# **University Physics I-21232**

**PHYS-2325** 

RT 2022 Section 005 3 Credits 01/18/2022 to 05/15/2022 Modified 01/24/2022



### **Course Modality**

Face to face (In person on campus)

### Meeting Days

MW

### **Meeting Times**

3:30 PM - 5:00 PM

## **Meeting Location**

SPBR102



### Welcome and Instructor Information

Welcome to University Physics I - PHYS 2325—I'm delighted that you have chosen this course! One of my passions is to know as much as I can about the universe around me, and I can hardly wait to pass that knowledge on to you. I will present these physical principles in the most coherent and exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by email built in canvas, if you can not access that through my HCC email. In all our communications, II highly recommend that you use your HCC e-mail. The best way to really discuss issues is in person and I'm available during posted office hours to tackle your questions. My goal is for you to walk out of the course with a better understanding of yourself and the universe around, as well as with a good grade. So please contact me by email within canvas, whenever you have a question.

### What's Exciting About This Course

Physics is the study of the entire universe and everything in it, from the smallest subatomic particles to enormous objects such as planets, stars and even entire galaxies. Physics is how we describe the motion of objects, topics such as electricity, magnetism and light and study energy in its various forms (for example, mechanical or thermal). It is amazing that the universe works in a way that we, as curious human beings, can describe, explain and even predict how phenomena occur in the world around us. Certainly, this sounds exciting to me and hopefully to you as well!

### My Personal Welcome

Welcome to University Physics I—I'm delighted that you have chosen this course! One of my passions is to know as much as I can about the universe around me, and I can hardly wait to pass that knowledge on to you. I will present these physical principles in the most coherent and exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

#### **Preferred Method of Contact**

You may reach me via email built in canvas (preferably). Please use your student HCCS.edu email for communication. I will only send correspondences to your student account so please check it regularly as you are responsible for content of messages. Students may access email via Canvas or student sign-ins. Please allow sufficient time for a response. I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages at some time before or on Monday morning.

#### Office Hours

Monday, Wednesday, 2:00 PM to 3:00 PM, Location: TBA

## Course Overview

First semester of a two semester, calculus-based physics course designed specifically for chemistry, physics, and engineering majors. Topics include principles and applications of classical mechanics, kinetic theory, fluid flow, and thermal physics, with emphasis on problem solving.

#### Requisites

PHYS 2325 requires college-level reading, writing and maths skills, including calculus. You are most likely to succeed if you have already taken and placed into GUST 0341 (or higher) in reading and be placed into MATH 2413 (or higher). If you have enrolled in this course having satisfied these prerequisites, you have a higher chance of success than students who have not done so. Please carefully read and consider the repeater policy in the <a href="https://example.com/html/>HCCS Student Handbook">HCCS Student Handbook</a>.

### **Department Website**

Physics | Houston Community College - HCC (hccs.edu)

## Core Curriculum Objectives (CCOs)

PHYS 2325 satisfies the physical science requirement in the HCCS core curriculum. The HCCS Physics Discipline Committee has specified that the course address the following core objectives:

- Critical Thinking. Students will demonstrate the ability to engage in inquiry and analysis, evaluation and synthesis of information, and creative thinking by demonstrating problem solving skills on homework and exams.
- Communication Skills: Students will demonstrate effective development, interpretation and expression of ideas through written, and visual communication.
- Quantitative and Empirical Literacy: Students will demonstrate the ability to draw conclusions based on the systematic analysis
  of topics using observation, experiment, and/or numerical skills by completing textbook reading assignments, completing
  assignments, and answering questions on quizzes and/or exams.

## Student Learning Outcomes and Objectives

## **Program Student Learning Outcomes (PSLOs)**

- 1. To provide the student a basic and practical understanding of physics (basic qualitative and quantitative concepts, and systematic problem-solving strategies) and recognize its relevance in our daily lives.
- 2. To prepare students to meet with success in higher level Physics and other science courses when they transfer to four-year universities.
- 3. To prepare students for professional programs requiring a mastery of General Physics, such as Physics, Chemistry, Mathematics and engineering.

## Course Student Learning Outcomes (CSLOs)

Upon completion of PHYS 2325, the student will be able to:

- 1. Use vector analysis and calculus to solve kinematics and dynamics problems.
- 2. Apply Newton's laws of motion to analysis of dynamics problems.

