## PHYS4A Syllabus

Course: \#57213

## LEC: T: 9:00AM-10:50 AM, F: 8:00AM-9:50AM

LAB: Th: 8:00AM-10:50AM

Instructor: Harinder Singh Bawa

Email: harinder.bawa@reedleycollege.edu, harinder.singh.bawa@gmail.com

Classroom: PHY70 (Tuesday, Thursday) and PHY76 (Friday)

## Office Hours: N.A (email me)

Course Objective: The main objective of the course is for the student to understand the laws/theories and principles of Classical Mechanics, properties of matter, gravitation, fluid mechanics, oscillatory motion and mechanical waves.
Students will gain skills in understand the complementary roles of experimental investigation and theoretical explanation in science, apply dimensional analysis to determine the units for an unknown quantity or to check the validity of equations, correctly report the units of an observable when it is measured or calculated and distinguish between important physical observables, such as velocity, acceleration and force.

## Basic Skills Advisories: ENG1A

Subject Prerequisites: MATH-5B - Math Analysis II (May be taken concurrently)

## Required Course Materials:

## Textbook: "Physics for Scientists and Engineers with Modern Physics", Giancoli, 4th edition, Pearson/Prentice Hall

 Publishers.You should bring a textbook, scientific calculator (or graphing), pencils, and paper or iPad (for notes) with you every class session.

Attendance: Students are expected to attend all class meetings, be on time, and be in class the entire class session. Calling me to tell me you will be absent does not excuse you. STUDENTS LEAVING CLASS BEFORE THE END OF CLASS WILL BE
COUNTED AS BEING ABSENT! Six (6) absences total or three (3) absences in the first three weeks of class may result in a drop from the course. However, if you decide to drop the course, it is your responsibility to make the drop official in the Administrations and Records office or else possibly receive a grade of $\mathbf{F}$.

Behavioral Standards: Your classmates and I would greatly appreciate that students in the class take care of any personal needs (i.e., using the restroom, getting a drink, sharpening a pencil) before class begins. Please turn your phone off when entering the class. You may not use your phone as a calculator. Do not bring guests to class.

Tardies: Students are expected to be on time. It is distracting, rude and unfair to fellow classmates and to the instructor when a student is late. It is your responsibility to notify the instructor (on a break or after class) that you are present if you arrive after roll has been taken.

## In class problem solving and HW:

There will in class problem solving sessions for many class sessions and those we couldn't finish in class would be homework assignments. The problems will be provided for you as worksheets in class. You will be graded on what is observed while you are in class. The problem solving sessions will be worth $\underline{15 \%}$ of your grade.

## Exams:

There will be three in-class exams and a comprehensive lecture final exam. The exam format may be work-out problems, multiple-choice, conceptual, or a combination of the three. Only standard calculators are allowed during the exam. The inclass exams contribute $\mathbf{3 0 \%}$ of your semester grade and final contribute $\mathbf{2 0 \%}$. The key to the success on the exams is preparation; DO THE HOMEWORK, attend the lectures, read the textbook and make sure you understand it, and ask questions if you don't understand. There are no make-up exams. If you miss an exam you will get a ZERO for that exam. Make up exams are not available except in documented extreme conditions. Notes from doctors or police officers (for car accidents) or jury summons will be the type of documentation accepted to allow a make-up exam. If you know that you will not be present in class for a scheduled exam, you must contact me PRIOR to the end of the class session within which the exam is given. Make up exams will be offered only for the occasion of your illness, a jury summons or an emergency (such as an auto accident). At end of quarter I will take the average of the three in-class exams and replace the lowest with the average. You must take ALL 3 exams in order to replace the lowest exam score by the average of the 3 scores!

Note: If there is a dispute in the grading of any quiz or exam, I will consider looking at them a second time only if it is handed back to me within 2 school days after I return them.

