

COURSE SYLLABUS

PHYS 4A Mechanics and Wave Motion: Syllabus

Fall 2026

(Updated on 8/13/2026)

Table of Contents

Instructor Information	2
Course Information	2
Required Course Materials.....	2
Course Specifics.....	5
Course Policies & Safety Issues	6
University Policies	9
University Services	9
Subject to Change Statement	11
Course Calendar	11
Tentative Course Schedule	12

Instructor Information

- Instructor Name: [Pei-Chun Ho](#)
- Department: [Physics](#)
- Email / Telephone: peiho@mail.fresnostate.edu / (559) 278-5990
- Office: McLane 255 (Doorbell on McLane 254)
- Student Support Hours: (days/times):
Monday & Wednesday at McLane 255: 12:15 PM – 1:15 PM
Tuesday & Thursday at McLane 162 or 255: 7:45 PM – 9 PM

Course Information

- Course Modality: [in-person](#)
- Course ID: PHYS4A-07-75366-2267
- Units: [3](#)
- Class Meeting Location & Time: McLane 162 & Tu, Th 6:30 PM – 7:45 PM
- Canvas: fresnostate.instructure.com
- Prerequisites:

Proficiency in High-School Algebra, Geometry, and Trigonometry

Math 75/Calculus I or MATH 75A & B/Calculus with Review IA& IB (definitely taken in previous semesters): inequalities, functions, graphs, limits, continuity, differential calculus, introductory integral calculus, and applications.

Math 76/Calculus II (taken either concurrently or in previous semesters): Techniques and applications of integration, improper integrals, conic sections, polar coordinates, and infinite series.

- Course description:
- This three-unit course will introduce the fundamentals of classical Newtonian mechanics. Topics include linear and circular motions; analysis of various forces, free-body diagrams; studies of various energies: work, kinetic energy, potential energy, mechanical energy, energy in general; systems of particles; linear and angular momentum; rigid-body motion and rotational dynamics; gravity; wave motion and fluids. In addition, the course fits into the curriculum General Education (G. E.) Breadth B1 when taken with PHYS 4AL. (catalog.fresnostate.edu).
- ♦ It is usually expected that students will spend approximately 2 hours of study time outside of class for every one hour in lecture. Since this is a 3-unit class, you should expect to study an average of 6 hours outside of class each week.

Required Course Materials

- I. *Immediate Access (IA)* is set up for this course in [Canvas](#) for this course by choosing “[Macmillan Learning](#)”, then “[Achieve](#).”

- Enrolling into an Immediate Access (IA) course means that all of the materials are delivered to students digitally through the **Canvas** system.
- Course Name: **2026 Fall PHYS4A**
- Course ID: **2tfz8p**
- IA contains an eBook, prelecture activities, and homework, and iClicker-Reef from MacMillan Learning-Achieve:
 - ISBN: **9781319439538R180**
 - eBook of “**University Physics, Volume 1**” (by **OpenStax**), which is licensed under a Creative Commons Attribution 4.0 International License (CCBY4.0). A PDF format of this textbook can “**Download for free at** <https://openstax.org/details/books/university-physics-volume-1> . It can also be accessed on student’s Achieve course website.
 - Prelecture activities (prelecture video and bridge assignment (by **Achieve**),
 - Homework assignments (by **Achieve**).
 - iClicker-Reef operated through APP (on laptops or Mobile device) is required for in-class quick quizzes. The iClicker-Reef Class is “**PHYS4AHO26F**” (remember that it **has been synced with the Achieve course**).

Check that **location services are enabled** in the iClicker student APP.
- **All Immediate Access (IA) communication will be delivered to the student’s Fresno State email account.** It is the STUDENT’S RESPONSIBILITY to read all communication coming from the Kennel Bookstore. They should look for email headers such as “IMPORTANT TEXTBOOK INFORMATION” or “REMINDERS” and check the SPAM folder!
- ALL IA materials are accessible for the first few days of the start of the semester to all students enrolled. After the opt-out date of the term, students who did not OPT OUT of the materials will be charged the cost of the materials on their Fresno State student account. This information can be found in their welcome letter email from the Kennel Bookstore, in the IA VitalSource link in your Canvas, or in your syllabus.
- OPTING OUT means that students DO NOT want the digitally delivered materials the Campus is offering. STUDENTS will then be responsible for getting the materials on their own – usually at a higher cost. If students OPT OUT, their digital IA access will be revoked.
- **IMPORTANT!** If students OPT OUT of the materials, they will also OPT OUT of the required ADAPTIVE materials associated with the IA eBook that may include homework, quizzes, tests, etc.... This access will be turned off after the last date to opt-out for the semester.
- We ask students to **NOT purchase IA digital materials directly from the Publisher website** or make any other outside purchase that would require them to enter a credit card or pay out of pocket. This will result in a DOUBLE charge! If they are OPTED IN, the campus will bill their Fresno State student account after the opt out date.
- **THE LAST DAY TO OPT OUT of IA materials this FALL 2026 is listed below.**

