

General Physics Syllabus

PHYS& 114C FALL 2021

Instructor: Gwynne Crowder, PhD (Call me “Gwynne”)

Pronouns: She / her / hers

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Office Hours: (on Zoom, drop-in welcome)

Monday 10:15 a.m. – 11:30 a.m.	Tuesday 11:45 a.m. – 1:00 p.m.	Wednesday 11:45 a.m. – 1:00 p.m.	Thursday 11:45 a.m. – 1:00 p.m.
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Also by appointment welcome

Class Meetings (on Zoom) / Synchronous Time:

Monday 1:30 p.m. – 2:20 p.m. (Usually, as announced)	Friday 12:30 p.m. – 2:20 p.m. (Usually, as announced)
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Occasional meetings during other scheduled course times (**see final page of syllabus for tentative course calendar**)

Books and Materials:

Required

- Text: *College Physics* (4th edition), by Knight, Jones, Field. [Available through Canvas.]
- Access to MasteringPhysics [Available through Canvas.]
- Lab kit rental from BC Bookstore

Strongly Recommended

- Graphing or scientific calculator
- Notebook

I strongly encourage you to use my office hours! I am available for drop-in questions four days per week. I am also available by appointment if those times aren't convenient for you. If you have a very simple/straightforward question, email or Canvas inbox is also an option. I check email most frequently between 10:00 a.m. – 3:00 p.m. M – F. Emails outside of those times may not get a response until the next business day. I look forward to getting to know you and guiding your learning!

There are a lot of challenging things going on in the world right now. **Please, if you are in a unique or challenging situation, reach out to me as soon as you can.** The sooner I know, the more options will be available for finding a good solution.

This syllabus is subject to change. Changes will be announced online.

Course Information

▪ Course Outcomes

Welcome to PHYS& 114! This is the first quarter of a three-quarter sequence of introductory physics for general science majors. The quarter focuses on motion: both describing motion (kinematics) and understanding the causes of motion (dynamics).

As a student, your goal is to think and communicate like a physicist as you work to understand the concepts and how to use those concepts to solve real-world problems. (A detailed list of outcomes is available at <http://scidiv.bellevuecollege.edu/physics/outcomes.html>)

Understanding physics concepts will help you understand your surrounding natural and technological environment. Physics emphasizes problem solving, which may differ from other classes in which memorization is important. If you are new to problem solving, you may find it to be a challenging and thought-provoking (though rewarding) skill to acquire. Like any new skill, you will get better through practice. Take charge of your learning- keep up with the coursework and make sure to ask questions about things you don't understand right away!

▪ How Outcomes Will be Met

Problem Sets

Problem sets are a very effective way of developing your problem-solving skills and conceptual understanding. The problem sets are carefully chosen lists of problems and questions from the online materials. They will usually address material recently covered in class. Problem sets will regularly be posted on MasteringPhysics and should be submitted online. Unless otherwise posted on the class MasteringPhysics site, they are **due by 11:59 p.m. Thursdays**. Further information on accessing and submitting the homework will be given in class. If you have questions about solving specific problems from the problem set, feel free to visit my virtual office hours (either drop-in or by appointment). For working on problem sets, I strongly encourage you to work with your classmates (see "Discussions" below for a way to do this) and form study groups as well as ask me questions during office hours. However, make sure that what you turn in represents your own work and is in your own words (see below for policies on cheating and the student code of conduct). **No late documents are accepted, but 15% of the total points available for problem sets will be dropped.** This 15% is sufficient to account for a missing assignment (due to an emergency, illness, etc.) as well as the idiosyncrasies of working with online homework.

Labs

Labs are unique opportunities to understand fundamental concepts by observing the actual way nature behaves. The laboratory is an opportunity to practice hands-on problem solving and is fundamental to the field of physics. It is also one of the portions of the class most detrimentally affected by the pandemic! Because the labs are so important, the physics department has been working hard to develop lab kits which are available from the BC Bookstore to take the place of in-person labs. The lab kits are a new development- more details about how we will use the lab kits will be discussed in class. In the meantime, please visit the BC Bookstore website and navigate to the materials for Phys& 114. You should **place an order for a kit rental**.

In-class work

At times throughout the quarter, you will work (usually in groups) to solve a problem or task in class. Your **attendance is required** at these events and they cannot be made up. **The lowest grade will be dropped.**

Discussions

Not being physically in class together deprives us of the multitude of opportunities for learning from each other. To try and replicate that in the online environment, we will have discussions on Canvas. Most of the discussions will center on helping each other with challenging questions from the problem set. Meaningful participation is required for credit. **The lowest grade will be dropped.**

Assessments

There will be multiple quizzes, one midterm exam, and a final exam.

