

Lyon College: Standard Course Policies, Spring, 2024

These policies apply to all courses offered at Lyon College. Details related to a specific course can be found in the rest of the course's syllabus.

Honor Code

All graded work in this class is to be pledged in accordance with the Lyon College Honor Code. The use of a phone for any reason during the course of an exam is considered an Honor Code violation.

Class Attendance Policy

Students are expected to attend all class periods for the courses in which they are enrolled. They are responsible for conferring with individual professors regarding any missed assignments. Faculty members are to provide absence notification through the Early Alert System which informs the academic advisor, Director of Student Success, and the Provost when a student misses the equivalent of one, two, three, and four weeks of class periods in a single course. Under this policy, there is no distinction between "excused" and "unexcused" absences, except that a student may make up work missed during an excused absence. A reminder of the College's attendance policy will be issued to the student at one week, a second reminder at two weeks, a warning at three weeks, and notification of administrative withdrawal and the assigning of an "AW" grade at four weeks.

Students, please note: the policy stated above means that every single absence, regardless of reason, counts toward the four-week maximum.

Academic Support

The Morrow Academic Center (MAC) assists students who want to improve grades or academic skills by providing peer-led services including Supplemental Instruction (SI), tutoring, the Writing Center, and academic coaching as well providing 24-hour, online tutoring for all subjects through online tutoring. A schedule of peer-led services is available at lyon.edu/mac and online tutoring is accessed through courses in Canvas. Contact Donald Taylor, Director of Academic Support and Accessibility, at (870) 307-7319 or donald.taylor@lyon.edu for more information about MAC services.

Technology Support

For any technology-related support, you can contact the IT department by emailing support@lyon.edu or by calling 870-307-7555. You can also navigate to support.lyon.edu to submit a ticket request. Your course content will be accessible digitally using the Canvas Learning Management System (LMS), which uses your myLyon credentials for your student login. To access Canvas, login at lyon.instructure.com.

NOTE: Students taking RISE courses will use the [RISE Canvas LMS login](#).

Disabilities

Students seeking reasonable accommodations for learning, psychological, or physical disabilities must contact Donald Taylor, Director of Academic Support and Accessibility, in the Morrow Academic Center at (870) 307-7319 or at donald.taylor@lyon.edu.

Harassment, Discrimination, and Sexual Misconduct

Lyon College seeks to provide all members of the community with a safe and secure learning and work environment that is free of crime and/or policy violations motivated by discrimination, sexual and bias-related harassment, and other violations of rights. The College has a zero-tolerance policy against gender-based misconduct, sexual assault, and interpersonal violence toward any member or guest of the Lyon Community. The College encourages anyone experiencing or knows of someone experiencing harassment, discrimination, or sexual misconduct to speak to and file an official report with our Title IX Coordinator, located on the first floor of the Edwards Commons Building #27, in the Student Life suite. All college employees (faculty, staff, administrators) are required to report actual or suspected incidents of harassment, discrimination, intimidation, and violence to appropriate officials immediately. However, there are limited exceptions, referred to as confidential reporters (Campus Clinic Director, the Chaplain, or the Director of Mental and Behavioral Health). Confidentiality will be maintained to the greatest extent possible within the constraints of the law. [Title IX Reporting Tool](#). [Lyon College Title IX Policy](#).

Mental & Behavioral Health

Lyon College is dedicated to ensuring each student has access to mental and behavioral health resources. The College's Mental and Behavioral Health Office is located in Edwards Commons and is partnered with White River Health's Behavioral Health Clinic. The office is committed to helping the Lyon community achieve maximum mental and behavioral wellness through both preventative and reactive care. A full-time, licensed, professional counselor provides counseling, consultations, outreach, workshops, and many more mental and behavioral services to Lyon students, faculty, and staff at no cost. The Mental and Behavioral Health Office also provides access to White River Health's services and facilities, including medication management and in-patient and out-patient care. To make an appointment, contact counseling@lyon.edu.

College-Wide COVID-19 Policies for Spring, 2024

The federal COVID-19 Public Health Emergency Declaration ended on May 11, 2023. **Except for individuals who, post-infection, may be directed to do so by Jennifer Morrison, Director of the Campus Clinic, masking will not be required in any campus space.** Vaccines are strongly encouraged for all faculty, staff, and students. Vaccines are not mandated for Lyon College community members, although there may be specific courses involving travel or interactions with vulnerable, external populations where a vaccine may be required.

