Phys 115 Syllabus

Fall 2021

Instructor: Tim Winchester, PhD

Pronouns: He / they

E-mail: tim.winchester@bellevuecollege.edu

Tim's schedule: I will be holding "Ask Me Anything" time by Zoom twice a week **just for this class**. These will be Tuesday 3:00-3:45pm and Friday 11:00-11:45am. These are totally optional, but they are a good opportunity to ask about homework, labs, lectures, or anything else on your mind. If these times do not work for you, **you can email to set up an appointment**.

> I am available by email or Canvas inbox. If you send an email between 9:00-3:00 M-F, I will typically reply within a couple hours. If you email outside that time on a weekday I may reply the next morning, and over the weekend it is possible I will not reply until Monday.

Course structure: The course will be held asynchronously online. You will not need to meet at designated class times.

Course Information

Course Outcomes

Physics 115 is the second quarter of algebra-based physics. After completing the course, a student should be able to speak sensibly and answer quantitative questions about thermodynamics, electrostatics, magnetism, and basic electric circuits. Students will also perform weekly laboratory activities and write lab reports on these topics. A detailed list of outcomes can be found at: <u>Course Outcomes</u>

How Outcomes Will be Met

We will meet the course outcomes through a combination of lectures, discussions, labs, quizzes, exams, and homework. We will be using Canvas as the main location for all parts of the class. I'll post weekly schedules, lectures, assignments, reviews, and exams on Canvas. I will also be posting grades on Canvas. Most homework for this class will be done on MasteringPhysics, which you will reach through the "Inclusive Access" link on Canvas. Unless there is a special exception, this should be ready-to-go as IA is already paid as part of your tuition. We will be using an ebook that can be accessed through Mastering. Additionally, I will have regularly scheduled "ask me anything" times via Zoom.

Grading

The College Grading Policy is explained in the current Course Catalog and can also be found at this link: <u>Grading Policy</u>

The grading scale for this course is:

- A: 93 100%
- A-: 90 93
- B+: 87 90
- B: 83 87
- B-: 80 83
- C+: 77 80
- C: 73 77
- C-: 70 73
- D+: 67 70
- D: 60 67
- F: 0 60

The grade breakdown will be:

- Formal labs (2-3): 10%
- Informal labs (5-7): 10%

As well as the **6 of the following 7** items you have the highest grades in, at 13.33% apiece:

- Practice/discussions
- Mastering homework
- Quizzes (about 6)
- Exam 1
- Exam 2
- Exam 3
- Final exam

Each part of the grade has a different purpose:

Labs

The labs give you hands-on experience with the concepts in this course. You'll get to use equipment, make measurements, and try things, which helps take you out of "what's the right answer" mode and into "what's going on" mode. Or, another way to put it is that you'll see the "physics world" of ideal batteries and ohmic resistors is a pretty good model of the physical world.

Informal labs will be about exploring concepts, trying things, and building models. Formal labs will be a chance to do quantitative analysis and practice technical writing. Ideally by the end of the class you'll have some polished reports that you would be proud to include in a portfolio.

Homework

The homework (mostly on Mastering) is a chance to practice using concepts and solving problems, which is why you will be allowed many attempts on each question. I recommend you also practice solving more problems out of the book on your own. Odd-numbered end-of-chapter problems have answers in the back of the book. If your final, cumulative average across all homework assignments is least 80%, I will round it up to 100%.

Quizzes

We will have a quiz approximately every week that we do not have an exam. These are meant to be fairly low-stakes places to check your understanding of material you've had a chance to practice before taking the exam on it.

Practice/Discussion

Though the class will be held asynchronously and online, it is still important to engage with the material and helpful to interact with your classmates. To incentivize these behaviors, part of the grade will be for participating in discussions, submitting evidence you are doing practice problems, etc. **These are graded on participation** – this is the easiest place to get points in the class, and the only way to not get the points is to either verbatim copy someone else's post, say almost nothing, or not post at all.

Exams

Due to the online nature of the course, I want to make exams as relatively stress-free as possible. Therefore, we will have four exams (including the final) that are each worth a relatively small 13.33% of the course grade.

Grading flexibility

Just to be super clear, the grading scale includes dropping **either** your lowest exam score, **or** your homework score, **or** your discussion/activity score, **or** your quiz score from the final average. This is meant to reduce your stress and give you some flexibility. Here are two examples:

Grade component	Cordelia's grade	Weighting
Informal labs	80%	10%
Formal labs	100%	10%
Discussions	43%	0% (dropped)
Quizzes	87.5%	13.333%
Homework (rounded up)	100%	13.333%
Exam 1	80%	13.333%
Exam 2	75%	13.333%
Exam 3	85%	13.333%
Final exam	85%	13.333%
Overall	86%	100%

Example 1: Cordelia got behind on discussions, but otherwise did pretty well:

Note: to calculate a weighted average, add up the (score * weight) for each category.

Grade component	Anya's grade	Weighting
Informal labs	90%	10%
Formal labs	100%	10%
Discussions	100%	13.333%
Quizzes	87.5%	13.333%
Homework (rounded up)	100%	13.333%
Exam 1	80%	13.333%
Exam 2	95%	13.333%
Exam 3	85%	13.333%
Final exam	0%	0% (dropped)
Overall	92%	100%

Example 2: Anya was happy with her grade before the final and opted not to take it:

Note: In cases where cheating is discovered, it is no longer possible to drop the lowest part of the grade (see the Science Division Policy on Cheating below). In those cases, the student receives a 0 on the exam in question, **and** all 7 parts of the grade, rather than the highest 6, are weighted equally at 11.43% to make up the non-lab 80% of the grade. Please do not cheat!

