As described in the ME 475/675 Course Syllabus, students in this class will complete a project for 3% of the course grade. The requirements for graduate students may be different from undergraduates in the class.

The intent of the project is for students to perform combustion-related work that is beyond the scope of the regular course homework, computer projects, examples and exams. Students will work with the Course Teaching Assistant to complete their project. Projects may be conducted individually or as part of a small group.

Students must submit a one-page proposal describing the work they will conduct and the names of the student(s) with whom they will work by November 22, 2017. The instructor and TA must approve the proposal. Students must complete a final report or presentation by December 8, 2017.

The following are some suggested projects:

- Construct a homemade camp stove fueled with absolute alcohol (some guidance may be found on the world wide web) and determine how long it take to bring 0.5 liters of room temperature water to a boil.
- Design an experiment, including part numbers and costs, that student can use to acquire data that to benchmark physical phenomenon that student calculate the course. For example, a diffusion flame length, a premixed flame speed, an adiabatic flame temperature, or diffusion mass flow rate. If the experiment is sufficiently simple to construct, then conduct the experiment. If possible, one of more of these experiments may be constructed by the ME Department and used in future offerings of ME 475/675.
- Read a combustion research paper of interest to you and make a 15 minute presentation to the class.
- Create lecture notes and a homework assignment from the textbook for a topic that the instructor does not currently cover in ME 475/675.
- Some other project proposed by the student and accepted by the course instructor and teaching assistant.