**College Physics I with Algebra**

The Valencia College

Science Department, West Campus

PHY 2053C, CRN

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 Instructor: (Dr. Homaira Parchamy) Class Location: (Online)

 Email: (hparchamyaraghy@valenciacollege.edu) Class Day/Time: (Online)

 Office Hours: (Online) Lab Location: (NA)

 Office Location: (Online) Lab Day/Time: (NA)

 Office Phone: (Online) Credit Hours: 4

 Term: (Summer 2022, from May 9th to August 1st)

Hours:

Monday 12:00 pm-2:00 pm available for synchronous online office hours (via Zoom). Other times by appointment only.

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COURSE DESCRIPTION

Welcome to College Physics I with Algebra. This course is the first of a two-semester sequence in introductory physics that designed to learning the basic concepts of physics associated with college Trigonometric and Algebra level and offered primarily for students majoring in information technology, the biological sciences and pre-health professions. Special emphasis is placed on understanding major principles governing general phenomena in Nature, and mathematics is used as a tool to clarify concepts. Content includes Vectors, Linear motion in one and two dimensions, Forces and Newton’s laws of motion, Work and energy, Linear momentum and collision, Rotational motion and dynamics, Simple harmonic motion, Fluids, Temperature and heat, Lab experiments and data analysis.

STUDENT LEARNING OUTCOMES

The successful PHY 2053C student should be able to:

* Develop a good conceptual and analytical understanding of motion in one and two dimension, and also understanding forces and their effect on motion through Newton’s law of motion.
* An understanding of Work, Energy, Power, the concept of conservation of energy, linear momentum, Impulse, and rotational motion and its dynamic, and simple harmonic motion.
* Gain a basic understanding of the fundamental principle of fluid mechanics, and thermal physics, and apply these principles to solving problems.
* Develop professional ethics, laboratory and data analysis skills applicable to standard introductory physics labs.

PREREQUISiTES

High School Trigonometry or MAC 1114 or MAC 1147.

REQUIRED MATERIALS

* The required textbook is “Physics” by Cutnell & Johnson, 11th edition loose-leaf Version w/WileyPlus, ISBN:9781119496953, or WileyPlus stand-alone code, ISBN: 9781119497004. It is available in the bookstore or online.

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* You must register for the WileyPLUS component of the course through the class’ Canvas site.
* Compatible PC and software and Internet access home. All the information and course activities such as lecture notes, homework assignments, videos, tests, pre labs, lab instructions, etc., will be available in some Modules in Canvas. For instance, Module1 has included such as, lecture notes, lecture video, movies, homework assignments, and etc., about chapter 1-2 of the text book. The front page will provide the links where you can find important information about the course.

VALENCIA COLLEGE POLICIES:

**ATTENDANCE POLICY**

Federal financial aid and Valencia policy require that attendance in online courses is documented by engagement in an “academically-related activity”.

* You are required to complete the following for your online course during the first week of classes: **submit** an online assignment (Discussion/Student Introduction), and do the Quiz within “Start Here” Module in Canvas.
* Each chapter will have a lecture and videos that mentioned in the tentative schedule below.
* **Homework:** There will be graded homework assignments for every chapter we cover. The graded assignments will be done through WileyPLUS. You will be notified about your assignments and deadlines with **weekly announcement** or email through the Canvas.

MAKE-UP POLICIES

Students who will not be able to complete one assignment or take one test in time due to an excused reason (sickness, death in family, or other serious reason) and have a perfect participation record otherwise at the discretion of the instructor may be allowed to get a time extension for this particular assignment or test. The instructor may request a doctor’s note or other documentation to decide whether to allow a make-up.

No time extension or make-ups or late submissions for more than one assignment or test.

No time extension or make-up for the final exam.

WITHDRAWAL DEADLINE AND POLICY

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdrawals), “A student who withdraws from class before the withdrawal deadline of (**July 5, 2022 at 11:59 pm**) will receive a grade of “W.” A faculty member is permitted to withdraw a student from the faculty member's class up to the beginning of the final exam period, for violation of the faculty member's attendance policy, as published in the faculty member's syllabus. A student is not permitted to withdraw from this class after the withdrawal deadline; if you remain in the class after the withdrawal deadline, you can only receive a grade of A, B, C, D, F or I. An I grade will only be assigned under extraordinary circumstances that occur near the end of the semester. If you receive an I, the work missed must be made up during the following semester, at which time you will get an A, B, C, D or F. Failure to make up the work during the following semester will result in you getting a grade of F in the course. Any student who withdraws from this class during a third or subsequent attempt in this course will be assigned a grade of “F.”

