PHYS 496 Syllabus, General Course Information, Spring 2024

Course Objectives
The purpose of this course is to teach you valuable writing, presentation, teamwork, leadership, and organizational skills that will better prepare you for a successful career in science or technology. You will learn good communications practices and standard conventions for physics talks, abstracts, journal articles, and figures, and you'll learn how to communicate your science to general audiences as well as to specialists. You will be exposed to forefront physics research and the variety of career options that are available for physics majors.

Classes
The class will meet on Fridays, 2:00–4:50 PM in Room 158 Loomis Laboratory of Physics. If infectious-disease conditions warrant, the course may have to be moved online at some future time. We must follow the campus policies for in-person teaching. If virtual classes become necessary, we will meet on Zoom at the regular Friday class time. Monitor your University of Illinois (UIUC) email for announcements.

Class attendance is mandatory, and unexcused absences will result in a loss of points for the "participation" portion of your final grade. If you are unable to attend class, send an email to the instructors *prior* to class if at all possible, explaining the reason for your absence. We will work with you on a plan for making up the work. If we know ahead of time that you will be absent, we will record class lectures on Zoom, and the recordings will be posted to MediaSpace for asynchronous review.

Course Website
The course syllabus, assignment summary, written instructions for assignments, announcements, lecture notes, and links to useful external resources are posted on the course website. Check it frequently.

Instructors

	Office Hours	Contact
Matthias Grosse Perdekamp	By appointment	email
Celia M. Elliott	By appointment on Zoom	email
Jessica Raley	By appointment	email

Course Components
The course will consist of in-class writing practice, lectures, formal and extemporaneous student presentations, and in-class activities, and written homework assignments and colloquium reports. No formal exams will be given, and no textbook is required.

Classes will be conducted in person, beginning on January 19 and may be recorded for asynchronous viewing depending on class needs.

An integral part of the class is "Writing Workshop" (WW), a series of in-class activities designed to improve your writing skills by analyzing and editing examples taken from published physics papers. These examples have been chosen to showcase specific, common scientific-writing flaws. To complete the exercises during each class that has a WW scheduled, you must use a device

equipped with MS Word. If you do not already have Word installed on your computer, you can get Microsoft Office 365 free-of-charge from the UI Webstore. Missed exercises **may not be made up** unless prior arrangements are made with Jessica Raley.

The homework assignments consist of specific writing tasks, including written evaluations of presentations and papers, abstracts, outlines, figure captions, and articles for a general audience. You will also learn how to create effective figures and captions to illustrate your written work.

PHYS 496 students are also required to ***attend at least two departmental colloquia*** (in-person or virtual) during the semester and ***prepare a short written analysis*** of each, using the "Colloquium Report" template. Each colloquium report is worth 50 points and is eligible for rewrite points. If your schedule does not permit you to attend the Physics colloquia, make alternative arrangements with Celia as soon as possible.

Presentations will include a formal short individual presentation, a team journal-club presentation, and informal individual and group presentations as part of in-class activities.

Refer to the grading matrix and written assignments for additional details and deadlines.

Textbook

No textbook is required for this course. Lecture notes are posted on the course website after each class. Some scientific papers published in the peer-reviewed literature will be assigned; all are available free of charge online through the University's library subscription.

Grading

Timely submission of written assignments is required. You will be given feedback on both the physics and the technical writing components of your assignments, and each will contribute to your final grade. A grading matrix that shows course components, due dates, and the points assigned to each is posted on the course website.

Each WW exercise will be reviewed, and points awarded for completing it. The WW exercises are graded binarily; if you show up and make a good-faith effort to complete the exercise and participate in class, you will receive full points, even if you don't have time to finish the exercise. If you don't, you will receive 0 points for that exercise. Missed WW exercises may not be made up, unless prior arrangements are made for an excused absence.

Each homework assignment will be scored, and points allotted. The total points for each assignment are provided in the written instructions for that assignment and on the grading matrix.

To give you an incentive to complete your assignments on time and to revise your work, you will be able to earn additional points for rewrites on some assignments, *provided the initial draft is submitted by the posted due date and time.* Late submissions will be ineligible for "rewrite" points. You will be able to earn additional points for each eligible revision, up to 95 percent of the original points assigned to that exercise.

