PHYS 596: Graduate Physics Orientation
General Information

♦ Class Times
The class will meet on Fridays, 10:00 a.m.–11:50 a.m. Attendance is required.
For students who want to attend in person, but socially distanced, we will meet in Room 141 Loomis. Students who want to attend remotely will be sent a Zoom meeting link before class. Lectures will be videotaped and posted on-line as soon as possible after class.

♦ Course Website
https://courses.physics.illinois.edu/phys596/fa2020/index.html

♦ Physics 596 Fall 2020 Channel on Media Space
Videos of all lectures will be posted on the Physics 596 Fall 2020 Channel on Media Space as soon as possible after the main lecture. The link to this channel is here:
https://mediaspace.illinois.edu/channel/Physics%2B596%2BFall%2B2020/173329861

♦ Instructors

<table>
<thead>
<tr>
<th>Office</th>
<th>E-mail</th>
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<tbody>
<tr>
<td>Lance Cooper 227B Loomis (Administrative); 218 MRL (Research)</td>
<td><a href="mailto:slcooper@illinois.edu">slcooper@illinois.edu</a></td>
</tr>
<tr>
<td>Celia Elliott 215 Loomis</td>
<td><a href="mailto:cmelliot@illinois.edu">cmelliot@illinois.edu</a></td>
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♦ Course Goals
Goals of this course: (i) to expose you to the range of research activities available in the department and (ii) to give you instruction on the important communications, teamwork, leadership, and organizational skills you will need as graduate research assistants and scientists.

♦ Textbook
No textbook is required for this course. Lecture notes are posted on the course website. 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.

Recommended reading:

♦ Assignments
Assignments include both written work and oral presentations. Detailed instructions for each assignment, along with its due date and point value, are posted at
https://courses.physics.illinois.edu/phys596/fa2020/Assignments.html

♦ Grading
Your final grade will be based on both class attendance and completion of the group assignments. Late submission of assignments, unexcused absences, and failure to participate in class may contribute to lowering of your grade. There are no formal exams for this course, and no final will be given.
♦ Class Administration
Any concerns, questions, or comments about the administration of the course should be directed to Professor Cooper. Please e-mail us if you’d like to schedule an appointment to meet regarding the class. If you send e-mail to the instructors regarding the class, please put “Phys 596” in the subject line.

♦ Course Delivery Options
Because of the ongoing COVID-19 pandemic, during Fall 2020, Phys 596 will be offered in a “hybrid” mode, allowing students to attend either remotely or in person but socially distanced.

- In-Person Delivery Option – If you choose to attend class in-person: (i) you will be able to occupy only the seats designated in Rm. 141 Loomis so that everyone is appropriately socially distanced; and (ii) you will also be required to wear a mask while in Loomis and in the classroom. Students not wearing a mask will be asked to leave the classroom.

Note that the socially distanced seating capacity for Rm. 141 Loomis is 40 students. Consequently, if more than 40 students would like to attend class in person, we will have to establish a staggered attendance procedure. In this case, a schedule of days that each student can attend will be established and circulated to the class.

- Remote Delivery Options – If you are unwilling or unable to attend class in person, you will be able to attend class either synchronously via Zoom or you can watch the lecture asynchronously via a videotaped recording that will be uploaded on Illinois Media Space after each lecture. The links to the videotaped lectures will be accessible from the Phys 596 webpage.

Some classes may be held only remotely if all research talk presenters scheduled during a particular week request remote delivery. Lance Cooper will e-mail the class at least two days before class meets if the class will be conducted remotely during a particular week. Also, we anticipate that the following classes will be conducted fully remotely: (1) The mandatory Ethics in Research class on Oct. 16 (Week 8) and (2) the Journal Club Presentations on Nov. 13, Nov. 20, and Dec. 4 (Weeks 12, 13, and 14).

Finally, in the event that the pandemic worsens, for reasons of safety, all class instruction and activities will be conducted completely remotely via Zoom.

