



The syllabus for this course outlines requirements for the Independent Laboratory project each small group of students must conduct (approximately three students per group). This memo will provide additional details for this project. Most notably, the due date for the proposal will be next week at the end of the day of your lab section (due Monday, February 2, for Section A, etc.).

As a reminder, Group A will conduct an experiment to validate beam theory strain equations and to determine Poisson's ratio for steel. Group B will conduct an experiment to study pitting and crevice corrosion in aluminum. Group C will conduct an experiment to aluminum foil corrosion when covering mom's spaghetti sauce (NOTE, however, plain tomato paste is recommended rather than spaghetti sauce). Group D will conduct an experiment to evaluate the effectiveness of vinyl protection spray at preserving rubber bands exposed to the outdoor environment.

The proposal letter should follow the suggestions presented in the course syllabus, and meet the standards described in the *UP Writing for Engineers* document. Be sure to include a time-line describing when you will start your experiment and when you will complete it. Describe what measurements you will take (ALL of the experiments must have quantitative data) and how you will analyze it.

I know that this project is not well defined. If you have questions, please be sure to ask me in a timely manner. I am happy to discuss this anytime I am available, and will respond promptly to email (lulay@up.edu). Do not start the experiment until I have approved your proposal! I will supply any materials you need (not necessarily the materials you request, however). Good luck.