Tentative Syllabus for Physics 321DS: Spring 2024
Topic: Research topics in Physics. Topic : astrophotography

Professor: Dr. Stuart Hutton
Office: Derby Center: 248 Research Lab: Derby 219: General Physics lab: 148
Phone: * 307 7560**
Email: stuart.hutton@lyon.edu
To access the Physics Gateway:<http://physics.lyon.edu>

Office Hours

I will schedule several office hour blocks. I will be very close to my office during these times. Otherwise, I will usually be close to my office. If you want to find me outside of office hours, make an appointment so that you will be sure to find me. My schedule is located on the physics home page which you may review to determine office hours.

Grading

As a general guide to grades, grades will be assigned as follows:

100-90]	(90-80]	(80-70]	(70-60]	<(60
A	B	C	D	F

You are required in this course to spend **1 hour minimum in documented research time for each credit hour** of the course per week for a minimum of 10 weeks. Weather may delay observations so the times can be switched slightly and 1 hour of observation time excludes time for setup of the telescope. If it is a clear night, and you have time, I really encourage you to not put off the observations. Electronically pledged weekly progress reports will count for 10% of your grade. These will be due each Thursday. You will want to keep a record documenting this laboratory effort as the course progresses since this comprises 10% of your grade for 10 events. You will also be required periodically to provide me with oral progress reports which will count for part of the 70% grouping. You will be required to keep a record (it can be electronic) documenting your weekly laboratory effort. All of these 3 portions should be combined with your final report notebook / portfolio presentation which will be a single pdf document submitted to me. This provides 70% of your grade so you want to take care with this. The various credit percentages are allocated as follows:

Weekly electronic pledged progress reports which show real progress:10% total
10 total (each report is worth 1 points for a total of 10%)

Final report and notebook/portfolio presentation: 70% total

Group construction of poster for scarf in the spring: 20%

Your portfolio will consist of a minimum of **quality** images of at least 10 different astronomical bodies together with a description of what is being shown. Of these images, 9 must be taken with the telescope. I expect that you will have more quality images in your portfolio than this bare minimum. Your images will also be used with your scarf poster construction. Note that all submitted materials will be due (as in completed) by May 06, 2024.

In this course, you agree to make a team scarf presentation in the spring. If you are not present at Lyon in the spring, you will need to overload on your contributions to the scarf poster. You will be expected to be present for the spring scarf presentation and to actively discuss your work.

Course Objectives and Prerequisites
PHY 321 INDEPENDENT STUDY / 1-3 credits

Directed study on an individual basis covering topics from advanced physics. Prerequisite: PHY 210/240, PHY 220/250 and permission of the instructor. Course may be repeated for up to 3 credits.

Text Book

There is no required text for this course; you are sort-of writing your own textbook in this class. Among the topics which you will learn, based upon my guidance will be the basics of astronomy, and other related topics. **You will get out of this course what you put into it. This is a research course and you are expected to demonstrate independence in your work.** Much of your laboratory will be outside with the telescope and so you will need to provide time in your schedules in the evenings for this; I expect a minimum of 2 hours every 2 weeks and you will document this with your pledged progress report. You should be concerned with quality and improvement. You should be able to discuss astronomy, locate astronomical objects, be knowledgeable about them and be willing and able to teach (and brag a bit perhaps) about astronomy and astrophotography to others. I fully expect that you will also be familiar with the basics of how to align the telescope and to run the clock drive on the scope to enable longer exposures for your faint images. You will also find it extremely useful to learn how to use skymap or a similar app on your phone to help with astronomical identification. I want you to at least initially work with other students in the class. Count the pieces of equipment before you take them out. Count the pieces of equipment when you bring them back. If the two counts do not agree, you have missed something so find it. Be very careful with the telescope because among other things, I have personal money invested with this and it is used in this class with the understanding that you will not damage it. One very important thing: never point the telescope at the sun. This will destroy the telescope. I do have a solar filter for the telescope but you will not be able to make photos using this solar filter without special equipment.

Course Description

In this course, you will have an opportunity to gain research experience with advanced topics from physics under the cover of astrophotography.

Course Objectives

As a consequence of this course, you should obtain experience in physics research under the cover of astrophotography. In addition, you should come away from this course with an ability to discuss, among peers fundamental problems involving astronomy and astrophotography.

Punctual and complete class attendance is expected and independent research hours are required. Absences will negatively impact your final grade.