♦ Office Hours
Lance Cooper will be available for as many office hours as requested. Office hour meetings will be conducted via Zoom. Please contact Lance (slcooper@illinois.edu) to schedule a remote meeting.
**Course Syllabus**
A tentative course syllabus for Fall 2020 is included below and an up-to-date syllabus can be found on the course website here: [https://courses.physics.illinois.edu/phys596/fa2020/syllabus.htm](https://courses.physics.illinois.edu/phys596/fa2020/syllabus.htm)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 28</td>
<td>Introduction and course expectations; How to find an advisor</td>
<td>Major Group Assignment Create and present a group Journal Club PowerPoint talk + write a referee report</td>
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<tr>
<td>2</td>
<td>Sep 4</td>
<td>Creating/giving a journal club presentation; Reading scientific papers</td>
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| 3    | Sep 11 | Research Talks
How to use on-line scientific resources; On-line research with SCOPUS | mini-Assignment #1
On-line resource activities |
| 4    | Sep 18 | Research Talks
Publication process; How to write a referee report                   |                                                                            |
| 5    | Sep 25 | Research Talks
How to write a scientific abstract                                   | mini-Assignment #2
Write an abstract for selected paper                                    |
| 6    | Oct 2  | Research Talks                                                         |                                                                            |
| 7    | Oct 9  | Research Talks                                                         |                                                                            |
| 8    | Oct 16 | Ethics in research                                                     |                                                                            |
| 9    | Oct 23 | Research Talks                                                         |                                                                            |
| 10   | Oct 30 | Research Talks                                                         |                                                                            |
| 11   | Nov 6  | Research Talks
Template for a journal club presentation                              |                                                                            |
| 12   | Nov 13 | Research Talks                                                         |                                                                            |
| 13   | Nov 20 | Team Journal Club Presentations                                        |                                                                            |
| 14   | Nov 27 | Thanksgiving Break                                                     |                                                                            |
| 14   | Dec 4  | Team Journal Club Presentations                                        |                                                                            |
**Academic Integrity**

All activities in this course are subject to the Academic Integrity rules as described in [Article 1, Part 4, Academic Integrity, of the Student Code](https://www.disability.illinois.edu/academic-support/instructor-information/examples-disability-statements-syllabus).

Infractions include, but are not limited to:

- cheating, plagiarism, fabrication
- facilitating infractions of academic integrity.
- academic interference
- computer-related infractions
- unauthorized use of university resources
- sale of class materials or notes

*Violations of any of these rules will be prosecuted and reported to the student's home college in compliance with the Student Code: [Article 1, Part 4, Academic Integrity, of the Student Code](https://www.disability.illinois.edu/academic-support/instructor-information/examples-disability-statements-syllabus).*

All aspects of the course are covered by these rules.

**Disability Access**

The Department of Physics is committed to being an open and welcoming environment for all of our students. We are committed to helping all of our students succeed in our courses.

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, e-mail disability@illinois.edu or go to the DRES website. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available on campus that can help diagnosis a previously undiagnosed disability by visiting the DRES website and selecting “Sign-Up for an Academic Screening” at the bottom of the page.

If you are interested in obtaining information to improve writing, study skills, time management or organization, the following campus resources are available to all students:

**Writer's Workshop**

Undergrad Library
217-333-8796
[http://www.cws.illinois.edu/workshop](http://www.cws.illinois.edu/workshop)
Also, most college offices and academic deans provide academic skills support and assistance for academically related and personal problems. Links to the appropriate college contact can be found by going to this website and selecting your college or school: [http://illinois.edu/colleges/colleges.html](http://illinois.edu/colleges/colleges.html)

If you are experiencing symptoms of anxiety or depression or are feeling overwhelmed, stressed, or in crisis, you can seek help through the following campus resources:

**Counseling Center**

206 Fred H. Turner Student Services Building  
7:50 a.m.-5:00 p.m., Monday through Friday  
Phone: 333-3704

**McKinley Mental Health**

313 McKinley Health Center  
8:00 a.m.-5:00 p.m., Monday through Friday  
Phone: 333-2705

McKinley Health Education offers individual consultations for students interested in learning relaxation and other stress/time management skills, call 333-2714.