 “The professor will not withdraw any student for any reason; it is the responsibility of the student to withdraw themselves before the withdrawal deadline and to be aware of the date of the withdrawal deadline.”

Students on financial aid should consult a financial aid advisor or counselor before withdrawing from a course; there may be financial implications to the student, which he or she must know about, to make an informed decision before withdrawing from a course. Students with some scholarships who withdraw or are withdrawn from a class must pay the college for the cost of the class. Other scholarship sponsors may also require repayment.

Notice to Students Seeking to Withdraw from a Course(s)

Before you withdraw from a course, you should be aware that course withdrawals:

• Will increase the cost of your education

• May affect your financial aid status

• May affect your transfer grade point average

• May result in your having to pay the full cost of instruction fee to retake the course

• May affect your anticipated graduation date

• May result in your being denied access to limited access programs

• May affect your eligibility for the Honors Program

• May affect your immigration status if you are attending Valencia on a nonimmigrant visa

• Will result in your required repayment of course fees paid by a Bright Futures scholarship.

To withdraw from a course(s) you must access registration on Atlas. The Withdrawal Deadlines for each term are published in the Academic Calendar in the online official catalog.

Before you withdraw:

• Talk with your professor to discuss your progress in the course

• See a Student Services staff member to discuss how a withdrawal will affect your career and education plans and/or the status of your financial aid

COMMUNICATION WITH THE INSTRUCTOR

Virtual hours are held via the conferences tool (**Zoom**) on designated dates/times as indicated in the syllabus. You may contact me through the **Canvas Inbox** Monday-Friday. I will respond to your message within 48 hours with the exception of days. Messages sent on weekends will be answered on Monday. Scheduled Zoom meeting for College Physics I with Algebra PHY-2053C-CRN

ACADEMIC HONESTY STATEMENT

*All work submitted by students is expected to be the result of the student’s individual thoughts, research, and self-expression unless the assignment specifically states ‘group project.’*Any submissions that are too similar for coincidence will receive no credit.

**Completing your on-line assignments, including Discussions and lab report components, etc., you must ANSWER QUESTIONS INDIVIDUALLY AND USE YOUR OWN WORDS. DO NOT COPY/PASTE. YOUR ANSWERS ON ESSAY QUESTIONS WILL BE CHECKED FOR PLAGIARISM.**

Penalties will be imposed as following:

* First attempt of cheating/plagiarism on a test or the Final exam – immediate withdrawal with an “F” grade in course in transcripts.
* First attempt of cheating/plagiarism on all other assignments (discussion posts, homework, etc.) – “0” grade for the whole assignment. Second attempt – immediate withdrawal with an “F” grade in course in transcripts and notification sent to student and academic services.

ACADEMIC INTEGRITY AND HONESTY

The rules and regulations of Valencia community college concerning Academic honesty (College Policy 6HX28:10-16) will be followed. Please read this policy in your Student Handbook or on the Valencia College (VC) web site.

COLLEGE CATALOG/STUDENT HANDBOOK/POLICY MANUAL

* A full description of all College policies can be found in the College Catalog at: [Catalog](http://www.valenciacollege.edu/catalog)
* The Student Handbook can be found at: [Handbook](file:///Users/homairaparchamy/Desktop/Handbook)
* The Policy Manual: [General Counsel](https://valenciacollege.edu/about/general-counsel/)
* For important dates: [Calendar](http://valenciacollege.edu/calendar/)

STUDENT RESOURCES:

BEHAVIORAL HEALTH'S STUDENT ASSISTANCE PROGRAM

Valencia is committed to making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help that may assist them with psychological issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, at home or work. Students have 24 hours unlimited access to the Baycare Behavioral Health's confidential student assistance program phone counseling services by calling (800) 878-5470.

