

EAS4810C: Experimental Aerodynamics Syllabus

*Modifications to this syllabus may be required during the semester.
Any changes to the syllabus will be posted on the course web site and announced in class.*

1. **Catalog Description:** Low speed wind tunnel testing, pressure and temperature measurements, load balances, hot film anemometry, uncertainty analysis, verification of numerical techniques, Credits: 3
2. **Pre-requisites:** *EAS4101, EML3301C.*
3. **Course Objectives:** This course provides an introduction to incompressible experimental aerodynamics. A variety of experimental techniques are introduced including pressure measurements, pressure scanners, temperature measurements, load balances, and hot film anemometry. Numerical simulations using XFOIL are verified experimentally. Students will become proficient in planning and executing a variety of techniques common to low speed wind tunnel testing.
4. **Instructors:**
John Abbitt
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Lawrence Ukeiley
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5. **Meeting Times and Location:**
See schedule at <http://www.mae.ufl.edu>
6. **Material and Supply Fees:** TBD
7. **Textbooks Required:** None
8. **Recommended Reading:** Barlow, Rae, and Pope, *Low-Speed Wind Tunnel Testing*, 3rd edition, Wiley.
9. **Course Outline and Schedule:** See the detailed schedule available at <https://lss.at.ufl.edu/> (use Canvas system)
10. **Attendance and Expectations:** Attendance is mandatory. Excused absences will be given for documented medical reasons, UF related travel or job interview travel. Documentation must be in the form of a doctor's note, or letter from the sponsor of the travel. During class, cell phones must be turned off.
11. **Assessment Methods and Grading:**
 - a. Lab Reports 80%
 - b. Design Reports 20%

If a student feels that there is an error in the grading, it should be brought to the attention of the instructor within two weeks after the graded material is handed back. Scores will not be reconsidered beyond the two week period.

12. Grading Scale:

94 <= A <= 100	90 <= A- < 94	(No A+)
87 <= B+ < 90	84 <= B < 87	80 <= B- < 84
77 <= C+ < 80	74 <= C < 77	70 <= C- < 74
67 <= D+ < 70	64 <= D < 67	60 <= D- < 64
E < 60		

There is no rounding up or down.

13. **Make-up Policy:** No late assignments will be accepted. If there is a planned event that causes you to miss a lab, you may re-schedule it with your group. You must find a TA who is willing to meet at the re-scheduled time. It is your responsibility to ensure your lab partners are will to re-schedule. If the lab is re-scheduled, the report must still must be turned in on time, and you must have permission from an instructor to re-schedule at the time proposed.

Honesty Policy and Ethical Considerations: Honesty Policy: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. Typical disciplinary action would be a grade of E in the course for a first offense. A second offense (which includes other courses) would likely result in a two-semester suspension. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others. The use of a pirated textbook is unauthorized and constitutes an honor violation.

Important: In this course, all lab reports are group lab reports. That means that all the analysis and write-up is to be the groups own individual work. Information (including data) may not be shared among groups. You may discuss lab concepts and procedures with classmates, and you may get help on how to perform an analysis, but **whatever work you turn in, ultimately must be work performed only by members of the group.** You may *not* share tables, graphs, spreadsheets, etc., with other groups. *You may not refer to or use old lab reports in any way even if you were the author. If you submit material that you previously submitted for a grade, that is self-plagiarism and is considered to be an honor violation under the UF Honor Code. You may not manufacture data.*

13. **Accommodation for Students with Disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

14. **UF Counseling Services:** Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
- Career Resource Center, Reitz Union, 392-1601, career and job search services.

15. **Software Use:** All faculty, staff and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

16. **Online Course Recording**

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

17.

18. ***F2F Course Policy in Response to COVID-19***

We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.