Quizzes: The quizzes will be given roughly weekly and will usually cover one chapter's worth of material. They will have one long problem or a few shorter problems. Questions will span beginning to intermediate difficulty. **Your lowest quiz score will be dropped.**

Exams: The midterm and final exam are weighted equally, and are cumulative. They will have a few long problems. Questions will span intermediate to higher difficulty.

For all assessments, you will be provided a "crib" sheet (a sheet of helpful equations) by the instructor. The crib sheet will be posted on Canvas ahead of time. **Please ask any questions about the crib sheet ahead of time; no answers about the crib sheet will be answered during assessments.**

Assessments may not be taken late. Please contact me individually if a serious emergency arises.

▪ Grading

Your grade for the class will be based on the following:

Problem sets	10%
Labs	15%
In-class work	8%
Discussion	9%
Assessments	58% (= 28% Quizzes + 15% Midterm exam + 15% Final exam)

Your letter grade will be based on the following table and a professional evaluation of your progress in the course.

Percent	Letter	Decimal	Percent	Letter	Decimal
91-100	A	4.00	69 - 74.4	C+	2.33
87.5 - 90.9	A-	3.67	64 - 68.9	C	2.00
85 - 87.4	B+	3.33	59 - 63.9	C-	1.67
77 - 84.9	B	3.00	56 - 58.9	D+	1.33
74.5 - 76.9	B-	2.67	50 - 55.9	D	1.00

The link to the College Grading Policy is located on page 10 of the Course Catalog: [Grading Policy](#)

Help with Canvas

The following places are helpful for becoming familiar with Canvas: [here](#) and [here](#) .

Classroom Learning Atmosphere

▪ Instructor's Expectation

Many students find physics to be a challenging and demanding class. Based on national research, it's recommended you spend 2-3 hours outside of class for each scheduled hour in class so expect to **spend 21-25 hours per week for the average student** who is comfortable with the prerequisite math. Individual students may need more time. Preparing for class and doing readings ahead of time will increase the efficiency of your learning. Because of the demands of this course, it is very important to not let yourself fall behind and attendance is important. If you are having trouble with a particular topic, make sure to get help right away. There are many great learning resources on the BC campus- your classmates, the [Academic Success Center](#), and instructor office hours.

▪ Affirmation of Inclusion

Bellevue College affirms the diversity of human identities and experiences and is committed to creating spaces free from harassment and discrimination (4000 Institutional Commitment to Inclusion). Furthermore, Bellevue College rejects all forms of racism, homophobia, sexism, xenophobia, religious intolerance, classism, ableism, ageism, language bias, and hate speech or actions that attempt to silence, threaten, or degrade others.

In classroom settings, we might disagree with views shared in the classroom; however, courteous, and respectful behavior and responses are always expected. When providing criticism, it is important to focus on the ideas and not the person.

Faculty are encouraged to disrupt and address hate speech and behaviors. Students are also encouraged to speak up and advocate when they experience, or witness hate speech and behaviors. Faculty, staff, and students also are encouraged to submit a report to the CARE Team regarding any concerns of discrimination, harassment, or inappropriate and disrespectful conduct.

[Affirmation of Inclusion](#)

Reasons of Faith and Conscience

Reasonable Accommodations for Reasons of Faith and Conscience: Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodation so that grades are not impacted. Such requests must be made within the first two weeks of the course to the office of the Associate Vice President of Student Affairs (see Bellevue College [Policy 2950](https://www.bellevuecollege.edu/policies/id2950/) (<https://www.bellevuecollege.edu/policies/id2950/>)). In the event you feel you are being discriminated against based on faith or conscience, you may refer to the procedures outlined in the college's [Discrimination, Harassment and Retaliation Policy 1440P](https://www.bellevuecollege.edu/policies/id-1440p/) (<https://www.bellevuecollege.edu/policies/id-1440p/>).

Annual Notice Non-Discrimination

Bellevue College does not discriminate on the basis of race or ethnicity; creed; color; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; or veteran status in educational programs and activities which it operates. Bellevue College is prohibited from discriminating in such a manner by college policy and by state and federal law. All college personnel and persons, vendors, and organizations with whom the college does business are required to comply with applicable federal and state statutes and regulations designed to promote affirmative action and equal opportunity.

Reports of gender and sex-based based discrimination, sexual misconduct, or retaliation by a student should be raised with the Title IX office (see 1440P2 for contact information). In cases where the impacted party is a student and the responding party is a college employee, the Title IX coordinator will direct the matter to the Office of Human Resources (HR). All other reports, including all reports where the impacted party is an employee, should be raised with the HR. If a report is against personnel in the Title IX office or HR, it should be submitted to the president's office for referral to an alternate designee.

