COURSE OUTLINE

PHY119 – College Physics II – LABORATORY

THIS OUTLINE CORRESPONDS TO THE LAB PART OF PHY119 *ONLY*

CRN: 37430 (**LAB PART ONLY**)	Thursdays 2pm–4:50pm	Lab+Lecture = 4	Modality: on campus, T15
Instructor: Glenda Denicoló (PhD)		E-mail: denicog@sunysuffolk.edu	
Websites: most course material will be in D2L-Brightspace.			

Instructor office hours:	Online hour (via e-mail, not on campus): Mondays 6pm-7pm
	In office (T-218): Tuesdays 10am-11:45am
The instructor's schedule is also available in D2L-Brightspace.	In office (T-218): Wednesdays 10am-11:45am
	In office (T-218): Thursdays 1:30pm-2pm

CATALOG DESCRIPTION

Second course of a two-semester algebra/trig-based college physics sequence for liberal arts, life science and physical therapy majors designed to acquaint students with basic concepts of physics. Topics covered include mechanics, sound, light, heat and electricity. Note: Fulfills SUNY-GE Natural Sciences. (3 hrs. lecture, 3 hrs. laboratory) Prerequisite: PHY118. Offered on: A-E-G / 4 cr. hrs.

COURSE LEARNING OUTCOMES

Upon completion of this course, students will be able to:

1. Solve word problems in the areas of thermodynamics, phase change, heat and mechanical work, electrostatics, D.C. circuits, capacitors, resistors, the effect of electric and magnetic fields on charged particles and currents, and optics.
2. Identify the properties of waves such as amplitude, length, frequency and period.
3. Distinguish between longitudinal and transverse waves and give examples of each.
4. Apply the concepts of wave theory to the electromagnetic waves and the light spectrum.
5. Identify the properties of electricity such as resistance, voltage and current.
6. Analyze elementary DC circuits using Ohm's and Kirchhoff's Laws.
7. Distinguish between alternating current (AC) and direct current (DC).
8. Solve problems involving magnetic induction, Faraday's Law, Gauss's Law and Lenz's Law.
9. Identify the properties of sound and explain how mechanical energy (such as sound) is transformed into thermal energy (heat).
10. Analyze the optics of lenses and spherical mirrors.
11. Analyze lens systems using the lens equation and the Lens Makers formula.
12. Utilize Snell's law and the Law of Refraction to solve problems in ray optics.
13. Apply critical thinking skills in analyzing multi-step word problems and formulating solutions.
14. Work in a technical setting such as a laboratory and be able to present findings in a coherent report.

LAB POLICY

- Attendance is based on the completion of the experiment AND submission of the required lab report.
- Students who are not present on the day of the experiment cannot submit a report and will receive zero unless they attend the following lab make-up date.
- All experiments will be performed in groups of no more than 3 people. Data acquisition must be performed as teamwork, everyone must participate, and all are equally responsible for the quality of the data.
- Once data acquisition is completed and the groups had a chance to review & discuss the experiment during the lab, the remaining activities MUST BE COMPLETED INDIVIDUALLY.
- **Lab assignment/report and quiz must be submitted 1 week after experiment, and before the next class meeting.** Lab reports that are turned in **1 day late** (not 1 class late) will be penalized with a **20% reduction** in grade. **Anything after that will receive a zero**.

- If going through extenuating circumstances, communicate ASAP with the instructor: DO NOT WAIT.
- Two lab make-up days are available for available to students who need to make-up one lab, either by collecting data from scratch, or re-submitting a report for improvement of the grade.
- Besides two make-up opportunities, the 2 lowest report or assignment grades will be dropped at the end of the semester. However, do your best not to miss any labs, as the knowledge involved in those labs will help you during the lecture too.

LAB GRADE

LAB Activity	Points
(12-2) Lab assignments or reports	Total of 30% of final PHY119 grade

Experimental instructions, lab manual, and the quizzes are freely available inside our D2L course page.

Your lab final grade will be shown at all times in D2L. The final lab grade will represent 30% of your total PHY101 course grade. The final publication of your total PHY119 grade will be done by Prof. Shumway.

There will be NO curving of the grades in this course. Your final grade is non-negotiable. According to the Family Educational Rights and Privacy Act (FERPA), grades will never be discussed by e-mail or phone, only in person video conference.

E-MAIL COMMUNICATION WITH THE INSTRUCTOR

E-mail is the preferred means of communication with your instructor. The instructor will reply to your question/request within 24 hours (with the exception of weekends and holidays). If your instructor does not reply within 24 hours it is most likely because you did NOT succeed in sending the message, and it is YOUR RESPONSIBILITY to check whether you typed the correct e-mail address or any other simple issue like that. Notice that in the case of an emergency, the instructor may also try to get in touch with you via e-mail. The instructor will always write an e-mail to your official college e-mail address (ending in @sunysuffolk.edu). This is the e-mail address you should be reading at all times concerning SCCC official announcements.

