Physics 4B- General Physics with Calculus
Phy 4B-L1, Fall 2018
Lecture (41745): Mo/We 8:00 am – 9:50 pm - Room: L-A 273
Lab (42370): W 10:30 pm – 1:20 pm – Room: LA-274

Instructor: Rosa Alvis ralvis@peralta.edu Office: A-274
Ofice hours: Monday: 10 – 11 am; Wednesday: 10-10:30 am and 1:20 -1:50 pm
by appointment and anytime through email or Canvas

Text: Physics for Scientists and Engineers with Modern Physics, By Giancoli, 4th Edition, 2008

Course Description: Physics 4B is the second semester of a two-semester survey course in calculus-based physics. Topics will include thermodynamcis, electrostatics, electricity, electric forces and fields, magnetic forces and fields, electromagnetism and AC and DC circuits. This course is designed to provide you with a basic knowledge of Physics in the form of theories, techniques, and principles. Emphasis is placed on the development of problem solving techniques and abilities, both individually and cooperatively. You will learn to use basic mathematical reasoning to explain and/or predict physical real life situations.

Prerequisites: Physics 4A and Math 3B

Homework: A list of problems from each chapter is assigned, but it will not be collected or counted for the final grade. Please keep a log of all your homework related work. I encourage each of you to get in the habit of using words to explain how you would approach each problem You will need to bring this notebook when you have questions about homework. I encourage you to discuss the homework problems with other students, and ask me as many questions as needed, but make sure you try to solve the problem before engaging in discussions with other students.

Worksheets: Worksheets will be provided throught the semester. These worksheets should be used to verify basic understanding of topic covered in class. These will not be collected, but you can compare your solutions with solutions posted on Canvas.

Tests and Final Exam: There will be three midterm examinations and a Final exam. The lowest midterm examination will be dropped and will not count towards the final grade. Each test/exam will include two sections: a short list of multiple-choice questions followed by a list of problems. The multiple-choice questions have a more conceptual focus and do not always require calculation. A set of equations will be provided for the exam. Remember, if you can't fully solve a problem, write down as much reasoning as you can; you may be closer than you think!
Please note that use of cell phones during all exams is prohibited. If you need a dictionary, you may use a paper dictionary. No electronic dictionaries are allowed. Please, understand that if a student is found using a cell phone during an exam, the exam will be removed, counted as zero, and will be counted for the final exam (will not be the one dropped).

Grading: The course grade will be determined as follows:

Lab reports – 20%
Midterm Exams – 50%
Final Exam – 30%

Letter grades will be assigned in accordance with the following:

87 to 100 %	A
70 to 86 %	B
50 to 69 %	C
40 to 59 %	D
< 40 %	F

Withdrawal from the Course: The administration of this institution has set deadlines for withdrawal of any college-level courses. Specific dates can be obtained from the Calendar of Instruction on the college website. It is the student's responsibility to handle withdrawal requirements from any class. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Attendance: Attendance is mandatory and will be taken every class period. An excess of two absences may result in the student being dropped from the class. If you are absent for a prolonged period of time due to unavoidable circumstances, please keep me informed. Please be aware that being dropped from a course may affect your status as an International Student or with the office of Financial Aid.

Incompletes: Incompletes are reserved for students who are passing the course with a very limited number of missed assignments and are unable for some unforeseeable reason to finish the course by the end of the semester. An example would be a student is passing a course with a grade of B or better before the final exam, and is unable to take the final exam due to an unforeseeable emergency.

Physics Mentoring: For help with math, there is the Math Lab located in the G building open from 10 am to 7 pm Monday through Thursday. For multiple subjects, there is the Tutoring Resource Center located in the Student Center open from 11 am to 1 pm and 4 - 6:30 pm. Monday through Thursday. Please check with them for schedules.

Special Accommodation: Please make an appointment with me as soon as possible if you
· need classroom or testing accommodations because of a disability;
· have emergency medical information to share with me;
· need special arrangements in case the building needs to be evacuated.

Students seeking disability related accommodations are encouraged to also register with the Disabled Students Programs and Services.

Academic Integrity: Honest work builds character, knowledge and skills. Integrity is a very important part of any learning process. Here is a list of things that will not be accepted:
1. Collaboration or copying on a test or exam.
2. Representing someone else's words, idea or data as your own without appropriate referencing.
3. Assisting another student in an act of academic dishonesty.
Do not risk cheating on an exam. If you are caught cheating or assisting in cheating your exam will count as 0 and it cannot be dropped. Another exam where you get a higher score will be dropped. It is not worth the risk.

Student Learning Outcomes (SLO's): At the end of the semester,
1) You should be able to explain and discuss both verbally and in written language the physics concepts listed in course content, as well as their relevance to everyday events and circumstances in a broad interdisciplinary context.

2) You should be able to use algebra, trigonometry, and calculus to set up mathematical descriptions of physical systems and to calculate measureable quantities that provide an understanding of the physical environment in terms of the concepts listed in the course content.

3) You should be able to set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify possible sources of error, implement techniques that enhance precision, reduce and interpret data, and report verbally and in written language the experimental data, results, and assessment of reliability.

Study Tips:
Read the relevant sections of the text before the lecture. After the lecture, read the material again and work through the homework problems relevant to the topics discussed in class. Also work through some additional problems given in the text when studying for exams, particularly those from the same sections as the assigned problems. Be sure to keep up with the material as it is covered; each section will build upon material studied in the previous section. Finally, ask questions. Ask questions during class, or feel free to approach me with any difficulties pertaining to the course. Also use the Moodle Forum to communicate with fellow classmates or me. I prefer the forum to the email because it is a way to encourage discussion and share them.

Canvas: Course syllabus, general information, homework, and midterm solutions will be posted on Canvas: **http://eperalta.org/fall2018/**. Your login information is as follows:
Username: Same as your school username, usually,the first letter of your name followed by your last name.
Password: Your student ID

Deadlines:

Last Day to Add:	Aug. 26, 2018
Last Day to Drop without "W":	Sep. 3, 2018
Last Day to Drop with "W":	Nov. 16, 2018

Final Comments about the class: If you need help, you may e-mail me or see me by special arrangement. Please feel free to ask questions or discuss any aspect of the class. Remember that the only dumb question is the one not asked.