STUDENTS WITH DISABILITIES INFORMATION

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class; accommodations will not be applied retroactively. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities. West Campus SSB, Rm. 102 Phone: 407-582-1523 Fax: 407-582-1326.

VALENCIA COLLEGE CORE COMPETENCIES:

The faculty of Valencia College has identified four core competencies that define the learning outcomes for a successful Valencia graduate. These competencies are at the heart of the Valencia experience and provide the context for learning and assessment at Valencia College. You will be given opportunities to develop and practice these competencies in this class. The four competencies are:

THINK

Think clearly, and creatively, analyze, synthesize, integrate, and evaluate in the many domains of human inquiry.

VALUE

Make reasoned judgments and responsible commitments.

COMMUNICATE

Communicate with different audiences using varied means.

ACT

Act purposefully, effectively, and responsibly.

GRADING AND EVALUATION

* Grading Scale:
* 90 – 100% = A
* 80 – 89% = B
* 70 – 79% = C
* 60 – 69% = D
* Below 60% = F

The typical Valencia College grading scale will be used. The grade will count the assessments using the following proportions:

* First week of class Assignment (02%)
* Four Tests (Each tests 10%) (40%)
* Online Homework Assignments (20%)
* Pre-Labs (8%)
* Lab Works (18%)
* Final Exams (12%)

IMPORTANT DATES

The last day to drop this course is: MAY 16, 2022 by 11:59 PM

The last day to withdraw with a grade of “W” from this course is: JULY 5, 2022 by 11:59 PM

FINAL EXAM: JULY 29, 2022

No Online Class: MAY 30, 2022 (Memorial Day), JUL 04, 2022 (Independence Day)

IMPORTANT INFORMATION DURING COVID-19:

Virtual Support Services and Resources Valencia College is concerned about our students and community members during the COVID-19 situation. Below, is a list of resources and virtual support services we have assembled into various categories to help you succeed. Top Four Resources:

ACADEMIC ADVISING

Visit [Student Support Services](https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fvalenciacollege.edu%2Fstudents%2Fstudent-services%2Fsupport.php&data=04%7C01%7Chparchamyaraghy%40valenciacollege.edu%7C68afe49415034faf847a08d96332a7f9%7C0e8866953d1741a88544135b0a92a47c%7C1%7C0%7C637649891494583390%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=jppG1qCcGDRiRa67GDojXCMxdWZu27Pen3nd5BC1Qzk%3D&reserved=0). You can now connect with an Answer Center advisor through Zoom. Our virtual Answer Center, student services advisors are available to assist you with questions about admissions, financial aid, assessment, transcripts, residency and more. Visit [Answer Center](https://valenciacollege.edu/students/answer-center/) for more information.

Learning support SERVICES

Learning support services provides students with academic support through distance tutoring, face to face tutoring at the campuses, writing consultations, library services, and resources. Tutoring is offered in most academic disciplines including math, science, foreign languages, English for academic purposes (EAP), computer programming and writing assistance for any course. Assistance with library research can be accessed online through Atlas or the tutoring LibGuide. For more information on how to access tutoring and library research assistance, please visit the college-wide Learning Support Services LibGuide at: [Tutoring Services](https://libguides.valenciacollege.edu/c.php?g=1014597&p=7348794) and self-enroll in the tutoring courses in Canvas. This is where you will access the links to live tutoring (via Zoom), as well as the schedule of tutors, times, and services.

QUICK START LIBRARY GUIDE

Use this handy guide to learn about and gain access to all the library resources from home or on-the-go.  Visit [Quick-start](https://nam01.safelinks.protection.outlook.com/?url=http%3A%2F%2Flibguides.valenciacollege.edu%2Fquickstartlibraryguide&data=02%7C01%7Cjdanilowski%40valenciacollege.edu%7C7369b36d08d64d605b8908d7e5636a7b%7C0e8866953d1741a88544135b0a92a47c%7C1%7C0%7C637230087453788485&sdata=7052DiCKNIb%2FHO2kJMJujmsty7Vg%2FemJD0YP7Sjdhj8%3D&reserved=0) to get started! **Keep Learning:** Visit [keep-learning](https://nam01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fvalenciacollege.edu%2Fstudents%2Fonline%2Fkeep-learning%2F&data=02%7C01%7Cjdanilowski%40valenciacollege.edu%7C7369b36d08d64d605b8908d7e5636a7b%7C0e8866953d1741a88544135b0a92a47c%7C1%7C0%7C637230087453768496&sdata=rkMLBzjCab%2BmKE%2FK7l29M7VFc2xWaUe1qQenJ57iQYw%3D&reserved=0) if you are still unable to find what you are looking for, please visit our Keep Learning webpage to get information on a wide range of resources and online learning tips.

