

AE 514 — Boundary Layer Theory

Room 106B6 Engineering Hall, MWF 8:30-9:50

Instructor: Jonathan Freund
Office: 306F Tablot
E-mail: jbfreund@illinois.edu (put “AE514” in subject line)
Website: <https://canvas.illinois.edu/courses/56352>
<https://uofi.box.com/v/AE514-Spring2025>
Office hours: TBD – see below
Grade: see below
Textbook: see list of references

- **Office Hours.** I will set some specific office hours a bit into the semester based on my availability and preferences of the students. Some evening virtual office hours (Zoom) will be considered at this point. You are welcome to stop by my office any time if you have problems, questions, or complaints, but I am hard to just catch and often distracted with other matters, so setting up an appointment via email is probably the most efficient way to do this.

- **Coursework and grading.**

Coursework. There will be no problem sets to be handed in this course. Instead, questions will be asked during class that are designed to augment understanding of the material and anticipate upcoming topics. I will also maybe distribute some questions to augment understanding. These will be tightly coupled to the lecture material. They should be worked on and incorporated into your notes, the completion and studying of which will be the main work you do in this course.

Meetings. We will meet multiple times (probably three) one-on-one during the semester to discuss the material. You are welcome to bring your notes and reference materials to these meetings. These will be scheduled to be compatible with when you are available. Your grade will depend on the level of understanding of the material you demonstrate our one-on-one meetings. It is recommended that meetings be studied for as for an exam. Clarity and completeness of the notes you maintain is probably essential for top-notch performance in these meetings and on the exam. After each one-on-one meeting, you will be provided a written report discussing your performance.

- **AI Policy.** During our meetings, may reference your notes even if they are prepared electronically, but you may not enter any text, video, or audio into any computing device, even for searching your own notes. Outside our meetings, you are welcome to use any AI tools you find useful. (I will be very interested to hear if anyone finds utility with any AI; I encourage you to try.)
- **Absence Policy.** Attendance will not be monitored. However, it is likely essential for learning the material at the necessary level. Arriving late is better than not attending, so long as it is not disruptive.

- **Academic Integrity.** The University of Illinois Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: ([link](#)).

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policy: ([link](#)) . Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

- **Family Educational Rights and Privacy Act (FERPA).** Please visit ([link](#)) for information about the Family Educational Rights and Privacy Act (FERPA).
- **Mental Health** Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

If you are in immediate danger, call 911.

(This statement is approved by the University of Illinois Counseling Center)

- **Community of Care.** As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regard to their well-being or yours, we encourage you to refer this behavior to the Connie Frank CARE Center (formerly the Student Assistance Center) in the Office of the Dean of Students. You may do so by calling 217-333-0050 or by submitting an online referral ([link](#)). Based on your report, staff in the Student Assistance Center will reach out to offer support and assistance.

Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the Connie Frank CARE Center ([link](#)) (formerly the Student Assistance Center) in the Office of the Dean of Students for support and referrals to campus and/or community resources.

- **Students with Disabilities.** The University of Illinois is committed to ensuring that all students, including those with disabilities, do not experience barriers to learning and participating fully in class. If you have a letter of accommodation from DRES and have not already given it to me, please do so as soon as possible to ensure your accommodation needs are met.

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-1970, email: disability@illinois.edu, or go to the DRES website ([link](#)).

- **Disruptive Behavior.** Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution ([link](#); conflictresolution@illinois.edu; 333-3680) for disciplinary action.
- **Emergency Response Recommendations.** Emergency response recommendations and campus building floor plans can be found at the following website: ([link](#)). I encourage you to review this website within the first 10 days of class.

- **Religious Observances**

It is the policy of the University of Illinois Urbana-Champaign to reasonably accommodate its students' religious beliefs, observances, and practices that conflict with a student's class attendance or participation in a scheduled examination or work requirement, consistent with state and federal law. Students should make requests for accommodation in advance of the conflict to allow time for both consideration of the request and alternate procedures to be prepared. Requests should be directed to the instructor. The Office of the Dean of Students provides an optional resource on its website ([link](#)) to assist students in making such requests.

NOTE: The web link is to the page where it currently describes the religious observance absence letters. We'll make revisions to the title of the page, the description, and the link to the resource for working with faculty prior to the start of the academic year.

- **Sexual Misconduct Reporting Obligation**

The University of Illinois is committed to combating sex-based misconduct. Faculty and staff members are required to report any instances of sex-based misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: ([link](#)).

Other information about resources and reporting is available here: ([link](#)).