(Tentative syllabus, subject to change!)

Atmospheric & Oceanic Sciences 2/2L Air Pollution

Spring 2023

Course Information

AOS 2 offers an introduction to some of today's most pressing environmental problems, such as the ozone hole, smog, climate change, etc., which are typically classified under the common term **air pollution**. Throughout the class, you will learn the different aspects of air pollution, their causes, effects, and possible solutions.

AOS 2 and the optional companion lab course AOS 2L at the UCLA campus will be taught as asynchronous online instructional classes but with in-person discussion sections for AOS 2 (no discussion sections for AOS 2L). Discussion sections are held as in-person sessions at the times published in the Schedule of Classes.

AOS 2L is optional – you are not required to take it while taking the main course AOS 2. For those who would like to take the lab course, you will have to enroll in AOS 2L separately – you will not be automatically enrolled in AOS 2L just because you are enrolled in AOS 2.

UCLA students enroll in in-person discussion sections, corresponding to "LEC 1" in the Schedule of Classes.

Cross-campus students participate in discussion sections via zoom. At the very start of a quarter, please choose from the existing discussion sections published in "LEC 1" in the Schedule of Classes and contact the TA to inform your participation – you will take part in that section throughout the quarter.

Wait-listed students are not enrolled in the class and are not guaranteed enrollment. Wait-lists are erased after the second week of classes.

While the discussion sections are online, there is a limit on how many students can participate. Consequently, some of the discussion sections may become full. There is no preferential enrollment and no PTEs will be issued for full sections. If you are dropped for any reason (usually a late fee payment), you will not be able to immediately re- enroll in a section that has a closed or wait-listed status. You will have to get on any open section or wait list; you will not be given preferential enrollment. This includes students dropped due to registrar/computer error or other administrative problems.

Textbook (optional)

There is no required textbook; an optional textbook is available (see below). Thus, there are no formal reading assignments as all the material a student is responsible for is in the online lessons.

Jacobson, M.Z., *Air Pollution and Global Warming: History, Science, and Solutions*. Available as a free e-text through Cambridge Core via the UCLA Library. To access the book, you must be within the UCLA network. If you are not on campus, you must use a Virtual Personal Network to connect to campus.

How it works

This is an online implementation of a course we have taught in the past with conventional methods. It combines video lessons with interactive activities and small-group work.

- No in-classroom lectures (content is online)
- Live in-person discussion sections with TAs

This online course uses modules to organize topics and weekly learning materials. Since there are no common-class lecture meetings, it is extremely important that students inform themselves of administrative policies, deadlines, and such. This means that you must familiarize yourself with the course syllabus (you are reading now), course topics overview & lessons tutorials, the assignments, and announcements posted in bruinlearn.

Please make it a habit to check the announcements regularly. If you have any questions about administrative and grading policies as well as course material, feel free to ask the instructor or the TAs during office hours or by email.

Online Lecture Content and Homework

Online lectures will consist of a series of short videos (most of the lessons) or electronic slide modules (a few lessons, encoded in H5P format), with each video having either embedded quiz questions or followed by separate activities and quiz questions. This approach is intended to engage you with the material and thus improve your learning experience. To make sure you make progress with the course throughout the quarter, you will work on each thematic section for about **ONE** week, after which this section is closed, and you move on to the next. Please note that you will not receive credit for completing a section once it is closed unless permitted by the instructor. You can find the schedule of the sections under Assignments.

In some cases, you may need to complete in-section activities before you can move on to the next instructional module. Viewing the videos and completing the activity questions accurately before the lessons close will earn you completion points and contribute to the overall grade. Keeping a schedule is necessary so that everyone is at the same level during the discussion sections. We strongly suggest that you attempt and complete the lessons *during the week* before they are scheduled to close. Leaving them until a few hours before they close puts you at risk of not being able to complete the lessons due to network congestion and technical difficulties.

Some of the between-lesson activities are labeled "homework assignments". These are more involved questions that include a mix of fill-in-the- blank, multiple-choice, numerical answers, and essay questions that encompass all the material in the preceding set of lessons and carry somewhat higher point totals per assignment than the lesson activities. They will need to be completed before subsequent online lessons are attempted.

We expect that you submit homework that represents what you as an individual would write. It is permissible and encouraged to consult with other students in the course or with tutors or instructors; however, it is not permissible for you to simply copy another student's answers, or text from another source (internet, books, etc.) and submit it as your own. It is also not permissible for other students to write up your homework assignment for you unless this has been arranged through the Center for Accessible Education (CAE).

Students who require accommodations due to physical disabilities should contact the *UCLA Center for Accessible Education* (or your local campus' disabilities office) for access to specialized equipment that will enable you to use our bruinlearn course site and the lesson videos. Videos have closed captioning. With rare exceptions, most of the lessons have transcripts of the audio track along with slide images that are available for everyone at the opening of the lessons.

Discussion Sections

Each week, students meet in their scheduled 50-minute discussion sections led by TAs. These sessions will have individual and group activities related to course material, and review of online lecture material as needed. The TA will present an overview of the task, and then the students will break up into groups of three or four to work on the group activity. Students can consult with each other, and the TA as needed. The group activities are usually quantitative exercises that apply some concepts in recent video lessons, including topics like "Your Carbon Footprint", "Chemical Cycles in Smog", and others. Participation in discussion group activities is **required**.