[Equal Opportunity](http://www.bellevuecollege.edu/equal/) (<http://www.bellevuecollege.edu/equal/>)

Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share with the Title IX Coordinator any and all information regarding sexual assault and other forms of sexual misconduct (e.g. relationship violence, stalking) that may have occurred on campus or that impacts someone on campus. Students may speak to someone confidentially by contacting the BC Counseling Center at (425) 564-2212. The Title IX Office can be contacted at 425-564-2641 and more information can be found at [Title IX](http://www.bellevuecollege.edu/titleix/) (<http://www.bellevuecollege.edu/titleix/>).

If you have any concerns, you may report to: [Report Concerns](https://www.bellevuecollege.edu/reportconcerns/) (<https://www.bellevuecollege.edu/reportconcerns/>).

▪ Student Code of Conduct and Academic Integrity

Any act of academic dishonesty, including cheating, plagiarism (using the ideas or words of another as one's own

without crediting the source), and fabrication and inappropriate/disruptive classroom behavior are violations of the Student Code of Conduct at Bellevue College. Examples of unacceptable behavior include, but are not limited to, talking out of turn, arriving late or leaving early without a valid reason, allowing cell phones/pagers to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Code of Conduct to the Dean of Student Success for investigation. Specific student rights, responsibilities, and appeal procedures are listed in the Student Code of Conduct at: [Student Code](#)

Science Division Policy on Cheating: You, the student, are expected to conduct yourself with integrity. If you cheat*, or aid someone else in cheating, you violate a trust. If you cheat, the following actions will be taken:

1. You will receive a grade of "0" on the work (exam, assignment, lab, quiz, etc.) where the cheating occurred. This grade cannot be dropped.
2. A report of the incident will be sent to the Dean of Student Success. They may file the report in your permanent record or take further disciplinary action such as suspension or expulsion from the college. If you feel you have been unfairly accused of cheating, you may appeal. (For a description of due process, see WAC 132H-120 and/or the Student Handbook.)

**Cheating includes, but is not limited to, copying answers on tests or assignments, glancing at nearby test papers, swapping papers, stealing, plagiarizing, lying, use of electronic information storage or communication devices to store or share answers and illicitly giving or receiving help on exams or assignments.*

Information about Bellevue College's copyright guidelines can be found at: [College Copyright Policy](#)
This link provides a good, short summary of how to avoid plagiarism: [Avoiding Plagiarism](#)

Important Links

▪ Bellevue College E-mail and access to MyBC

All students registered for classes at Bellevue College are entitled to a network and e-mail account. Your student network account can be used to access your student e-mail, log in to computers in labs and classrooms, connect to the BC wireless network and log in to MyBC. To create your account, go to: [Create Email](#)

BC offers a wide variety of computer and learning labs to enhance learning and student success. Find current campus locations for all student labs by visiting the [Technology Help Desk](#)

▪ Disability Resource Center (DRC)

The Disability Resource Center serves students with disabilities. Common disabilities include physical, neurological (e.g. Autism, ADD/ADHD), and mental health (e.g. depression, anxiety). If you are a student who has a disability or if you think you may need accommodations in order to have equal access in your classes, programs, activities, and any other services, please contact the DRC.

If you require assistance in an emergency, please meet with your individual instructors to develop a safety plan for while in class and contact the DRC to develop a safety plan for while you are elsewhere on campus.

The DRC office is located in building U Room 001. You can contact the DRC by stopping by the office at B132, calling our front desk phone number (425) 564-2498, emailing drc@bellevuecollege.edu. Deaf students can reach us by calling TTY: (425) 564-6189, or by Skype (account name **DRCatBC**). For more information about the services we offer, including our Initial Access Application, visit our website at [Disability Resource Center](http://www.bellevuecollege.edu/drc) (<http://www.bellevuecollege.edu/drc>).

Service Animals are allowed in this classroom. Emotional Support Animals need to be approved through the DRC. All other animals will be asked to leave. If you believe you need your animal with you, please connect with the DRC and refrain from bringing your animal until a decision has been made.

Accessibility

The online elements of this course are designed to be welcoming to, accessible to, and usable by everyone, including students who are English-language learners, have a variety of learning styles, have disabilities, or are new to online learning. Be sure to let me know immediately if you encounter a required element or resource in the

course that is not accessible to you. Also, let me know of changes I can make to the course so that it is more welcoming to, accessible to, or usable by students who take this course in the future.

