Phy 4B Cascarano

### Lecture 10

## Pre-Lecture Preparation (due within the first 5 minutes of class):

- Read pages 660 678 in the textbook (Serway 9<sup>th</sup> edition) and do the following:
  - 1) Quick Quizzes 22.3 22.6
  - 2) Book Problems (p. 684): 42

## Goals for the Lecture:

- 1) Understand the Carnot Engine and that it is the most efficient engine possible
- 2) Understand the concept of entropy and how it applies to thermodynamic systems
- 3) Be able to calculate changes in entropy for thermodynamic processes

# Post-Lecture Study Guide (I do not collect this):

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas. Review the pre-lecture questions to make sure you understand them.

## Do problems:

Ch 22: Conceptual Questions: 10 and 11

Ch 22: Problems: 43

Continue with the additional recommended study problems from chapter 22