- 3. Relate the concept of total work done to the change in kinetic energy of a particle.
- 4. Identify different forms of energy and transformation of energy.
- 5. Apply conservation laws (conservation of energy and linear momentum) to the analysis of dynamics of a particle or a system of particles.
- 6. Apply Newton's laws of motion to rotational motion.
- 7. Understand basics of Thermodynamics

## **Learning Objectives**

Upon successful completion of this course, students should be able to:

- 1.1 Solve one and two-dimensional kinematics problems.
- 1.2 Analyze motion of free-falling object, projectile motion, and particle in circular motion.
- 2.1 Use Newton's Laws of motion in solution of dynamics problems.
- 2.2 Draw free body diagrams in situations involving forces.
- 3.1 State the Work Energy -Theorem and apply it to the analysis of dynamics problems.
- 4.1 Define potential energy and relate it to conservative forces;
- 4.2 Relate internal energy to the work done by non conservative forces.
- 5.1 State the Law of Conservation of Energy.
- 5.2 Use the Law of Conservation of momentum in the analysis of collisions.
- 6.1 Solve simple problems involving rotational dynamics.
- 6.2 State the conditions for equilibrium and apply them to solution related to equilibrium.
- 7.1 Sove basic thermodynamic problems.

## Departmental Practices and Procedures

## **Department Specific Instructor and Student Responsibilities**

As your Instructor, it is my responsibility to:

- · Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- · Facilitate an effective learning environment through learner-centered instructional techniques
- · Provide a description of any special projects or assignments
- · Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- · Provide the course outline and class calendar that will include a description of any special projects or assignments
- · Arrange to meet with individual students before and after class as required

#### As a student, it is your responsibility to:

- · Attend class in person
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- · Read and comprehend the textbook
- · Complete the required assignments and exams
- · Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

## **Program-Specific Student Success Information**

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content.

Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- · Reading the chapter before coming to class
- · Attending class in person
- · Completing assignments
- · Solving as many end-of-chapter problems as possible

There is no short cut for success in this course; it requires studying the material and solving problems using the course objectives as your guide.

## Instructional Materials and Resources

#### **Instructional Materials**

This course participates in the Houston Community College *First Day Program*. A discount has been applied to the required digital course materials. The discounted charge has been added to students' tuition and fee bills.

Students will access course materials through a link in Canvas. Instructions for opting out of the HCC First Day Program are also posted in Canvas. Students who opt out will still be responsible for obtaining required course materials.

### Temporary Free Access to E-Book

There is no need for temporary cod to access the e-book as this course participates in

First Day /Inclusive Access Program.

### **Physics for Scientists and Engineers**

Author: Raymond A. Serway | John W. Jewett, Jr.

Publisher: Cengage Edition: 10th

ISBN: 978-1-337-55327-8

Availability: First Day Access Program

This course participates on the First Day Access Program and students are not required to purchase a textbook separately.

### Other Instructional Resources

#### Courseware

No other resource is required. However, for this course homework assignments will be delivered and managed electronically and a reliable internet and access device (laptop or a tablet) is required.

## Course Requirements

Item	Weight
Assignment/ Homework	20 %
Exams (on each module)	60 %
Final Exam	20 %

### **Grading Formula**

Range Notes	
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Grade	Range	Notes
A	90 - 100	
В	80 - 89	
С	70 - 79	
D	60 - 69	
F	< 60	

### Assignments, Exams, and Activities

Туре	Weight	Topic	Notes
Homework Assignmen	20%	Homework are assigned per chapter in WebAssign	Quantitative and qualitative questions/problems
Exams	60%	Four Modules with 15% weight each.	Exams will be per module.
Final Exam	20%	All Chapters	Final Exam is compulsory and mandatory.

## Instructor's Practices and Procedures

### **Incomplete Policy**

If a student completed 75% to 80% of the assessments and missed one major assignment, and reported why the assignment was missed. The instructor may grant the student an opportunity to complete the particular assignment and complete the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

## Missed Assignments/Make-Up Policy

Homework assignments have to be completed and submitted online as scheduled. Students will be given ample time to complete and submit, typically a homework quiz will be open for for about a week during regular term like this one. Late homework is not accepted. There is no make-up on missed homework quizzes.

Examinations will consist of three non-cumulative regular exams (60 %) plus a comprehensive final (20%). Make-up exams will not normally be given, so make every effort to take exams on their scheduled dates. In the event that you must miss a regular exam, I will count the grade made on the final exam as the grade for the missed exam (for one missed exam only) and calculate the final course grade accordingly. If you do not miss any of the regular exams, I will replace your lowest exam score with your final exam score if the final exam grade is higher. This is intended to provide you a "second chance" if you do not do well on a particular exam. Remember that the final exam will be comprehensive (meaning that it will cover all of the material from the whole semester, not just the last part). Please note that all students are required to take the final (no student can be exempted).