▪ **Public Safety**

Public Safety and Emergencies

Public Safety is located in the D building (D171) and can be reached at **425-564-2400** (easy to remember because it's the only office on campus open 24 hours a day—2400). Among other things, Public Safety serves as our Parking Permits, Lost and Found, and Emergency Notification center. Please ensure you are signed up to receive alerts through our campus alerting system by registering at [RAVE Alert Registration](#)

If you work late and are uneasy about going to your car, Public Safety will escort you to your vehicle. To coordinate this, please phone ahead and let Public Safety know when and where you will need an escort.

Please familiarize yourself with the emergency postings by the door of every classroom and know where to go in the event of an evacuation. Your instructor will be asked if anyone might still be in the building, so check in before you do anything else. Emergency responders will search for anyone unaccounted for.

If a major emergency occurs, please follow these three rules:

- 1) Take directions from those in charge of the response** -We all need to be working together.
- 2) Do not get in your car and leave campus (unless directed to)** - Doing so will clog streets and prevent emergency vehicles from entering the scene. Instead, follow directions from those in charge.
- 3) In an emergency, call 911 first, then Public Safety.**

Please do not hesitate to call Public Safety if you have safety questions or concerns at any time. You may also visit the [Public Safety](#) web page for answers to your questions.

▪ **Final Exam Schedule**

The final exam for the quarter will be on:

Friday, 12/10, 12:30 p.m. – 2:20 p.m. [Backup time: Tuesday, 12/14, 1:30 p.m. – 3:20 p.m.]

In case of an emergency that causes campus/online resources to close during the allotted final exam time, student grades will be based on what they have earned to date. If this happens, an announcement will be posted on Canvas.

▪ **Student Success Day**

Student Success Day is a day between the end of classes and the start of finals to allow students to prepare for their exams. I will hold the following office hours:

Monday, 12/13, 10:00 a.m. – 3:00 p.m., by appointment

▪ **Academic Calendar**

The Bellevue College Academic Calendar provides information about holidays, closures and important enrollment dates such as the finals schedule.

- [Calendar](#) You will find admissions and registration dates and important dates for withdrawing and receiving tuition refunds. You will also find college holidays, scheduled closures, quarter end and start dates, and final exam dates.

Tentative Course Calendar

Week	Topic	Notes
1 (9/27)	Ch 1	
2 (10/4)	Ch 2	<i>Monday: Quiz</i>
3 (10/11)	Ch 3	<i>Monday: Quiz</i>
4 (10/18)	Ch 4	<i>Monday: Quiz</i> <i>Tuesday: No classes or office hours</i>
5 (10/25)	Ch 5	<i>Monday: Quiz</i>
6 (11/1)	Ch 6	Wednesday: 12:30 p.m. – 2:20 p.m. midterm exam
7 (11/8)	Ch 7	<i>Monday: Quiz</i> <i>Thursday: No classes or office hours</i>
8 (11/15)	Ch 8	<i>Monday: Quiz</i>
9 (11/22)	Ch 9	<i>Monday: Quiz</i> <i>Wednesday: 12:30 p.m. – 2:20 p.m. class</i> <i>Thursday/Friday: No classes or office hours</i>
10 (11/29)	Ch 10	<i>Monday: Quiz</i>
11 (12/6)	<i>Review</i> <i>Final exam</i>	Friday: 12:30 p.m. – 2:20 p.m. final exam
12 (12/13)	<i>Backup times</i>	<i>Monday: Student Success Day</i> Tuesday: [Backup exam time: 1:30 p.m. – 3:20 p.m.]

▪ Additional Information

All students should be aware of the many tutoring services provided by the [Academic Success Center](#). If you need free tutoring help, please contact them. The [Bellevue Physics Website](#) may be useful as well.

If you feel threatened or see something that may indicate trouble, please report it right away at [Report Concerns](#). We all need to help keep our campus safe for everyone.

A note about accessing Canvas from the People's Republic of China: some users have reported that they do not have full access to all Canvas functionality from within the People's Republic of China. This appears to be due to Canvas' parent company, Instructure, not fully committing to Chinese government requirements regarding internet operations within the country. The Chinese government does not inform foreign entities of their policy updates; therefore, Bellevue College cannot anticipate access to Canvas.

If you will be in China during the quarter, you should prepare for intermittent and uncertain access to Canvas.

Source: [Access to Canvas in China](https://support.canvas.fsu.edu/kb/article/1157-access-to-canvas-in-china/) (https://support.canvas.fsu.edu/kb/article/1157-access-to-canvas-in-china/)