You may use the student gradebook for PHYS 496 available at `my.physics.illinois.edu` to check on your grades at any time and to confirm that all your submitted assignments have been graded. Incremental rewrite points will be added as they are earned to the total points awarded for each assignment in the gradebook.

Final letter grades will be determined by the total points you earn, the distribution of point totals among the whole class, and your class rank. Do not worry about grades; concentrate on learning and improving.

Academic Integrity

The instructors for PHYS 496 take academic integrity very seriously, and we expect you to do so as well. Progress in science is not possible unless we can rely on its practitioners to be scrupulously honest in all their activities. Dishonesty in any form—cheating, plagiarism, representing others' work as your own individual work, submitting work you did for another class as original work for this class, or fabricating excuses for missed work—will not be tolerated.

Academic dishonesty may result in a failing grade for the assignment and will be reported to the Faculty Academic Integrity Reporting (FAIR) system. Repeated instances of academic dishonesty may result in a failing grade for the course. Every student is expected to review and abide by the university's Academic Integrity Policy. Ignorance of professional standards is not an excuse for *any* academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding and to bring any questions to the course instructors.

If you have *any* question about proper citation of sources, the reuse of materials (including your own) in a homework assignment, or the limits of work that can be done collaboratively and presented as your own, ***please*** consult us *before* you do something that could have serious adverse consequences for your academic career. We will report instances of academic misconduct to the appropriate University authorities.

Part of academic integrity also involves the proper use of course materials. Do not share graded course materials or Writing Workshop exercises with others outside of PHYS 496 or repost them to unscrupulous internet sites that promote cheating.

Assignments

Assignments include both written work, team activities, and oral presentations. Detailed instructions for each assignment, along with its due date, are posted on the website. Most assignments are due by 9:00 PM on the designated due date, but *check the written homework instructions* for due dates and times. **Assignments turned in after the deadline date and time will be penalized by a deduction of up to 10% of the total points, *if* submitted within 48 hours of the deadline. Assignments submitted more than 48 hours late will be increasingly penalized. Furthermore, late assignments *will not be eligible for rewrite points*.**

Deadline extensions will not be granted except for extraordinary circumstances (transient global amnesia; severe, sustained chest pains; uncontrolled bleeding from a major artery...). Get *something* on paper and get it turned in by the deadline.

All assignments are to be deposited in the secure PHYS 496 portal on my.physics by the deadline noted on the assignment page. A summary of the homework assignments, including due dates, eligibility for rewrites, and points assigned, is posted on the course website.

Don't forget to put your name at the top of the page for submitted assignments.

Revisions of Previously Submitted Assignments: If you are submitting a revised assignment for regrading, please prominently identify it as a revision on the top of the page, e.g., "Homework #6—Rev. 1" and email it to Celia. Subsequent revisions should be labeled in consecutive numerical order. Keep ***all*** files (originals and revisions) for your records.

For your written assignments, you may wish to consult the University's Center for Writing Studies *Writers Workshop*, which provides free, one-on-one help to all UIUC students. The Writers Workshop's mission is to support the UIUC community by providing free writing assistance for students, faculty, and staff from all disciplines and at all stages of the writing process. Visit them at any stage of the writing process: brainstorming, organizing ideas, polishing final drafts, citing sources, and more.

The Workshop offers online appointments, in-person appointments, and evening drop-in hours. The Workshop also sponsors writing groups and provides presentations about academic writing skills. Find more information at writersworkshop.illinois.edu or learn more about their policies and services). You can also find them on Facebook (Writers Workshop at Illinois), Twitter (@WorkshopIL), and Instagram (UIUC Writers Workshop).

Peer Review
One of the homework assignments will be peer reviewed by your classmates. You will learn about the important role peer review plays in the advance and integrity of science, how the process works, and how to write an objective, useful review.

Physics Colloquium
Colloquium is held at 4:00 pm on Wednesdays. Most colloquia will be held in Room 141 Loomis, and some will be held virtually on Zoom. Click on the title of each colloquium in the Physics calendar to see an abstract, details about the speaker, and the Zoom link and password for virtual lectures. You can also sign up at the bottom of the calendar page to receive automatic email notifications of weekly Physics events, including colloquia. If you have a work or class conflict and cannot attend the Physics colloquia, consult Celia for suggestions on alternative arrangements.