For students at the UCLA campus: all discussion sections, as of Spring'23, are conducted inperson this quarter by teaching assistants for UCLA students. On rare occasions when you cannot be at the discussion in person due to reasons beyond your control and per any relevant UCLA policy, please inform your TA so that you can still participate in the discussion via zoom.

For cross-campus students: for obvious reasons, participate in discussion sections via zoom. At the very start of a quarter, please choose from the existing discussion sections published in "LEC 1" in the Schedule of Classes and contact the TA to inform your participation – you will take part in that section throughout the guarter.

Note that it is always preferred that you attend the section in which you are enrolled.

Laboratory Section

There is an optional lab section AOS 2L that may be taken independent of AOS 2. This 1-unit section satisfies the "lab/demo" requirement for the General Education "Foundations of Scientific Inquiry". This lab section does not have formal classroom meetings since all assignments are posted and submitted online in the AOS 2L course site.

For cross-campus students, check your local campus approvals for degree credit and whether you need to enroll in this lab section (some of these data is in our course listing at https://crossenrollcourses.universityofcalifornia.edu).

Assignments & Grades

The number of attempts allowed for assignments vary, depending on the type of the assignment. In general, you are allowed **ONE** attempt on quizzes and exams (no chance to go back and redo it), **THREE** attempts on HWs (you can redo and resubmit the assignment), and **multiple** attempts on questions embedded in a lesson.

If you ever need an extension to an assignment (things happen), then you must contact your TA to obtain their permission. The TAs have full authorization on this matter. Please keep in mind that the TAs grade the assignments, and any late assignments cause interruptions to their schedule and may mean extra work on their part. There is no guarantee that your request of an extension will be approved - it is always case by case.

Course grades are based on points earned from:

Online Lessons and Homework	60%
Discussion section group activities	20%
Midterm examination	10%
Final examination	10%
Extra credit (course evaluation)	2%

If you are excused from some assignments, your cumulative total will be reduced by the point value of the excused assignments. For grading purposes, your "% of total points" will be based on this new cumulative total.

This course will be graded on a fixed scale:

Grade	Percentage
A+	100% to 97%
А	96.99% to 93%
A-	92.99% to 90%
B+	89.99% to 87%
В	86.99% to 83%
B-	82.99% to 80%
C+	79.99% to 77%
С	76.99% to 73%
C-	72.99% to 70%
D+	69.99% to 67%
D	66.99% to 60%
F	59.99% to 0%

P-NP Grading: Students who take the course "P/NP" will pass the course after earning the equivalent of a "C" or better grade.

Р	100% to 70%
NP	< 70% to 0%

Exams (subject to change)

Midterm (through ozone hole): flexible 3-hour window during Week 5.

Final (cumulative): flexible 3-hour window during Finals Week.

Exams will be open-book and online.

Examination Policies

- There will be no makeup and no alternate-scheduled (i.e., "early") exams, unless otherwise required by CAE and California Education Code Section 92640(a).
- Students who normally require the assistance of CAE to take exams must consult with the instructor as soon as possible regarding test-taking procedures.
- Examinations are multiple-choice, fill-in-the-blank, and short-essay. They include material from the lecture, homework, and the discussion sections.

University Policies

Academic Integrity

UCLA is a community of scholars. In this community, all members including faculty, staff and students alike are responsible for maintaining standards of academic honesty. As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in your academic endeavors. You are evaluated on your own merits. Cheating, plagiarism, collaborative work, multiple submissions without the permission of the professor, or other kinds of academic dishonesty are considered unacceptable behavior and will result in formal disciplinary proceedings usually resulting in suspension or dismissal. See the Dean of Students website for more information.

[source: Dean of Students syllabus statement (syllabus)]

Accommodations for Students with Disabilities:

If you are already registered with the Center for Accessible Education (CAE), please request your Letter of Accommodation in the Student Portal. If you are seeking registration with the CAE, please submit your request for accommodations via the CAE website. Students with disabilities requiring academic accommodations should submit their request for accommodations as soon as possible, as it may take up to two weeks to review the request. For more information, please visit the CAE website, visit the CAE at A255 Murphy Hall, or contact us by phone at (310) 825-1501.

[source: Center for Accessible Education (Faculty Questions)]

Resources for Students

UCLA provides resources if you are feeling overwhelmed and need personal and/or academic assistance.

Please see the Red Folder REV2020 web for more information.

Title IX

Advocacy and Confidential Services

Please note that Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the CARE Advocacy Office for Sexual and Gender-Based Violence, 205 Covel Commons, Los Angeles, CA, 90095,

care@careprogram.ucla.edu, (310) 206-246 5. Counseling and Psychological Services (CAPS) provides confidential counseling to all students and can be reached 24/7 at (310) 825-0768.

Reporting and Non-confidential Services

Your professor is required under the UC Policy on Sexual Violence and Sexual Harassment to inform the Title IX Coordinator should he become aware that you or any other student has experienced sexual violence or sexual harassment. In addition, You can also report sexual violence or sexual harassment directly to the University's Title IX Coordinator, 2255 Murphy Hall, titleix@equity.ucla.edu, (310) 206-3417. Reports to law enforcement can be made to UCPD at (310) 825-1491.