Schedule for Beginning of AAE520 Student Projects

- Lab 3 finishes Friday, 23 February 2024
- Lab 3 report due Monday, 4 March 2024
- One-page ‘white papers’ summarizing your project idea, plan, and group will be due Monday 4 March at 8am on Brightspace.
  - Discuss these with the TAs and me beforehand, for example, during the “Project Discussions” class periods leading up.
End of Semester Schedule + Class Schedule

- Spring Break: March 11-16
- Finals Week: April 29 – May 4
- Final Grades Due: 5PM on Tuesday, May 7

Final Presentations During Finals Week
1-3pm, Monday, April 29 (last feedback!)

Final Reports Due 8:00am, Friday, May 3

<table>
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<tr>
<th>6th</th>
<th>Intro. To Project (12 Feb.)</th>
<th>Lab 3 Recitation (Teams 1-4)</th>
<th>Lab 3 (Shock/Boundary-Layer Interaction) Report due 4 March</th>
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<td>7th</td>
<td>Lab 3 Recitation (Teams 5-10) (19 Feb.)</td>
<td>More on Project (21 Feb.)</td>
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<td>8th</td>
<td>Project Discussions (26 Feb.)</td>
<td>Project Discussions (29 Feb.)</td>
<td>Project</td>
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<td>9th – end</td>
<td>TBD (Project Recitations)</td>
<td>TBD (Project Recitations)</td>
<td>Final Report due 3 May</td>
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J.S. Jewell, Last Revised: 10 February 2024

NOTE: NO CLASS Monday 8 April. Go see the eclipse!
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 are helpful as with the pre-set labs.

• 8 weeks; plus finals week for giving oral presentations

• 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 (begins March 11). The shop queue gets long and your time is short.

• Machine-shop drawings must be approved by a TA, before being submitted, and you must have material ready to cut.

J.S. Jewell, AAE520, 22 February 2024
Due Dates for Student Project Elements

• White papers due Monday 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 sessions with the TAs/instructor on 4 & 6 March.

• Written proposals due Monday 11 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 the time scheduled for the ‘final exam’, 1-3pm April 29, in person in the regular classroom. Upload copies of slides to Brightspace. Please advise of conflicts. We can give you some brief feedback at this time.

• Final written reports due Friday, 3 May 2024, 8:00AM. One electronic PDF (for the team) uploaded to Brightspace.

J.S. Jewell, AAE520, 22 February 2024
More on Student Projects

• Do your labs whenever appropriate. Everyone should get approval to swipe their ID 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.

J.S. Jewell, AAE520, 22 February 2024
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.

J.S. Jewell, AAE520, 22 February 2024