Completed colloquium reports should be uploaded to the my.physics course-upload portal. Note that colloquium reports and any revisions for additional credit must be ***submitted by the posted deadlines*** to receive full credit.

Office Hours
Office hours for each instructor are posted at the beginning of this document, and appointments will be available in person or via Zoom. Please send us an email to schedule a specific appointment time.

Email
The instructors will communicate with you about the course via email to your ***University of Illinois*** email account; check it regularly! If you send email to the instructors, please put **PHYS 496** in the subject line of each message. We do not use the "threading" feature of some email programs, so don't omit the subject line and be sure to include your full name in your message.

Health Policies
Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community. Students who feel ill ***must not come to class***. In addition, students who test positive for COVID-19 or have had an exposure that requires testing and/or quarantine ***must not attend class***.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non-compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

Face Coverings—At this time (January 2024), face coverings are not required in Loomis Laboratory. You may, of course, wear a face covering if you choose to.

Disability Access and Accommodations

The University of Illinois is committed to making higher education accessible to all students. To obtain disability-related academic adjustments and auxiliary aids, you must contact the Disability Resources and Educational Services (DRES) and notify one of the instructors as soon as possible. To contact DRES, you may call (217) 333-4603, email disability@illinois.edu, or go to the DRES website. Their staff is available Monday–Friday from 8 a.m. to 5 p.m.

To obtain disability-related accommodations and services through DRES, you may apply online via the "Application for DRES Services" tab on their website and then upload your documentation or submit your documentation through mail or fax. The DRES secure fax number is (217) 244-0014 and the mailing address is 1207 South Oak Street, Champaign, IL 61820.

If you are concerned that you may have an undiagnosed disability-related condition that is adversely affecting your academic progress, confidential academic screening appointments are available on campus to identify a previously undiagnosed disability. You can arrange for such testing by visiting the DRES website.

Religious Observances

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to class attendance and the scheduling of examinations and work requirements. You should examine the class schedule now for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify one of the instructors of the conflict ***within the first two weeks of classes*** and follow the University's procedures to request appropriate accommodations.

Sexual Misconduct Reporting Obligation

The University of Illinois and the Department of Physics are committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual 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 advisers, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: wecare.illinois.edu/resources/students/#confidential. Other information about Title IX resources and reporting is available at my.physics.illinois.edu.

Family Educational Rights and Privacy Act (FERPA)
If you have suppressed your directory information pursuant to Family Educational Rights and Privacy Act (FERPA), you should self-identify to the instructors to ensure protection of the privacy of your attendance in this course. See https://registrar.illinois.edu/academic-records/ferpa/ for more information on FERPA.

Bias, Discrimination, and Ill Treatment
The University of Illinois Urbana-Champaign and the Department of Physics are committed to the most fundamental principles of academic freedom, equality of opportunity, and respect for human dignity. We prioritize fostering an inclusive campus culture that allows people of all backgrounds to exchange ideas and learn in a positive, supportive environment. Furthermore, PHYS 496 is an equal opportunity classroom environment. We value the diversity represented by the participants in this course. Our diversity is a primary source of ideas and perspectives. As you work through the course, practice using this diversity to your advantage.

Acts or statements of racism, sexism, ableism, homophobia, transphobia, xenophobia, anti-Semitism, Islamophobia, anti-Asian bias, and other discriminatory or hateful behaviors will not be tolerated. If you experience any of these actions or discourse, please inform the instructors immediately.

The Bias Assessment and Response Team (BART) has been an important and visible mechanism to help students, faculty, and staff to inform the university when they encounter negative behaviors that adversely affect their campus experience. Reports of discrimination or hateful behavior or speech can also be submitted via a web form; staff from the Office of the Vice Chancellor for Diversity, Equity, and Inclusion will coordinate response to the reports.

Class Administration
Any concerns, questions, or comments about the administration of the course should be directed to Professor Grosse Perdekamp.

One final thought...
We all face unexpected challenges and uncertainty that disrupt our schedules, interfere with our sleep, worry our minds, and stress our coping mechanisms. Be as patient as you can, plan ahead as well as you are able, be flexible if you must, ask for help if you need it without hesitation or embarrassment, and ***look out for one another***. We will do our best to make sure that PHYS 496—Spring 2024 edition is the great class that you've heard about. And thanks for reading all the way to the end!

Send questions about this syllabus to Celia Elliott.