LEARNING TECHNOLOGY SUPPORT

Visit: [Learning Technology Support](https://outlook.office365.com/owa/calendar/LearningSupportEastTechnology%40valenciacollege.edu/bookings/) to get live support for Canvas and Microsoft Office, as well as device support for iPads and MacBook.

COURSE SCHEDULE

A suggested course schedule is found below. The schedule is tentative and subject to change. The learning goals below should be viewed as the key concepts you should grasp after each week.

| Module | Week | Date | Topics | Important |
| --- | --- | --- | --- | --- |
| Start Here & 1 | 01 | **Chapter 01** | Syllabus review, The Fundamental Nature of Physics, Different Systems of Units, The Role of Units in Problem Solving, …  | Student Introduction, attendance to the online lab orientation,Quiz, pre-lab(M4b) |
| 1 | 02 | **Chapter 02** | Kinematic in One Dimension/Trigonometry Facts, Vectors, Scalars, Lecture &videos, … | HW-Ch.01/Lab-M4b, HW-Ch.02  |
| 2 | 03 | **Chapter 03** | Kinematic in Two Dimension, Lecture &videos, … | HW-Ch.03/Lab-M9c, **Test 1** |
| 2 | 04 | **Chapter 04** | Forces and Newton’s of Motion/ Newton’s Laws, Friction Force, Lecture & videos, … | HW-Ch.04/Lab-M16c |
| 3 | 05 | **Chapter 05** | Dynamics of Uniform Circular Motion, Lecture & videos, … | HW-Ch.05/Lab-M20b, **Test 2** |
| 3 | 06 | **Chapter 06** | Work and Energy, Lecture & videos, … | HW-Ch.06/Lab- M21a |
| 3 | 07 | **Chapter 07** | Impulse and Momentum, Lecture & videos, … | HW-Ch.07/Lab-T4a |
| 4 | 08 | **Chapter 08** | Rotational Kinematics, Lecture & videos, … | HW-Ch.08/Lab-F9a, **Test 3** |
| 4 | 09 | **Chapter 09** | Rotational Dynamics, Lecture & videos, … | HW-Ch.09/Lab-M25a  |
| 5 | 10 | **Chapter 10** | Simple Harmonic Motion, Lecture & videos, … | HW-Ch.10/ Lab- S1a **Test 4** |
| 5 | 11 | **Chapter 11** | Fluids, Lecture & videos, … | HW-Ch.11 |
| 5 | 12 | **Chapter 12** | Temperature and Heat, Lecture & videos, … | HW-Ch.12 |
|  |  |  |  | **Final Exam** |

**PHYSICS LABS**

Your lab report (9 Labs) needs to include the following items: (Students should write a lab report individually for each lab experiment in your own words.)

* A Pre-lab sheet with questions and or problems that you need to complete (before you start working on the data sheet), need to submit it at the due date before the opening dates of the experiments in the Canvas.
* Lab report components that need to include:
* An introduction where you explain about the purpose of the experiment, in your own words,
* All the data sample sheet (s) I will provide the data sample sheet, you don’t need to take measurements for the experiments, the experimental data will be added in the sheets, and then you use this data to do all the calculations and answer any of the questions. It will be posted on Canvas one day prior to the opening date of each experiment (it is required that you get approval from the lab assistant **during the due date).**
* A conclusion where you compare the experiment with theory, and explain how the experiment has helped you understand a certain concept(s) in Physics.

Once you have completed your Lab report components including all the components mentioned above, submit it at the due date of each experiment in the Canvas.

**DISCLAIMER**

As many factors may affect the development and progress of a class, exceptions to the above-stated policies or schedules may be made at the discretion of the instructor.