Tim's grading philosophy

As an instructor, I have a bit of a conflict of interest when it comes to grades. I want to **accurately assess your achievement**, but I also want you to **achieve highly**. Components of the grade such as exams and labs assess your achievement in a relatively accurate way (though of course they do not tell the full story), while components like homework, discussions, and quizzes motivate behavior that I believe will help you achieve highly (reading the textbook, watching lectures, practicing problems).

Books and Materials Required

- We will be using the book *College Physics* by Knight, Jones, and Field for this class. You are automatically enrolled in Inclusive Access, which means that **you paid for it already in your tuition**.
- You will need to rent a lab kit from the bookstore. Please **order it as soon as possible**, even if it is backordered. The Physics Department is refurbishing kits from last quarter as quickly as possible, and may prioritize classes with backordered kits. You can either arrange to pick up your kit, or have it shipped to you. We will be using the materials in many of the labs. The kit is a rental, which means it was likely used last quarter, and will likely be used again next quarter, so please keep this in mind when using the equipment.

Course Calendar

Here is the approximate schedule of topics:

Week of	Chapter(s)	Notes	
Sep 27-Oct 1	11		
Oct 4-8	12		
Oct 11-15	13		
Oct 18-22	(Gravity)	No class Tuesday (Professional Development Day) Exam 1 Friday	
Oct 25-29	20		
Nov 1-5	(Gauss's Law)		
Nov 8-12	21	No class Thursday (Veterans' Day)	
Nov 15-19	22	Exam 2 Friday	
Nov 22-26	23	No class Thursday or Friday (Thanksgiving)	
Nov 29-Dec 3	24		
Dec 6-10	25	Exam 3 Friday	
Dec 13-16		Student Success Day Monday (Review day) Final exam Wednesday	

Classroom Learning Atmosphere

Attention

As this class is online, you will have increased responsibility for your own learning. This means that when watching video lectures, you should treat them as though you were in class – take notes, ask questions (in the discussion), pause to anticipate the next step, rewind if your mind wandered, etc. A benefit of online lectures is that they can be shorter because there is less need for me to repeat things and wait – but that does not mean they will take less time to watch.

Textbook

Reading the textbook will help you learn. The schedule is listed above, and I'll remind you each week what you should be reading. It will be best for you to stay slightly ahead of lectures. Even if you feel a little confused, getting the main idea will make the lecture make more sense.

I recommend reading the textbook for about 15-20 minutes at a time, rather than for two hours straight. Trying to sit down and read a dense textbook for hours at a time will probably not be useful for you. Pay special attention to the example problems as they are there to illustrate the techniques you are trying to learn.

Late Work, Make-up Work, and Extensions

Due to the nature of the class, I am expecting that it will be relatively easy to plan your week and keep up with assignments. However, **if you need an extension, please let me know**. I know that people are managing work, family, and school, and that you may have unforeseen challenges. With everything asynchronous anyway, **I will be reasonably generous with extensions**.

Communication

I strive to make this class useful and fair to everyone. If one of the course components is unduly burdening you, please talk to me about it. I am willing to be flexible to help you succeed. However, I cannot do that if you do not talk to me. I recommend you visit my AMA hours (or make an appointment) early and often to discuss your progress in the class so that you do not wait until it is too late. In order to maintain communication, it is important you receive Canvas messages and check your email regularly. Email or Canvas messages are a good way to contact me.

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.

Anti-Bias Statement

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

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 (https://www.bellevuecollege.edu/inlusion/)

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 accommodations 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 (Bellevue College Policy 2950). In the event you feel you are being discriminated against based on faith or conscious, you may refer to the procedures outlined in the college's Discrimination, Harassment and Retaliation Policy 1440P.

Annual Notice of 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/)

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 <u>Title IX</u> (http://www.bellevuecollege.edu/titleix/).

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

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. He 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: <u>College Copyright</u> <u>Policy</u>

Tim's addendum to the cheating policy: Use of Chegg.com or other resources where you post a question and someone else posts the solution **is cheating**. Use of these sorts of websites for homework, exams, quizzes, or any other class work will trigger application of the Policy on Cheating. It is extremely easy to catch this sort of cheating! Please do not do it!

Student Conduct Code 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 Conduct Code of Bellevue College. Examples of disruptive behavior include, but are not limited to, talking out of turn, arriving late or leaving

early without a valid reason, allowing cell phones to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Conduct Code to the Manager of Student Conduct for investigation. Specific student rights, responsibilities, and appeal procedures are listed in the Student Conduct Code at: <u>Student Code</u>

Important Links

See <u>"Important Links" page online</u> for more information about the Non-Discrimination Statement, E-mail and MyBC, Public Safety, the Academic Calendar, the Academic Success Center, and more.

Help with Canvas

Students can find help with Canvas by following the link here: Student Canvas Help

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 U001, calling our front desk phone number (425) 564-2498, emailing <u>drc@bellevuecollege.edu</u>. 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 <u>Disability Resource Center</u> (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.