WITHDRAWAL POLICY

This instructor will NOT grant "W" after the cutoff date to any student, unless a very well justified case comes up, **with documentation** proving this extreme case. **The "W" cutoff date for Spring 2024 is April 4**. Only students who submit a course withdrawal form on or before this date are guaranteed a grade of "W". Please note that this means if you stop attending class without officially withdrawing in the time period provided, you will very likely be given an F by your instructor. **It is common courtesy to communicate to your instructor the fact that you are leaving the course.** It is important to know also that **the instructor has no means to give you a W at the end of the semester** (this option is NOT available in the school system when entering the final grades). Thus a **W MUST BE AN ACTION STARTED BY THE STUDENT ALWAYS**, and well before the end of the semester!

COLLEGE POLICIES

Testing Positive for COVID-19

If you test positive for COVID-19, as per current CDC recommendations, you should isolate from others and stay home for 5 days. After you have completed your 5 days of isolation, upon your return to campus, you should continue to wear a well-fitting mask for the next 5 days.

Attendance Policy

Regular attendance is considered essential for academic success. Students are expected to attend every class session, no matter the modality, of each course for which they are registered. Excessive absences may have a negative impact on a student's academic performance and/or eligibility for financial aid.

Each instructor must provide an attendance policy in the course syllabus, allowing for a minimum of one week's worth of absences including absences due to illness or other unforeseen circumstances. For example, if a class meets twice a week in a 15-week term, a student must be entitled to at least two absences. The equivalent of one week may differ depending on the length of the term.

The College defines attendance in online courses as regular participation in course-related activities, which may include, but is not limited to: contributing to online discussion, engaging in virtual live instruction (when applicable), submitting an assignment, taking a quiz or exam, viewing and/or completing a tutorial, or communicating with a faculty member regarding course content. Logging into an online class is not sufficient, by itself, to demonstrate attendance or participation by the student.

Students absent from a class for any reason are responsible for any missed work and any other relevant requirements stated in the course syllabus. In the event that a student is absent, it is always recommended that the student contact the instructor to discuss missed work and class content.

Federal financial aid regulations require the College to report a student's last date of attendance for each course; in most cases faculty will be asked to confirm this date. Consequently, faculty must take attendance at each class meeting.

In accordance with New York State Education Law, Section 224-a, any student who is unable, because of religious beliefs, to register or attend classes on a particular day or days will be excused from any examination, study, or work requirements [scheduled on that day]. It is the responsibility of the faculty to make available [to the student] an equivalent opportunity to make up any examination, study, or work requirements within a reasonable amount of time of the religious observance. It is the responsibility of students to notify their professor at least one week prior to the religious observance, via their College email accounts or otherwise in writing, of their intention to be absent from class.

Service for Students with Disabilities

PLEASE SELF-IDENTIFY TO THE INSTRUCTOR AT THE START OF THE SEMESTER, DO NOT WAIT.

Suffolk County Community College provides reasonable accommodations to registered students with disabilities who have self-identified and been approved by the Office of Disability Services. Once approved for reasonable accommodations, such students will be provided with an Accommodation Letter, describing the specific accommodations. Students must present this letter to each of their professors before accommodations can be provided. Students are encouraged to email this letter to their faculty member.

Students who have, or think they may have, a disability are invited to contact Disability Services for a confidential consultation. Students are encouraged to contact the office by email this semester.

Disability Services Contact Information - Ammerman Campus: Call the Disability Services Office at 631-451-4045 or email the Office at disabilityA@sunysuffolk.edu

Diversity

In alignment with our institutional mission and strong support of diversity, equity and inclusion, Suffolk County Community College reaffirms its commitment to providing access to higher education and a welcome environment to all students. No matter your age, race, ethnicity, national origin, gender identity or expression, sexual orientation, family status, U.S. citizenship status, religion, socio-economic status, political ideology,

military-connected status, or intellectual or physical ability - you belong here. Therefore, in this class, we will maintain an atmosphere of mutual respect, civil discourse and cross-cultural communication.
The college prohibits discrimination and harassment and you can read more at:
www.sunysuffolk.edu/nondiscrimination.

SCCC Cares

At Suffolk, we are **C**REATING **A**WARENESS and **R**EADINESS to **E**ND **S**TIGMA about mental health issues and we know that the past year has presented unprecedented challenges to our mental health and wellness. Please know that if you need support related to your psychological, emotional, or social well-being, there are resources available to you through Mental Health & Wellness Services. To learn more about MHWS or for other wellness related resources, visit MHWS on the SCCC website under the Experience Student Life tab.
If you would like to connect with a MHWS counselor at SCCC, for **free and confidential** counseling, email us at mentalhealth@sunysuffolk.edu. You can also reach out to one of us directly:

Ammerman Campus – Sarah Boles (451-4530/boless@sunysuffolk.edu) or Evan Haun (451-4060/haune@sunysuffolk.edu.

ACADEMIC INTEGRITY

I do not tolerate dishonesty.

