiency with each tool?
- 9) What is your generic weekly schedule for working on ME 433 throughout the summer term? What is your plan for submitting weekly assignments by midnight Monday evening?
- 10) What instructor interaction/support would you like to have in completing this course? Would you be interested in having regularly scheduled weekly ZOOM recitations (perhaps Wednesday or Thursday evening) to answer questions on course material or to provide consultation on course assignments?

2. Syllabus Analysis

- 1) What are the three most critical prerequisite skills you need to review to prepare for this course. Describe a technique that you will use to refresh each skill.
- 2) Which three of the course topics/activities most interest you? Why?
- 3) Of the course topics listed which two do you predict will be the most challenging? Why?
- 4) What are the top three professional behaviors that will help you get the most out of this course?
- 5) What are your top two questions about the course for which the syllabus doesn't answer?
- 6) What preliminary ideas do you have about topics you might explore in the course project?

3. Self Assessment

Rate your current performance in documenting engineering calculations using the problem solving rubric posted on the course website. Provide a brief justification for each rating. How will you customize implementation of each of the areas in the rubric for greatest personal benefit in preparing homework solutions? What tips/practices will you deploy?