Course Objectives: The students will be asked to demonstrate their knowledge of the material covered in this first thermodynamics course through their mastery of the following course objectives. Through the study of this material the student will be able to:

This is “remember” aspect of how to get the basic information

1. Determine properties of real substances, such as steam and refrigerant 134-a, and ideal gases from either tabular data or equations of state.

And those two are “Apply” aspect of using basic information to get energy and work

2. Analyze processes involving ideal gases and real substances as working fluids in both closed systems and open systems or control volumes to determine process diagrams, apply the first law of thermodynamics to perform energy balances, and determine heat and work transfers.
3. Analyze systems and control volumes through the application of the second law.

The first one falls under "Remember" and the rest "Apply", according to Bloom's taxonomy.

COURSE OBJECTIVES:

- Determine properties of real substances, such as steam and refrigerant 134-a, and ideal gases from either tabular data or equations of state.
- Compute heat and work transfer by performing energy balances using the first law of thermodynamics for processes involving ideal gases and real substances as working fluids in both closed systems and open systems or control volumes to determine process diagrams.
- Solve engineering problems using systems and control volumes through the application of the second law of thermodynamics.
- Compute efficiency, work, heat input/rejection, temperatures, pressures, etc., in various cycles via the application of thermodynamics laws and principles applicable to engineering problems.