



## **WELCOME TO LAAS 5050: Integrated Topics in Land & Atmospheric Science**

### **Introduction**

This course is an introduction to the Land & Atmospheric Science graduate program. Our course goals are to (1) orient students for a successful graduate career in the LAAS, or other programs, (2) create an environment of learning and support for peers in the LAAS program, (3) provide an overview of research problems in land and atmospheric sciences, and (4) provide students with the ability to critically engage in the life cycle of scientific research. This course will be taught in person in Fall 2022 at 395 McNeal Hall, St. Paul campus.

Content types:

- Students- or instructor-led in-class discussions of journal articles, book selections, and other professional development materials.
- Guest lectures and discussions.

### **Instructor contact information**

Prof. Kyungsoo Yoo

Email: [kyoo@umn.edu](mailto:kyoo@umn.edu)

Office Hours: By appointment or zoom. My Zoom Meeting Room is available from the course canvas.

The best way to contact me is by email. I have personal Zoom rooms and I can meet with students individually or as groups. Please contact me when

you would like to schedule a Zoom meeting or an in-person meeting in our office.

### Course materials

#### Website

- The course website can be found at <https://canvas.umn.edu/courses/331671>  
All reading materials, videos, assignments, and assessments will be located here.

#### Reading Materials

Over the semester, we will read the following two books as a group. Make sure you buy the books.

- Ellis, Erle C. *Anthropocene: A Very Short Introduction*. 1st ed. Oxford University Press, 2018.
- Smil, Vaclav. *How the World Really Works: The Science behind How We Got Here and Where We're Going*. First United States edition. New York: Viking, 2022.

Every Monday, we will share and discuss news related to land and atmospheric science and scientific careers *from the past week*. We will focus on two major scientific journals: Nature and Science.

For the past week's issues, use the links below:

- [Science Magazine](#).
- [Journal Nature](#)

For career-related coverage, use the links below.

- [Science Magazine on Career](#).
- [Journal Nature on Career](#)

### In-Person

This course is scheduled as an in-person course. I intend to hold all class sessions in person except if situational factors arise, such as the personal illness of the instructor, when the class may be held synchronously via Zoom or recorded for later viewing.

### Course Requirements

**Participation:** Students are expected to participate actively during lectures and during discussions of course materials. This means students should arrive to class on time and be engaged either in listening to the speaker or

in providing comments to the group while avoiding unnecessary usage of personal electronic devices.

Students will have many opportunities to participate in this course. Those opportunities include: leading and participating in discussions, acting as a scribe and posting the minute to the course Canvas, and being an excellent supportive listener.

***Writing Assignments:***

Students will write two review articles. The topic for the first review article should be your discipline's (1) a big idea and its impacts or (2) a seminal paper and its influences. Your second review should focus on your discipline's research tool or method. Each assignment's format and rubric will be described under the Canvas Assignments. Use of reference software in your written assignments is a must. Note that your submitted work will be instantly shared with the class through the course canvas for peer review.

For each writing assignment, students will be randomly assigned to review three papers submitted by peers. Review assignments will be automatically made two days after the writing due dates. Each review should be about 500 words. Due dates will be posted. When writing reviews, students should (1) summarize the key points in the article, (2) articulate the effectiveness of the presentation in conveying the covered materials, and (3) help improve the review. The reviews will not be graded but count towards grades (30%).

**Course Expectations**

***Attendance and participation in the class:*** Class attendance is required. Class participation is required both during discussions *and* during lectures. Students will earn a grade no higher than a B if participation is not satisfactory.

***Assignments:*** Students are expected to turn in their assignments on the due date. If this is not possible, students must speak with instructors before the deadline. Late assignments will incur a penalty, as described below.

***Late Assignments:*** Unless you have received permission in advance from the instructor to turn in an assignment past the due date, the grade on an Assignment posted to Canvas will be automatically reduced by 10% of the graded value if it is turned in late and further reduced by an additional 10% each day thereafter. For example, if your grade on an assignment was 80 but you turned it in two days late, your score would be  $80 \times 0.80 = 64$ .

Failure to turn in an assignment within five days of the deadline will result in a grade of zero for that assignment. All deadlines will be posted on the Canvas site with the assignment and with the upload site.

***Additional / Extra Credit Assignments:*** The instructor will not provide additional additional credit assignments for students who seek to improve their grades in the course. This practice is unfair to other students and creates an additional workload for the instructor. There are ample opportunities for students to earn grade points during regularly assigned coursework.

***Use of UMN Canvas:*** In this class, our use of technology may make students' names and U of M Internet IDs visible on the course website, but only to other students in our class. Since we are using a password-protected secure course website, this will not increase the risk of identity theft or spamming from anyone in the class.

### **Assessment criteria and grading**

Course grades are based on the University's point scale. For information, please refer to <http://policy.umn.edu/education/gradingtranscripts>.

### **Grading composition**

<b>Component</b>	<b>% of grade</b>
Papers	40%
Peer review	30%
Participation (e.g., leading and scribing discussions)	30%
<b>TOTAL</b>	<b>100%</b>

### **Grading criteria (A-F):**

A	100%	to	93%
A-	< 93%	to	90%
B+	< 90%	to	87%
B	< 87%	to	83%
B-	< 83%	to	80%
C+	< 80%	to	77%
C	< 77%	to	73%
C-	< 73%	to	70%
D+	< 70%	to	67%

D	< 67%	to	60%
F	< 60%	to	0%

### **Expected student workload**

For this 3-credit course, it is expected that students spend a minimum of 9 hours per week completing coursework (note: according to University policy, "one hour" equates to 50 minutes of time). This requirement is fulfilled through all components of the course, including engaging on the Canvas site with posted videos and readings, discussion of readings, student presentations and peer evaluations, and writing assignments.

