Physics 212 Syllabus and General Guidelines (Fall 2020)

Instructors:

Chuck Yeung, cyeung@psu.edu (Section 1)

In person office hours: Wed 2:00 PM - 3:00 PM *Nick 168*

Zoom office hours: Tues 2:00 PM - 4:00 PM https://psu.zoom.us/j/92104722450

Please email to make a Zoom appointment for other times.

Bruce Wittmershaus, bpw2@psu.edu (Sections 2 and 3)

In person office hours: Thurs 2:15 PM -3:15 PM *Nick 168*

Zoom office hours: Mon and Fri 2:15 PM -3:15 PM, https://psu.zoom.us/j/95799500314

Please email to make a Zoom appointment for other times.

Note: You must access all Zoom sessions using your psu.edu account. You can do so either through the Zoom page on the class CANVAS page or through your psu.zoom.us account.

Some of the teaching assistants will also have in person office hours. See CANVAS course page for times and locations. You can also email us to make an appointment if these times do not work for you.

Classes: The format of the class is synchronous online. You will be placed in a group which you will work with throughout the semester. You must attend class at your designated time to receive credit***. Please contact your instructor to make alternative arrangements if you are taking the class remotely and are not in the US Eastern time-zone.***

Section 1: MWF 8:00 AM - 9:40 AM https://psu.zoom.us/j/91553147134
Section 2: MWF 10:10 AM - 11:50 AM https://psu.zoom.us/j/96249417121
Section 3: MWF 12:20 PM - 2:00 PM https://psu.zoom.us/j/99491220609
Zoom Problem Solving Session: Dr. Yeung will be offering a optional problem-solving session on Zoom on Thursdays from 3:00 PM to 4:00 PM https://psu.zoom.us/j/93739250215**.** Sessions will be recorded and available on CANVAS afterwards.

Textbook. Knight, *Physics for Scientists and Engineers*, 4th Ed., Vol. 2, Electricity and Magnetism. ISBN: 9780136477167. This is the custom Penn State edition of the Knight textbook and should come with an access code for the homework service.

Prerequisites: Passing grade in Physics 211 and Math 140. Passing grade or concurrent enrollment in Math 141.

Class Webpage: CANVAS has the syllabus, calendar, Zoom links, homework instructions, pre-clsss overviews, reading quizzes, exam reviews, Class Powerpoints, activity solutions (available the following day) and handouts. All your grades will be on CANVAS. Please see the Class Agenda to see what you should do to prepare for class and links to the activities during class.

Missing a Graded Event: If you are unable to attend a class or complete an assignment on time due to a "university approved excuse" (https://handbook.psu.edu/content/class-attendance**) *YOU MUST NOTIFY US BEFORE THE EXAM, QUIZ, CLASS, OR DUE DATE* for us to accommodate you.** Approved excuses include illness, family emergency, athletic team competition or military commitment. In the case of illness, just email your instructor. An exam make-up not completed within 3 weeks after the exam's originally schedule date will be given a grade of zero except in cases of University approved absences. For those cases, contact your instructor as soon as possible and alternative arrangements will be made.

Reading Quizzes: Reading quizzes are on CANVAS and are due at 11:59 pm the day before class. They are available one week before the due date. Note each student will receive slightly different quizzes. The correct answers are different for the different versions. *The four lowest grades will be dropped. There are no makeups.*

Mastering Physics Homework: See CANVAS for Homework Instructions for Mastering Physics. Due at 11:59 pm on due dates (see schedule). Please register for the homework service as soon as possible. *There are no makeups.*

Quizzes: The quizzes will be on CANVAS and focus on material by chapter. See schedule for dates. *The lowest grade will be dropped. There are no makeups.* If you have a valid excuse, we will prorate your grade.

Exams: There will be three, in-term exams on CANVAS (see schedule). If you miss the test without a valid excuse, you must call us within two hours after the test is over for your section to schedule a make-up with penalty (0.75 times your make-up test grade).

Final Exam: The final exam will be on CANVAS and will be comprehensive.

Grading Criteria: Exams 45%, Final Exam 20%, Activities/Attendance 10%, Reading Quiz 5%, Quizzes 10%, Homework 10%

Grades: A:> 93, A-: 88-93, B+: 84-88, B: 80-84, B-: 75-80, C+: 70-75, C: 65-70, D: 60-65, F:< 60; You can check all your class grades and overall grade at any time on CANVAS. With thousands of grades to input mistakes will occur. Always check your grades and alert us to any errors. Questions about how something is graded are welcomed but grade adjustments must be *submitted within **three** weeks after receiving the graded material and **before** the final exam*.

Purpose of the Course: The goal of this course is for you to develop the knowledge base and skill set required for success in an engineering and/or science career. This includes knowledge and understanding of physical concepts and quantitative problem-solving skills and the ability to accomplish assigned tasks as a team.

Method - SCALE-UP Physics: You will quickly notice that the course is NOT the same as a "traditional" lecture course that you may be used to. Using the results of education research, SCALE-UP physics encourages student learning and problem solving with "brains-on" activities in order to improve student success. In SCALE-UP physics, you will be asked to complete tasks with the same methods that working engineers and scientists use to figure out what they need to know.

