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 158 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/fa2021/index.html

♦ Physics 596 Fall 2021 Channel on Media Space
Videos of all lectures will be posted on the Physics 596 Fall 2021 Channel on Media Space as soon as possible after the main lecture. The link to this channel is here: Physics 596 Fall 2021 - Illinois Media Space

♦ Instructors

<table>
<thead>
<tr>
<th>Office</th>
<th>e-mail</th>
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<tbody>
<tr>
<td>Lance Cooper 227B Loomis</td>
<td><a href="mailto:slcooper@illinois.edu">slcooper@illinois.edu</a></td>
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<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/fa2021/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 2021, Phys 596 will be offered in a “hybrid” mode, allowing students to attend either remotely or in person.

In-Person Delivery Option – If you choose to attend class in-person: (i) you must have Building Access “Granted” on your Safer Illinois App; and (ii) you must abide by campus requirements for wearing masks in the building. Students not wearing a mask, if required by campus policy, will be asked to leave the classroom.

Remote Delivery Options – If you are 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 Physics 596 Fall 2021 - 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.

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 2021 is included below and an up-to-date syllabus can be found on the course website here:

https://courses.physics.illinois.edu/phys596/fa2021/syllabus.htm

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<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 27</td>
<td><em>Introduction and course expectations; How to find an advisor</em></td>
<td><strong>Major Group Assignment</strong>: Create and present a group Journal Club PowerPoint talk + write a referee report</td>
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<td>2</td>
<td>Sep 3</td>
<td>Creating/giving a journal club presentation; Reading scientific papers</td>
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<td>3</td>
<td>Sep 10</td>
<td><em>Research Talks</em></td>
<td><strong>mini-Assignment #1</strong>: On-line resource activities</td>
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<td><em>How to use on-line scientific resources; On-line research with SCOPUS</em></td>
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<td>4</td>
<td>Sep 17</td>
<td><em>Research Talks</em></td>
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<td>5</td>
<td>Sep 24</td>
<td><em>Research Talks</em></td>
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<td><em>Publication process; How to write a referee report</em></td>
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<td>6</td>
<td>Oct 1</td>
<td><em>Research Talks</em></td>
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<td>7</td>
<td>Oct 8</td>
<td><em>Research Talks</em></td>
<td><strong>mini-Assignment #2</strong>: Write an abstract for selected paper</td>
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<td></td>
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<td><em>How to write a scientific abstract</em></td>
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<td>8</td>
<td>Oct 15</td>
<td><em>Ethics in research</em></td>
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<td>9</td>
<td>Oct 22</td>
<td><em>Research Talks</em></td>
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<td>10</td>
<td>Oct 29</td>
<td><em>Research Talks</em></td>
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<td>11</td>
<td>Nov 5</td>
<td><em>Research Talks</em></td>
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<td><em>Template for a journal club presentation</em></td>
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<td>12</td>
<td>Nov 12</td>
<td><em>Research Talks</em></td>
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<td>13</td>
<td>Nov 19</td>
<td><em>Team Journal Club Presentations</em></td>
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<td>14</td>
<td>Dec 3</td>
<td><em>Team Journal Club Presentations</em></td>
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<td>15</td>
<td>Nov 26</td>
<td><em>Thanksgiving Break</em></td>
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♦ 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.

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.*

All aspects of the course are covered by these rules.

♦ Disability Access

(https://www.disability.illinois.edu/academic-support/instructor-information/examples-disability-statements-syllabus)

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
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

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.