Guidelines to Solve Thermodynamic Problems

- 1. Read the problem carefully and understand the requirements.
 - (a) hi-lite or underline specific conditions and/or information requested
- 2. Sketch the necessary diagrams.
 - (a) System diagram: indicate the system components/stages
 - (b) Process diagram: indicate the states
- 3. State assumptions and idealizations.
- 4. Apply the laws of thermodynamics (1st and 2nd laws, conservation of mass).
- 5. Simplify the general equations based on assumptions and idealizations.
- 6. Obtain the necesary thermodynamic properties from figures and tables or using the equations of state.
 - (a) clearly indicate where you obtained the information
- 7. Solve the problem.
- 8. Clearly label your final answer.
- 9. Give comments if you have any.