Session Start/End Dates	Last Day to Opt-Out	Student Acct Charged	Student Payment Due
Fall 2026 Regular Session 8/24/26 - 12/17/26	9/4/2026	9/14/2026	9/18/2026

It is the STUDENT'S responsibility to OPT OUT if they do not want to buy these IA materials. Once they click on the OPT OUT link in their Canvas page, they will receive a confirmation email within 24 hours. If they do not receive an email within 24 hours, please contact ecarmona@mail.fresnostate.edu

- **DO NOT pay for your materials through Canvas! If the link provided requires an "ACCESS CODE" it will be delivered to the student in their IA VitalSource link or on any IA emails sent to their Fresno State email account** from the Kennel Bookstore. ALL CHARGES will be billed to their Fresno State student account.
- Student accounts will be charged according to the schedule above ...Charges will be due according to the schedule above. Students may pay on their Fresno State student account either online or at Joyal Administration.
 - To make an online payment, go to <https://my.fresnostate.edu>, click on Student Self-Service > Student Center > My Finances > View "eBills/Make a Payment."
 - To see your current balance, go to Student Self-Service> Student Center > My Finances > Account Inquiry.
- If students are on financial aid, scholarship, or other benefit programs, they are still obligated to pay on their account...They should put this money aside.
- If students enroll **after** the Opt-out date, they will have **24 hours** to contact ecarmona@mail.fresnostate.edu to review the materials and decide if they want to continue with the IA materials or choose to purchase elsewhere and OPT OUT of the IA materials program.
- Any questions about the IA program can be directed to ecarmona@mail.fresnostate.edu

If students have issues with accessing the materials, students should contact their professor first to confirm professors have made the content available to students on their Canvas page. We ask students to make sure their search engine pop-up blockers are off. If students still have issues, please visit us at the Kennel Bookstore Course Materials Department with your laptop! If you would like to send an email, please contact ecarmona@mail.fresnostate.edu or jugonzales@mail.fresnostate.edu for further assistance.

- II. Scientific Calculator (Graphing Calculator is "Not" allowed for this course).
- III. A Fresno Stat email account. Instructor will not respond to the emails not sent through the Fresno State system.
- IV. Zoom (available to all Fresno State students)
https://fresnostate.edu/help/students/video_conferencing/

Course Specifics

This course will include assigned prelecture activities, which includes prelecture video and bridge assignments (i.e., Macmillan Learning – Achieve accessed through IA) that should be completed before students come to each in-person class meeting (via Zoom Meeting). During the in-person class sessions there will be lectures, demonstrations, quick quizzes, and discussions. Associated assigned reading for each lecture can be found in the eBook. In order to facilitate your understanding of assigned readings, lecture notes in PDF format can be available after each class meeting, which may review portions of the readings, but they will not serve as a substitute for reading the materials. Important additional information will be presented during the lectures, which will be included in the exams.

Course goals: Upon completion of this course, students are expected to be able to analyze, predict, and model the linear or rotational motion of macroscopic objects under the influences of various external forces.

Student Learning Outcomes: Students will develop a strong foundation to identify, analyze, and solve problems with physical models within the core disciplines described in the text book of University Physics, which are universally recognized as standards in undergraduate physics education.

PHYS 4A along with PHYS 4AL is also a General Education (GE) course in the area B1, which is expecting students to understand and actively explore fundamental principles in the Physical Sciences and the methods of developing and testing hypotheses used in the analysis of the physical universe.

GE Program ePortfolio Requirement for Students (APM 215). Students can upload one of their best PHYS 4AL lab reports to Canvas in order to fulfill the requirement of GE assessment.

Course Requirements/Assignments:

- I. Prelecture Activities, including prelecture video and bridge assignment, need to be completed 1 hour before the class meeting time. They will be assigned at least a week ahead and can be accessed through Achieve. (3% of weighted grade)
- II. Quick Quizzes: In order to encourage students to preview the ebook contents, perform prelecture activities before class, focus learning in the classroom, and engages in interactive learning, 1-10 questions will be randomly given as quick quizzes in most of the class meeting time. Total of the quick-quiz score, which will be counted as 6% of the weighted grade. Full participant points will only be given when students complete all quick-quiz questions.
- III. Homework will be assigned via Achieve and usually given at the end of each week. Homework passes the deadline will be counted as zero. (15% of weighted grade)
- IV. **All Achieve assignments will be terminated on Sunday midnight right before the final exam Monday.**
- V. Three midterms will be offered and total weighs 51%.