Please review the [UMN Policy on Expected Student Academic Work per Credit](#).

### **University Policies**

#### **COVID-19 Symptoms, Vaccination, Excused Absences, and Face Coverings**

You should stay at home if you experience any signs of illness or have a positive [COVID-19 test](#) result. If this occurs, please consult with your healthcare provider about an appropriate course of action. I will follow these same protocols and will let you know if the delivery of this course has to be temporarily changed as the result of my own circumstances. Absences related to illness, including COVID-19 symptoms, for yourself or your dependents, are [legitimate "excused" absences](#)

**Vaccines:** COVID-19 Vaccinations (or approved exemptions) are [required for all students and employees](#). Learn about vaccine and booster appointments on campus by visiting the FAQ on [Get the Vax](#) page.

**Face coverings:** Up-to-date policy information is available on the [Safe Campus](#) page. The University expects that all community members respect those who choose to wear a mask, as well as those who choose not to wear one.

I don't intend to wear a mask in class myself, and I fully support your individual choices around masking.

Indoor masking continues to be an important tool in high risk situations. High-quality masks (N-95 or certified KN-95) will be available to students Fall 2022. Check the [Safe Campus](#) website for information on the location(s) for each campus.

**Testing:** Information on *When, Where, and What if* for testing is available on [MTest](#) webpage.

The above policies and guidelines are subject to change. The University regularly updates [pandemic guidelines](#) in response to guidance from health professionals and in relation to the prevalence of the virus and its variants in our community.

***Student Conduct:*** The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University, you are expected to adhere to the Board of Regents Policy: *Student Conduct Code*. To review the Student Conduct Code, please see:

[http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf).

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

***Use of Personal Electronic Devices in the Classroom:*** Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For this course, use of your electronic device is limited to in-class activities and other tasks that directly support your academic success, such as note taking and gathering relevant information. It is your responsibility to get the information you need in this course and your electronic device use during class should reflect this. Use of the device for email should be limited to important communications that require a timely response. Prohibited activities include excessive use of email, playing games, surfing the web, use of

social media, and so forth. For complete information, please reference: <http://policy.umn.edu/education/studentresp>.

**Scholastic Dishonesty:** You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code:

[http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf)) If it is determined that a student has cheated, the student may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: <http://policy.umn.edu/education/instructorresp>.

The Office for Community Standards has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: <https://communitystandards.umn.edu/avoid-violations/avoiding-scholastic-...>. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

**Makeup Work for Legitimate Absences:** Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see: <http://policy.umn.edu/education/makeupwork>.

**Sexual Harassment:** "Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy:



[https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual\\_Harassment\\_Sexual\\_Assault\\_Stalking\\_Relationship\\_Violence.pdf](https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf)

**Equity, Diversity, Equal Opportunity, and Affirmative Action:** This course draws students from a variety of scientific disciplines. In addition, students may come from widely diverse ethnic and cultural backgrounds and hold different values. Because a key to optimal learning is to hear, analyze, and draw from a diversity of views, the instructors expect collegial and respectful dialogue across disciplinary, cultural, and personal boundaries. The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: [http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity\\_Diversity\\_EO\\_AA.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf).

Please also see the Department of Soil, Water, and Climate Diversity, Equity, and Inclusivity Statement <https://www.swac.umn.edu/about-us/diversity>

**Disability Accommodations:** The University of Minnesota views disability as an important aspect of diversity, and is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

- If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the DRC office on your campus (UM Twin Cities - [612.626.1333](tel:612.626.1333)) to arrange a confidential discussion regarding equitable access and reasonable accommodations.
- Students with short-term disabilities, such as a broken arm, **can** often work with instructors to **minimize** classroom barriers. In situations where additional assistance is needed, students should contact the DRC as noted above.
- If you are registered with the DRC and have a disability accommodation letter dated for this semester or this year, please contact your instructor early in the semester to review how the accommodations will be applied in the course.
- If you are registered with the DRC and have questions or concerns about your accommodations please contact your (access consultant/disability specialist).



Additional information is available on the DRC website: (UM Crookston - <https://www.crk.umn.edu/units/disability-resource-center>, UM Duluth - <http://www.d.umn.edu/disability-resources>, UM Morris - <http://www.morris.umn.edu/academicsuccess/disability/>, UM Rochester - <http://r.umn.edu/student-life/student-services/disability-resources>, UM Twin Cities - <https://diversity.umn.edu/disability/> ) or e-mail (UM Crookston - [myers062@crk.umn.edu](mailto:myers062@crk.umn.edu), UM Duluth - [access@d.umn.edu](mailto:access@d.umn.edu), UM Morris - [hoekstra@morris.umn.edu](mailto:hoekstra@morris.umn.edu), UM Rochester - [sdzavada@r.umn.edu](mailto:sdzavada@r.umn.edu), UM Twin Cities - [drc@umn.edu](mailto:drc@umn.edu)) with questions.

***Mental Health and Stress Management:*** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: <http://www.mentalhealth.umn.edu>.

***Academic Freedom and Responsibility:*** Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.\*

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact your instructors, the Department Head of SWAC, your adviser, the associate dean of your college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

*\* Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".*

**The tentative schedule for Fall 2022 is available in a separate document on the course Canvas.**