Student Responsibility for Learning: To be successful in this course, you must come to class prepared to learn. This requires knowing the information from the assigned reading in the textbook, viewing the pre-class material, and doing the reading quizzes before class. Coming to class without knowing the required information will waste your opportunity to learn from the day's activities and, you will not be able to complete the activity in the assigned time. Success in this course requires spending about 8 to 12 hours a week thinking about and working on physics OUTSIDE of class time.

Expectations: We will be using the physics covered in Physics 211 as well as concepts from Math 140 and 141. You should be comfortable with differentiation and simple integration. More importantly you should have the basic ability to solve problems. The basic concepts and techniques you learn and apply in this class will be required in all aspects of science and engineering. You are encouraged to talk to your classmates about the homework and any other problems or ideas but you should try them yourself first. It is particularly important that you do not get behind in this class as we will always be building on previous material. Make sure to talk to your instructor since it will be very difficult to catch up if you get behind. The studying methods that you find most useful will depend on yourself. The common denominator for success in this course is hard work.

Activities & Attendance: There are in-class activities each class. You must be present **AND** active on Zoom in order to receive credit for the activity. Each day one activity will be randomly chosen for grading. Your lowest grade will be dropped. *There are no make-ups.* Your activity grade will be pro-rated for valid excuse absences. You will be assigned to a team of two or three people that usually you will keep for the entire semester. Learning to work as part of a team and performing the assigned task in the time allotted are also required skills for a successful career in engineering and science, just as much as understanding the physical concepts and mastering quantitative problem solving.

Teaching Assistants:

Section 001	Alec Payne (azp76) and Matthew Krull (mxk5762)
Section 002	Jack Blicha (jkb5907) and Flor Parra Rodriguez (fip5046)
Section 003	Rebecca Grey (rmg5657) and Robert Sanford (rxs524)

Academic Integrity

Academic integrity is a basic guiding principle for all academic activity at the University, and all members of the community are expected to adhere to this principle. Specifically, academic integrity is the pursuit of scholarly activity in an open, honest, and responsible manner. It includes a commitment not to engage in or tolerate acts of falsification, misrepresentation, or deception. Such acts violate the fundamental ethical principles of the University community and undermine the efforts of others.

Violations of academic integrity are not tolerated at Penn State Behrend. Violators will receive academic sanctions and may receive disciplinary sanctions, including the awarding of an XF grade. In cases such as these, an XF grade is recorded on the transcript and states that failure of the course was due to an act of academic dishonesty. All acts of academic dishonesty are recorded so those repeat offenders can be sanctioned accordingly.

For more information: http://behrend.psu.edu/for-faculty-staff/faculty-resources/academic-integrity

Disabilities and Learning Differences

Penn State is strongly committed to providing full access to its programs and services for all individuals. The University encourages academically qualified students with disabilities to take advantage of the educational programs and accommodations offered at Penn State Behrend.

For more information: http://behrend.psu.edu/student-life/educational-equity-and-diversity/student-resources/students-with-disabilities-and-learning-differences

Educational Equity Concerns

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, harassment, and/or incivility due to age, ancestry, color, disability, gender, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity at the Report Bias site: http://equity.psu.edu/reportbias/statement.

Counseling and Psychological Services

Students with academic concerns related to this course should contact the instructor in person or via email. Students also may occasionally have personal issues that arise in the course of pursuing higher education that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the Penn State Behrend Personal Counseling Services at (814) 898-6504.

For more information: http://psbehrend.psu.edu/student-life/student-services/personal-counseling

Title IX

Penn State is committed to fostering an environment free from sexual or gender-based harassment or misconduct. The Office of Sexual Misconduct Prevention and Response ensures compliance with Title IX, a federal law that prohibits discrimination based on the sex or gender of employees and students. Behaviors including sexual harassment, sexual misconduct, dating violence, domestic violence, and stalking, as well as retaliation for reporting any of these acts violate Title IX and are not tolerated. The University is also committed to providing support to those who may have been impacted by incidents of sexual or gender-based harassment or misconduct and may provide various resources and support services to individuals who have experienced one of these incidents.

For more information: http://titleix.psu.edu/ or http://titleix.psu.edu/resources-penn-state-erie-the-behrend-college/

Online Assessment

This course may require you to have a webcam for class sessions and assessments. Classes and assessments may be conducted using Zoom or other technology selected by your instructor which may use your computer's webcam or other technologies to communicate, monitor, and/or record classes, class activities, and assessments. Please contact your instructor if you are unable to comply or have any questions or concerns.

Copyright of Class Materials

You may not share any information from this course (including notes and assignments) with others who are not currently registered for the course, nor post such information electronically without the permission of the instructor--this includes online note-taking/note-sharing services (See Penn State Administrative Policy AD-40). Also prohibited in the policy is the posting of audio, video, or photographs posted to social media sites or other publicly accessible resources. Unless you have my permission, you risk disciplinary sanctions.

Class Recordings

Video and audio recordings of class lectures will be part of the classroom activity. The recording of video and audio content is used for educational use/purposes and only may be made available to all students presently enrolled in the class. For purposes where the recordings will be used in future class session/lectures, any type of identifying information will be adequately removed.