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 online via Zoom. The meeting ID is 982 4472 2496, and the password is 097722. You may join Zoom through a web browser using the link above, or you may wish to download the Zoom client for desktop and mobile applications and join using the meeting ID and password.

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. Classes will be recorded automatically, 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

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Office Hours</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nadya Mason</td>
<td>Zoom, Thursdays 3–4 pm or by appointment</td>
<td>email</td>
</tr>
<tr>
<td>Celia M. Elliott</td>
<td>Zoom, Wednesdays 2–3 pm or by appointment</td>
<td>email</td>
</tr>
<tr>
<td>Jessica Raley</td>
<td>by appointment</td>
<td>email</td>
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</tbody>
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Course Components
The course will consist of in-class writing practice (Writing Workshop), lectures, formal and extemporaneous student presentations and group exercises, and written homework assignments and colloquium reports. No formal exams will be given, and no textbook is required.

Classes will be conducted online via Zoom and will be recorded.

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. The examples have been chosen to showcase specific, common scientific-writing flaws. You must use a device equipped with MS Word during each class that has a WW scheduled to complete the exercises. If you do not already have Word installed on your computer, you can get
Microsoft Office 365 free-of-charge from the UI Webstore (q.v. https://webstore.illinois.edu/shop/product.aspx?zpid=2816). Missed exercises may not be made up unless prior arrangements are made with Celia.

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 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.

Presentations will include a formal 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. 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 100 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 to each assignment in the gradebook.

Final grades will be determined by the total points you earn, the distribution of grades among the whole class, and your class rank.
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. Violations of any of these rules will be prosecuted and reported to the student's home college in compliance with Article 1, Part 4, Academic Integrity, of the Student Code.

We encourage you to review the College of Liberal Arts and Sciences’ excellent discussion of academic integrity. 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 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 emailed to phys496@physics.illinois.edu 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. 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 Workshop’s consultants can help with any kind of paper, in any class, at any stage of the writing process. While the Writers Workshop is not an editing service, the tutors will help you with anything related to your writing, including grammar, brainstorming, organizing, polishing final
drafts, citing sources, and more. The Writers Workshop offers 50-minute sessions by appointment via Zoom. The Workshop also sponsors writing groups, online tutoring, and hands-on presentations about academic writing skills.

**Peer Review**
One of the homework assignments will be peer reviewed. The reviews will be done anonymously; please maintain the confidentiality of the review process. Your colleagues will be most helped by reviews that are specific, detailed, and objective. Be critical, but express your criticisms in a positive, nonjudgmental way. Strive for the “golden rule” for reviewers—“Review unto others as you would have them review unto you.”

**Physics Colloquium**
*Colloquium* is held at 4:00 pm on Wednesdays via Zoom. Click on the title of each colloquium in the calendar to see an abstract, details about the speaker, and the Zoom link and password for that lecture. If you have a class conflict and cannot attend the Physics Department colloquia, consult Professor Mason for suggestions on alternative arrangements.

Completed colloquium reports should be emailed to Celia. Note that colloquium reports and any revisions for additional credit must be submitted by the posted deadlines to receive full credit.

**Office Hours**
Because of COVID-19 precautions, office hours will be available only on Zoom and not in person. You can “drop in” any time during posted office hours (Professor Mason or Celia) or make an appointment to meet at another time by emailing the instructor.

**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.

**Disability Access and Accommodations**
The University of Illinois is committed to make 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. While most DRES services will be remote/virtual this semester because of COVID constraints, 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 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 a 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 procedure at https://odos.illinois.edu/community-of-care/resources/students/religious-observances/ to request appropriate accommodations.

Sexual Misconduct Reporting Obligation
The University of Illinois is 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.

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

One final thought...
We are all facing extraordinary challenges this semester that are disrupting our schedules, worrying our minds, and stressing 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, wear your mask, wash your hands, get your tests, and look out for one another. We will do our best to make sure that PHYS 496—Fall 2020 edition is the great class you’ve heard about.