### **Academic Integrity**

You are expected to be familiar with the College's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

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https://www.hccs.edu/studentprocedures (https://www.hccs.edu/studentprocedures)

#### **Attendance Procedures**

The HCCS attendance policy states: "Students are expected to attend classes regularly". This course is a hybrid class which means attendance is mandatory, for days that we meet on campus as scheduled. Students are responsible for materials covered during their absences. Although it is the responsibility of the student to drop a course for non-attendance, the instructor has full authority to drop a student for excessive absences. A student may be dropped from a course for excessive absences after the student has accumulated absences in excess of 12.5% of the hours of instruction (including lecture and laboratory time)."

Note that for this course, FOUR meeting classes missed would exceed the 12.5% limit. If circumstances significantly prevent you from attending classes, please inform me. I realize that sometimes outside circumstances can interfere with school, and I will try to be as accommodating as possible, but please be aware of the attendance policy.

For this regular term, Spring 2022 term, the last date to withdraw from the course is April, 4 2022. I urge any student who is contemplating withdrawing from the class to see me first! You may be doing better than you think. Either way, I want to be accessible and supportive. I do not believe in "weed out" classes, and I consider you to be much more than just a name or number! Note my email address above; if you need assistance, I'm here to help.

Students desiring to withdraw from a class must do so by the above withdrawal date by filling out a withdrawal form at the registrar's office. After this date, instructors can no longer enter a grade of "W" for the course for any reason.

#### **Student Conduct**

Students are expected to maintain cordial and professional conduct as would be expected of an academic environment and as laid out in the Student Handbook. Please be considerate in your correspondence with the instructor and/or any classmates as well as in any in-person interaction.

Please arrive and leave class on time so as to cause little disruption and avoid missing important class information and/or assignments.

Academic integrity is also considered to be a part of appropriate conduct.

Every student as well as the professor has the right to work in a healthy learning environment based on mutual respect and adherence to rules. Conduct unbecoming of such an environment will not be tolerated.

## Instructor's Course-Specific Information Devices

The use of electronic devices (cell phones, laptops, etc.) by students in the classroom is up to the discretion of the instructor. Any use of such devices for purposes other than student learning is strictly prohibited. If an instructor perceives such use as disruptive and/or inappropriate, the instructor has the right to terminate such use. If the behavior continues, the student may be subject to disciplinary action to include removal from the classroom or referral to the dean of student services

Cell phone or electronic device use in class is NOT PERMITTED, particularly during testing/labs. It is understandable that a need arises to tend to personal or urgent matters, but that should not be habitual nor disruptive. A student may excuse themselves from class to tend to a pressing matter. However, cell phone use is otherwise not permitted in class.

No communication or photographs may be taken during class either, of persons or course material (ie exams, keys, quizzes, etc.) using a device and no testing material may be removed from the class at any time.

If students choose to use laptops or tablets (or other electronic device with WIFI, cellular or communication capabilities including cell phones and watches), they should be for classroom related purposes only and during times permitted.

Cell phones are not calculators and will not be permitted to be used as a calculator.

## **Faculty Statement about Student Success**

Success in academics is a result of dedication and perseverance. Plan your course work and be up to date on your assignments. Ask questions and get help if you need assistance.

### **Faculty-Specific Information Regarding Canvas**

This course section will use Canvas (<a href="https://eagleonline.hccs.edu">https://eagleonline.hccs.edu</a> (<a href="https://eagleonline.hccs.edu">https://eagleonline.hccs.edu</a>) to supplement in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

#### Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

## 血 HCC Policies and Information

## **HCC Grading System**

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
А	Excellent (90-100)	4
В	Good (80-89)	3
С	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0
AUD	Audit	0
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0

Grade	Grade Interpretation	Grade Points
СОМ	Completed. Given in non-credit and continuing education courses.	0

### Link to Policies in Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: https://catalog.hccs.edu/ (https://catalog.hccs.edu/)

In it you will find information about the following:

- · Academic Information
- · Academic Support
- · Attendance, Repeating Courses, and Withdrawal
- · Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- · Equal Educational Opportunity
- Financial Aid TV (FATV)
- . General Student Complaints
- · Grade of FX
- Incomplete Grades
- · International Student Services
- · Health Awareness
- Libraries/Bookstore
- · Police Services & Campus Safety
- . Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

## **Link to HCC Academic Integrity Statement**

https://www.hccs.edu/student-conduct (https://www.hccs.edu/student-conduct) (scroll down to subsections)

### **Campus Carry Link**

Here's the link to the HCC information about Campus Carry:

https://www.hccs.edu/campuscarry (https://www.hccs.edu/campuscarry)

### **HCC Email Policy**

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID (https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

## Office of Institutional Equity

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: <a href="https://www.hccs.edu/eeo">https://www.hccs.edu/eeo</a> (https://www.hccs.edu/eeo)

### **Ability Services**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <a href="https://www.hccs.edu/accessibility">https://www.hccs.edu/accessibility</a>)

#### Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271

Houston, TX 77266-7517 or Institutional.Equity@hccs.edu (mailto:Institutional.Equity@hccs.edu)

https://www.hccs.edu/titleix (https://www.hccs.edu/titleix)

#### Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/ (https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/)

#### **Student Success**

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content.

Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- · Reading the textbook
- · Attending class in person and/or online
- · Completing assignments
- · Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

## **Canvas Learning Management System**

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

#### **HCC Online Information and Policies**

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: <a href="https://www.hccs.edu/online/">https://www.hccs.edu/online/</a> (<a href="https://www.hccs.edu/online/">https://www.hccs.edu/on

### Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <a href="https://eagleonline.hccs.edu/">https://eagleonline.hccs.edu/</a> (<a href="https://eagleonline.hccs.

### Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- · Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- · Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- · Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- · Provide the course outline and class calendar that will include a description of any special projects or assignments
- · Arrange to meet with individual students during office hours, and before and after class as required

#### As a student, it is your responsibility to:

- · Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- · Complete the required assignments and exams
- · Ask for help when there is a question or problem
- . Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the <u>HCCS Student Handbook</u> (<a href="https://www.hccs.edu/studenthandbook">https://www.hccs.edu/studenthandbook</a>)

#### Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

#### EGLS3

The EGLS<sup>3</sup> (Evaluation for Greater Learning Student Survey System (https://www.hccs.edu/egls3)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS<sup>3</sup> surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

https://www.hccs.edu/egls3 (https://www.hccs.edu/egls3)

## **Housing and Food Assistance for Students**

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

#### **Student Resources**

#### **Tutoring**

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the <a href="https://www.hccs.edu/tutoring">HCC Tutoring Services (https://www.hccs.edu/tutoring)</a> website for services provided.

#### Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <a href="https://library.hccs.edu/">https://library.hccs.edu/</a>).

#### **Supplementary Instruction**

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <a href="https://www.hccs.edu/supplemental-instruction">https://www.hccs.edu/supplemental-instruction</a>)

#### **Resources for Students:**

https://www.hccs.edu/covid19students (https://www.hccs.edu/covid19students)

#### **Basic Needs Resources:**

https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/ (https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/)

### Student Basic Needs Application:

https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds)

#### COVID-19

Here's the link to the HCC information about COVID-19:

https://www.hccs.edu/covid-19 (https://www.hccs.edu/covid-19)

#### Instructional Modalities

### This course is in In-Person (P) modality

It is face-to-face course with scheduled dates and times as described in above.

## **Copyright Statement**

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publically posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me or to the Manager of Student Conduct and Academic Integrity.

## **Syllabus Modifications**

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

When	Topic	Notes		
		Date	Activity	Due Date
		19-Jan	CH1 lec HW1-CH1	22-Jan
		24-Jan	HW2-CH2	29-Jan
		26-Jan	CH2 - lec. Cont.	
		31-Jan	CH3 Lec HW3	5-Feb
		2-Feb	CH4 Lec HW4	9-Feb
		7-Feb	CH4 Lec	
		9-Feb	CH5 Lec HW 5(02/06)	13-Feb
		14-Feb	HW6-CH6 lec	20-Feb
		16-Feb	Exam I	
		21-Feb	CH7 Lec, HW 7	26-Feb
		23-Feb	CH7 Lec	
		28-Feb	CH8 Lec, HW 8	6-Mar
		2-Mar	CH 8 Lec	
		7-Mar	CH9 Lec HW 9	12-Mar
		9-Mar	CH9 Lec	
		14 March - 20 March	Spring Break	
		21-Mar	CH10 Lec HW 10	27-Mar
		23-Mar	Exam II	
		28-Mar	CH10 Lec	
		30-Mar	CH 11 Lec HW 11	5-Apr
		4-Apr	CH12 Lec HW 12	9-Apr
		6-Apr	CH13 Lec HW 13(apr 2)	10-Apr
		11-Apr	CH14 Lec HW 14(apr 8)	12-Apr
		13-Apr	Exam III	
		18-Apr	CH18 Lec HW 18	22-Apr
		20-Apr	CH19 Lec HW 19	23-Apr

When	Topic	<b>N23t-d</b> spr	CH20 Lec HW 20 (04/24)	28-Apr
		27-Apr	CH21 Lec HW 21	1-May
		2-May	Exam IV	
		4-May	Last Day of Instruction.	
		9-May	Final Exam	

### Additional Information

### **Departmental/Program Information**

<u>US Physics/Astronomy Job Outlook Handbook (https://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm)</u>

## **Process for Expressing Concerns about the Course**

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair. The Division Chair's information at the bottom of this syllabus.

### NATURAL SCIENCES DEPARTMENT ADMINISTRATION

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