## Lab Reports:

This class has a laboratory that is mandatory. I will provide all lab reports for you and they will be due at the end of the lab session on the same day assigned (unless extra time is necessary.) Lab reports will be worth $\mathbf{1 5 \%}$ of your grade. Some lab sessions will be solely dedicated to in-class problem solving. There will not be any opportunities to make up a lab, so I will drop your lowest lab grade.

## Quizzes:

There are occasionally some activities and quizzes given in class, some are announced, and others are not. If you do not communicate with me *PRIOR TO THE END OF THE CLASS MEETING TIME* that you are not going to be present in class, then you will receive a score of ZERO for that quiz, and you will not be able to make up the activity or quiz. You may inform me in person, or by email. Sending a message through a classmate or friend disqualifies you from the exemption. This is YOUR grade, so YOU must communicate with me regarding your ability to be present. I do NOT want to know why you will miss class - just that you will not be present. You will only be able to use three "passes" for the entire semester. After you use up your three passes, you will receive zero points for your absence. Lowest quiz score will be dropped at end of quarter. Quiz will be worth $\underline{\mathbf{1 0 \%}}$ of your grade.

## In-Class Projects with Discussions:

There would be scientific simulation projects we do in class for many physical concepts and I will encourage students to come to participate and discuss with partners. This will be graded on a strictly participation basis and you need to write explanation after discussion with partners. The In-class discussion will be worth $\underline{10 \%}$ of your grade, with no drops.

## Where to find your grades:

I will put your grades on Canvas. You can also calculate it yourself at any time using the method above.

## Special Needs Requests:

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

## Academic Dishonesty:

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or is playing notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

## IMPORTANT DATES:

- The deadline to drop for a refund is January 25th
- The deadline to add a class is February 1st
- The deadline to drop a class to avoid a "W" is February 8th
- The final deadline to drop with a "W" is March 15
- Spring Recess: April $15^{\text {th }}-19^{\text {th }}$
- EXAM 1 — Friday, February $22^{\text {nd }}$ ( $8: 00 \mathrm{AM}-9: 50 \mathrm{AM}$ in PHY 70)
- EXAM 2 - Friday, March $22^{\text {nd }}$ (8:00AM - 9:50AM in PHY 70)
- EXAM 3 - Friday, April $26^{\text {th }}$ (8:00AM - 9:50AM in PHY 70)
- Final Exam: Tuesday May $21^{\text {st }}$ at 9 AM in PHY 70 - the room where the class is held.


## Class Cancellation Notification

If I must cancel class for reasons beyond my control, I will inform the Dean's office as soon as possible and there will be an official notification posted on the door. Finally, Canvas will be used to inform you of a class cancellation, which you can check online or on your cell phone if you download the app for your mobile phone. Please note that it is unlikely that I will be cancelling any classes, we have too much to do! If it has been a few minutes and I have not shown up, please do
not leave as if I am running late I will inform the prior instructor and they will let you know where I am and how long I will be. Please note again that I will probably not be late either, but this is just in case!

## Grading Policy:

| \% Grade for the Class | Letter Grade For the Class | Category of classwork | \% of Class Grade |
| :---: | :---: | :---: | :---: |
| 90-100\% | A | Exams <br> (In class + final) | 30\%+20\%=50\% |
| 80-89 \% | B | In-Class problem solving and HW | 15\% |
| 65-79\% | C | Lab Reports | 15\% |
| 55-64\% | D | Class Quizzes | 10\% |
| 0-54\% | F | In-Class project with discussions | 10\% |

Student Conduct: Students are expected to conduct themselves in a responsible manner as outlined by the board policy 5410. Conduct standards are designed to perpetuate the college's educational purposes, allowing students to enjoy the right of freedom to learn. Failure to adhere to the accepted standards will result in disciplinary action.

Accommodations for Students with Disabilities: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact the Disabled Student Services as soon as possible.

Plagiarism and Cheating: Cheating and plagiarism is prohibited in the class. Incidents of cheating and plagiarism will result a failing grade on the particular examination or assignment in question.

