

ECE University of Connecticut Course Syllabus 2021-2022 Physics 1202Q – 832L (1178) General Physics Mr. James Goddard-Adjunct Physics Professor Shelton High School, Shelton CT 06484 Spring Semester, 2022



This course is given in cooperation with the Early College Experience Program at the University of Connecticut

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Course Description: 1202Q. General Physics

Four credits each semester. Three class periods and one 3-hour laboratory period. Prerequisite: MATH 1060Q or 1110Q or equivalent. PHYS 1201Q not open for credit to students who have passed PHYS 1401Q, 1501Q or 1601Q. PHYS 1202Q not open for credit to students who have passed PHYS 1402Q, 1502Q or 1602Q. PHYS 1201Q required for PHYS 1202Q.

Basic facts and principles of physics. The laboratory offers fundamental training in precise measurements. CA 3-LAB.

Contact information and office hours:

- Classroom 417
- Meeting time: daily, check individual schedules
- Office hours: Tuesday & Thursday 2:15 p.m.— 3:00 p.m.
- Contact information jgoddard@sheltonpublicschools.org

Course Goals and Objectives:

This course will cover curricula as outlined by the University of Connecticut for General Physics 1202Q. See below for the weekly procession of curriculum covered this year. Calculus is not a prerequisite, nor is taking it required, as this course is a non-calculus class; however, advanced mathematic skills and concepts will be used throughout the course. It will be beneficial if the student already has taken and succeeded in Pre-Calculus, or Trigonometry/Algebra II.

This course is not a high school Physics course and should not be confused as the same, as expectations for success is very high, but with the structure of the class, liberal office hours and opportunities to be successful, all students should realize success. You will gain high school credit as well as University of Connecticut credit for successfully completing this course. See below grading information for more specifics.

Expectations are that each student will keep up with the daily course syllabus of assigned readings, homework problems, pre-labs, lab data collection, post-lab written summaries, quiz and test preparations. Please plan on utilizing office hours for individual help when needed. Even though college professors may not contact parents directly, expect that Mr. Goddard will contact your parent/guardian once each quarter via telephone or email in addition to the standard progress report given by Shelton High School.

Required Materials:

Textbooks will be distributed on day 1 and students are expected to take this home for daily reference. Books are not required to be brought to class. Students are expected to come prepared to class each day with paper, pencil, calculator (a set of instructor provided calculators are available in the classroom if students don't have one), and completed homework.

Schedule:

Please refer to the below weekly schedule. Every attempt will be made to remain on this schedule. Please note that exceptions will occur that will cause slight deviations from this schedule, so please refer to the specific detailed daily syllabus for changes. If a change in the daily syllabus occurs, students will be presented with an updated version with the revision date posted on the bottom of the daily syllabus. The weekly schedule does not reflect dates of quizzes, labs and/or tests, other than a mid-term exam.

The first week of school the second semester begins about the fourth week of January and continues 18 weeks hence or until about mid-June.

Week 36

Final Exams

Semester: Spring		
Week 19	Transfer of Heat, Ideal Gas Law 1st Law of Thermodynamics	
Week 20	Ideal Gas Law, 1st Law of Thermodynamics	
Week 21	Electric Forces & Fields	UCONN Physics 1202Q
Week 22	Electric Potential Energy & the Electric Potential	Grading Rubric: 75% for all semester work
Week 23	Electric Circuits- Basic	
Week 24	Electric Circuits- Complex	25% for final semester exam
Week 25	Magnetic Forces & Magnetic Fields	
Week 26	Electromagnetic Induction & A.C. Circuits	SHS (Shelton High School) Grading Rubric
Week 27	Mid-Term Exams	Each quarter:
Week 28	Electromagnetic Waves	10% homework
Week 29	Reflection of light, Mirror Equations	15% Quizzes 25% Labs
Week 30	Refraction of light, Lens Equations, Snell's Law	50% tests
Week 31	Wave Nature of Light - Interference	Voor long .
Week 32	Special Relativity	Year long : 20% each quarter
Week 33	Particles & Waves	10% Semester Exam
Week 34	The nature of the Atom	10% Final Exam
Week 35	Nuclear Physics and radiations	

Policy Statements:

• Grading Criteria: A=100-93, A- = 92-90, B+ = 89-87, B = 86-84, B- = 83-80, C+ = 79-77, C = 76-74, C- = 73-70, D+ = 69-67, D = 66-64, D- = 63-60, F = 59-0. According to UConn policy, the following grade points per credit shall be assigned to grades: A, 4.0; A-, 3.7; B+, 3.3; B, 3.0; B-, 2.7; C+, 2.3; C, 2.0; C-, 1.7; D+, 1.3; D, 1.0; D-, 0.7; F, 0. For information on grades and grading policies, visit the Registrar's page on grades (http://registrar.uconn.edu/grades/).

Students will be required to take the final exams provided by UCONN in late January and June. Students can earn up to 8 credits (4 per semester) from UCONN by earning a C (not a C-) or better for the course in each semester.

• *Note:*

You may receive two different grades for this course. The UCONN course grade will be calculated differently than the Shelton course grade. The Shelton grade (the grade that will go on your report card) will be determined the same as any other high school course (20% each quarter and 10% for each exam). But the UCONN grade will be determined differently (per UCONNs new policy). This will be determined as 75% for all work during the semester and 25% for the final semester exam. This also means that if you are enrolled in the UCONN course, you cannot be exempt from either semester exam. It will be this grade, and not the Shelton grade, that will be sent to UCONN and appear on any UCONN transcripts

Policy Against Discrimination, Harassment and Related Interpersonal Violence: The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community - students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help. More information is available at equity.uconn.edu and titleix.uconn.edu.

- Attendance—UConn has a unique attendance policy:
 (http://catalog.uconn.edu/academic-regulations/grade-information/#attendance)
 Where grades depend on classroom participation, absences may affect the student's grade. However, if a student were absent and the instructor reduced the grade, the reduction would be due to lack of class participation, not the student's absence. Except for final examinations, instructors have final authority in permitting students to submit assignments late or make up examinations. Students should contact their instructor with any questions.
- **Student Conduct Code**: Students are expected to conduct themselves in accordance with UConn's Student Conduct Code. (http://community.uconn.edu/the-student-code/)
- Academic Integrity Statement—Consider adding a statement such as this: This course expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, you should consult with your instructor. Additionally, consult UConn's guidelines for academic integrity. (http://community.uconn.edu/the-student-code-appendix-a/).
- Copyright—The Office of the Attorney General in Storrs advises that instructors include an assertion of copyright in their syllabi and suggest the following language: My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. I will inform you as to whether you are authorized to record my lectures at the beginning of each semester. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me.
- Students with Disabilities: The <u>Center for Students with Disabilities</u> (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the accommodations process is also available on their website at www.csd.uconn.edu.
- Makeup Work for Legitimate Absences—Note that UConn does not have an attendance policy (except in relation to the final exam); you are encouraged to allow students to make up work for <u>excused</u> absences.

• Final Exam Policy: In accordance with UConn policy, students are required to be available for their final exam and/or complete any assessment during the time stated. If you have a conflict with this time you must obtain official permission to schedule a make-up exam with the Office of Student Support and Advocacy (OSSA). If permission is granted, OSSA will notify the instructor. Please note that vacations, previously purchased tickets or reservations, graduations, social events, misreading the assessment schedule, and oversleeping are not viable reasons for rescheduling a final.

• Other policy statement(s):

Use of Personal Electronic Devices in the Classroom is forbidden unless preauthorized by your instructor.