If I'm sure, I'll give a failing grade. If it's serious, I'll report it. If it's bad enough, you could be expelled. Examples of dishonesty include plagiarizing, falsifying data, copying another's work without acknowledgement, or receiving help from someone on a quiz or test. Please refer to the SCCC Academic Integrity and Plagiarism Guide (see excerpt below). Any work you present as your own must be your own work.

Suffolk County Community College provides students with the opportunity to demonstrate their knowledge by submitting coursework that is uniquely theirs and giving proper attribution to the work of others. Participating honestly in the SCCC academic community ensures that students can take pride in their education and their contributions to scholarship. Without academic integrity, students gain unfair advantage over others and prevent their own intellectual progress. As a student in this class, you are expected to uphold the SCCC core value of Integrity and understand the Special Procedures for Academic Dishonesty in the relevant sections of the SCCC Student Code of Conduct.

The Code prohibits academic misconduct, which includes any action that results in students giving or receiving unauthorized assistance in an academic exercise, or receiving credit for work that is not their own. Academic exercise includes all forms of work submitted for credit. Academic misconduct includes, but is not limited to, the following behaviors: cheating on exams; plagiarizing - using another person's work or ideas without crediting them; complicity - helping a student, or being helped, to engage in academic misconduct; multiple submissions - submitting the same work for credit in more than one course without the instructor's permission; falsification and forgery - inventing information or falsifying the identity of a student.

Information about the Student Code of Conduct, plagiarism and the citation process is in the Academic Integrity and Plagiarism Guide.

It is an academic crime to use Chegg, ChatGPT or similar services to copy answers, which classifies as cheating and plagiarism. Your professors and SCCC tutors are willing to help you understand questions and problems. You must do your own thinking, but ask for help when needed.

NEVER COPY.

Lab reports and homework assignments must be done **individually**.

Cell phones, online browsing and communication tools in general are NOT allowed during any test.

PHY119 LAB SCHEDULE

CRN 37430

Thursdays 2 pm – 4:50 pm, T-15

Late start on days of lecture exams (see exact information with instructors, during class).

Course materials including lab instructions are available in D2L.

Lab assignments/reports must be printed in paper and delivered at the start of each class. All assignments/reports are due 1 week after the experiment and must be done individually (no copying or sharing after the experiment is over).

Date	LAB #	Experiment
Jan 25	1	Measurements, uncertainties, and graphs caliper, ruler, rectangular mass, graph paper and computer for graphing
Feb 1	2	Buoyant Force Graduated cylinder, spring scale, string, weight, caliper, ruler
Feb 8 After lecture exam	3	Fluid dynamics (shortened version) Computers for video analysis, WaterTank.mp4
Feb 15	4	Viscosity Graduated cylinder, oil, sphere, stopwatch, micrometer
Feb 22	5	Simple pendulum Computers, photogate, poles to hang weight, string, protractor
Feb 29 After lecture exam	6	Simple harmonic motion with springs (shortened version) Computer, motion detector, spring, weight, digital scale
Mar 7	7	Standing waves on a string Setup with poles, pulley and string, weights, hanger, digital scale
Mar 14		Make-up class
Mar 21 After lecture exam	8	Introduction to electrical measurements Multimeter, batteries, thermocouple, photocell, resistors
Apr 4	9	Capacitors in series and parallel Multimeter, batteries (or DC power source), capacitors, connectors
Apr 11 After lecture exam	10	Resistors in series and parallel Multimeter, DC power source, resistors, connectors
Apr 18	11	Geometric optics Light source, converging lens, screen, ruler
Apr 25	12	Snell's law of refraction: parts 1 (computer) and 2 (practical) Computers, paper cardboard, pins, glass, ruler, protractor
May 2 After lecture exam		Make-up class
May 9		Final lab grades available

DISCLAIMER:

General rules are posted in your course outline. But even if a rule is not specifically shown in your course outline, it may be announced only in class and it is a valid new rule that must be followed. If there are changes to any existing rules, these too will be announced in class whether or not they are in print.

Students are responsible for apprising themselves of anything that transpires in class whether or not they are in attendance. All students need to be aware of all announcements whether or not they are in attendance. Ask another student. E-mail the professor and ask to update you on any new announcements. If you missed a class, you must ask: it is YOUR responsibility to ask.

Professors are not "babysitters", i.e., they will not remind you all the time of the requirements presented in the course outline: you have the responsibility to know what is strictly expected from you.

All students are personally accountable for all submitted work. You must keep track of your own progress in class. Learn to calculate your average grade at all times; estimate your own final grade to know where you are heading to. This only requires basic knowledge of math: ask for help if needed right at the start of the semester. You MUST be able to calculate your own final grade.

YOU are responsible for the grade you receive.

Professors are just messengers in the classroom: the grade you get is not "given" by the professor – it is the grade that you gave to yourself, the grade you have earned, in direct correspondence to how much YOU have studied, worked and learned about the subject. Taking responsibility for your own acts and taking responsibility for your own work is a good rule for life.

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Please hand in this signed slip within the first week of class.

I have read and am aware of all the information contained in the course outline of PHY119 LAB.

Name (please print): _____ Date: ___/___ /____

Your signature: _____