Academic Honesty

If you use reference work, **be sure to include proper references and these references must be visible during your presentation.** It is expected and encouraged that students in this class will work together on homework problems. If you use reference work, be sure to include proper references. On tests, students are required to keep notes and books closed except as instructed. **Your professor will supply all the paper needed for the tests.** Any questions during tests should be directed to the professor only. **CELL PHONES AND OTHER WIRELESS OR NETWORKED DEVICES (INCLUDING COMPUTERS) MAY NOT BE USED DURING TESTS.** If you do use such devices during a test, it will automatically be considered to be a violation of the Lyon College Honor Code.

All graded work in this class is to be pledged in accordance with the Lyon College Honor Code.

CLASS SCHEDULE / OFFICE HOURS Spring 2024

**Office
Derby 248**

**General Lab
Derby 148**

**Research Lab
Derby 219**

PROFESSOR Stuart Hutton

Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:50 Phy250.01 Fundamentals of Physics II Derby 207	8:00-9:15	8:00-8:50 Phy250.01 Fundamentals of Physics II Derby 207	8:00-9:15	8:00-8:50 Phy250.01 Fundamentals of Physics II Derby 207
9:00-9:50 PHY220.01 General Physics 2 Derby 207		9:00-9:50 PHY220.01 General Physics 2 Derby 207		9:30-10:00
10:10-10:50 Office Hours Derby 248	9:30-10:00	10:10-10:50 Phy321.01 Derby 148	9:30-10:00	10:10-10:50 Office Hours Derby 248
11:00-11:50 Lunch		11:00-11:50 Lunch		11-11:50 Lunch
			12-12:50 Office Hours Derby 148/248	
		13:00-15:50 PHY251.01 Fundamentals of Physics Lab 1 Derby 148	13:00-15:50 PHY251.02 Fundamentals of Physics Lab 2 Derby 148 Phy211.01 by arr	13:00-15:50 PHY251.03 Fundamentals of Physics Lab 3 Derby 148

Safety regulations for General Physics Labs Spring 2024

During labs, I will be wearing a face mask except maybe outdoors.

- (1) Anytime springs are used in lab, safety goggles must be worn.
- (2) Anytime boiling water is used in lab, safety goggles must be worn.
- (3) You should not look at laser light or point it towards other people.
- (4) In the event of a spill (which will be water), dispense a towel from the spill kit (aka towel dispenser) and wipe up the spill.
- (5) Food and drink are not permitted in lab.

Special for phy321: astrophotography: You are strictly forbidden to direct the telescope towards the sun, or to look at it without properly shielded eyes. I have a sun shield for the telescope but they have been known to break. During an eclipse, we may relax this with use of the solar shield for the telescope.

Attach this form to your email (as an extra attachment today) when you send in your introductory lab report. In your lab report, right below your name, you should say this:
I have read the safety regulations attached to this email.

PHY 321 INDEPENDENT STUDY / 1-3 credits. Directed study on an individual basis covering topics from advanced physics. Prerequisite: PHY 210/240, PHY 220/250 and permission of the instructor. Course may be repeated for up to 3 credits.

General Education Objectives

1. Students can apply critical thinking to pose and answer questions.

2. Students can use the processes and methods of science and mathematics to demonstrate how reproducible results give rise to the discovery of fundamental laws and the development of theories.

3. Students can articulate a basic knowledge of current scientific understanding of the universe and the scientific and mathematical laws that govern it.

4. Students can summarize, interpret, analyze, and critically evaluate data and reports relating to the natural sciences and mathematics.

Each of these objectives is evidenced by a final portfolio, notebook, scarf poster and presentation.

Topics in Phy321 have varied in the periods it has been taught. During the first time it was presented, the topic was microwave interference, and scattering. The student that participated in this particular course did not complete the course. During the most recent periods, the emphasis has been upon group research projects involving ferroelectric crystals. Presently three students have participated in this course and for Fall 2010, an additional three students will participate. The topics will involve growth and electronic measurement of ferroelectric crystals. As a result of this course, students obtain a more direct self-motivated approach to research typically as part of a team and this course is additionally intended to provide students with experiential learning. Evaluation of the work consists of weekly progress updates showing evidence of research progress, a more formal compilation of results at the end of the course and a formal oral presentation. Because of the very nature of research in the sciences as opposed to research in other areas of liberal arts, it is essential that the research be performed under the direction of a faculty member. For Fall 2022, the topic is astrophotography.