

Schedule for Beginning of AAE520 Student Projects

- Lab 3 finishes Fri. 22 Feb. 2019
- Lab 3 report due Monday 4 March
- One-page 'white papers' summarizing your project idea, plan, and group are also due Monday 4 March. Discuss these with the TA's and I beforehand! Schneider on travel 8-14 March.
- The lecture periods on Mon. 18 and 25 Feb. will be used for project discussions. Wed. 20 Feb. is the first oral reports on Lab 3, Wed. 27 Feb. is second oral reports on Lab 3.

Outline of Schedule for Student Projects

- M-W 4:30 sessions to be used for group discussions/progress reports, for the remainder of the term, except for special issues as required.
- Beginning with Monday 4 March, Monday will be half the teams, Wed. is the rest (TBD). Present an update to facilitate discussion, slides plus email a copy for TA and I.
- 7 weeks, of 4, 18, 25 March, and 1, 8, 15, 22 April; plus finals week for finishing reports.
- Use these weekly meetings to get help with your problems! Describe your progress, plans, and problems.
- If you need machine-shop work done, try to get your design submitted before spring break. The shop queue gets long and your time is short. Machine-shop drawings must be approved by the TA or I, before being submitted, and you must have material ready to cut.

Due Dates for Student Project Elements

- White papers due 4 March at 8 AM. Emailed to TA and I. A couple of paragraphs. Title, group members, concept for project – facility, model, instrumentation. To be discussed by email, in meetings, and during the meetings on 4 & 6 March.
- Written proposals due Fri. 8 March at 5PM. A more detailed writeup of your plan – why, how, when. A few pages.
- Draft of Introduction and Background sections due Mon. 1 April at 8AM. Detailed review of previous work, to be incorporated in your final report.
- Draft of Introduction, Background, and Apparatus sections of final report due Mon. 15 April at 8AM. Include preliminary results if you have them.
- Brief summaries of your final reports are to be presented during 3:30-5:30PM on Monday 29 April, in NISW 184. Email copies of slides to TA and I. Please advise of conflicts.
- Final written reports due Thurs., 2 May 2018, 8:00AM. One paper copy, plus electronic PDF to both TA and I.

More on Student Projects

- Do your labs whenever appropriate. Everyone should get a PIN code so they have after-hours access through the North door. Be safe.
- Help us with building security – don't block the doors open.
- Help us keep the building a good place to work, clean up after yourself. Final grade will not be assigned until work site is cleaned up.
- Budget for experiments is small, unless you get a professor to buy in – possible if your project aligns with larger interests.
- Get help re choosing and borrowing equipment
- Shop time is available in limited quantities.
- More resources will be made available for projects with a long-term benefit to AAE courses or research.
- Use your project as a warmup for a thesis?
- But project should not be any part of your thesis plan.

Budget, Schedule, Quality, and Planning

- Your project is like every other – quality is limited by budget and schedule. Your job is to be creative, skilled, and conscientious in accomplishing as much as you can, of the most important tasks, within available resources.
- Developing an apparatus that works often takes most of the schedule and budget. Allow time for this iterative process!
- Planning is a critical element. Be creative in examining available resources (what are they?) and putting them together in a new way, an effective way, to address a relevant problem.
- What's been done before? What are the key issues? Your literature search should help here, but you have to pick a topic first!
- Is your experimental concept feasible? Can you estimate what you might see?
- Be prepared to adjust your plan as you get preliminary results, or fail to get preliminary results.