VI. Final exam will be given according to the University Final Exam (25% of weighted grade).

Besides the regular Office hours student can talk to the instructor through Zoom, other communications are preferred done through **Fresno State email**. *When sending an email message you **must** use a specific format. Type your last name and first initial in the 'subject' line along with the course number (PHYS 4A). Example: Doe, John PHYS2A.*

Instructions for significant assignments: If your course has a project, a paper, or other significant assignment, please give detailed requirements and instructions on how to complete them, such as length, fonts and/or number of references that must be used for the project/paper.

Attendance: Attendance is mandatory.

Grading policy:

A grade of 55% or better is required to pass this class.

Table 1 Assignment and Percentage Distribution

Assignment	Percent
Prefecture Activities (Video & Bridge Assignment)	3 %
In-Class Quick Quizzes	6 %
Homework	15 %
Three Midterms	51 %
Final Exam	25 %

Table 2 Distribution of Letter Grade to Percent

Letter Grade	Upper-limit Percentage	Lower-limit Percentage
A	100%	85%
B	84.99%	70%
C	69.99%	55%
D	54.99%	45%
F	44.99%	0%

Course Policies & Safety Issues

Classroom Behavior

Both the instructor and the students are to adhere to high standards of professionalism, common courtesy, and respect for others. Please refrain from the following behaviors, bearing in mind that if your behavior interrupts the class you may be asked to leave the class for the rest of the period:

- Coming to class late, please use the back doors for entrance. If you must leave early, please sit near a door.
- During lecture sessions, mute all cell phones, laptops and other electronic devices. You only need one electronic device to run iClicker-Cloud.
- Do not speak or write to anyone in a rude or aggressive fashion, or speak of others in a disrespectful fashion
- The University Policy on Disruptive Classroom Behavior ([APM 419](#)) is well worth reading and can be found in the Class Schedule and the Academic Policy Manual.
- If you are absent from class, it is your responsibility to check on announcements made while you were away.

If you are absent from class, it is your responsibility to check on announcements made while you were away.

- ❖ Audio and video recordings of class lectures are prohibited unless I give you explicit permission to do it. Students with an official letter from the Services for Students with Disabilities office may record the class if SSD has approved that service.”

Late work and make-up work policy: Either delayed or make-up exams for three midterms and final exam will not be allowed by the instructor. If a midterm is missed for a compelling reason (e.g. illness documented by a physician’s note), the part of the grade that midterm would have counted will be voided, and the rest of the grade will be counted as 100%. If the final exam is missed for a compelling reason (e.g. illness documented by a physician’s note), the student will receive a grade of “I” (incomplete) for PHYS 4A for the semester. It will also be the student’s responsibility to contact the university administration in a timely manner, and make the necessary arrangements to remove the “I” grade. Please check “the California State University Fresno General Catalog” for regulation regarding the “I” grade. Only students who can document very compelling reasons to miss final exams, e.g. with a physician’s note, will be eligible for incompletes; other students missing the final exam will receive 0% for the grade of final exam.

Fresno State has continually focused on the safety and well-being of our campus community by following state and local public health guidelines as well as California State University policies. Any COVID-19-related questions or concerns can be directed to campus Office of Environmental Health & Safety/Risk Management at 559.278.8422

Additionally, listed below are resources and quick links regarding updates on the coronavirus, campus and community resources, testing sites and more.

- Visit the [Center for Disease Control \(CDC\) website for the latest updates on the virus](#)

- For updated regarding the Fresno State campus community and response, click [Fresno State Coronavirus Updates](#).

Plagiarism Detection: The campus subscribes to Turnitin, a plagiarism prevention service, through Canvas. You will need to submit written assignments to Turnitin. Student work will be used for plagiarism detection and for no other purpose. The student may indicate in writing to the instructor that they refuse to participate in the plagiarism detection process, in which case the instructor can use other electronic means to verify the originality of their work.

Course AI Policy: Students may use artificial intelligence (AI) tools as learning resources—for example, to clarify concepts, review background information, or obtain additional explanations. However, AI must not replace the student's own thinking and problem-solving. Students may not use AI to generate procedures, calculations, explanations, or answers for homework, assignments, or in-class quizzes. All submitted work must reflect the student's own reasoning and effort.

Supplemental Instruction

Supplemental Instruction (SI) is provided for all students enrolled in this course who want to improve their understanding of the material. SI sessions are led by a student who has already mastered the course material and been trained to facilitate group sessions where students can meet to compare class notes, review and discuss important concepts, develop strategies for studying, and prepare for exams. The SI leader attends this class and communicates regularly with the instructor to ensure that accurate information is given. Attendance at SI sessions is free and voluntary for any student enrolled in this course. Students may attend as many times as they choose.

The Supplemental Instruction (SI) leader and SI schedule for this class are below:

- Name: **Ankit Sharma**
- Email: koreusx07@mail.fresnostate.edu

Dispute Resolution: If there are questions or concerns that you have about this course that you and I are not able to resolve, please feel free to contact the Chair of the department to discuss the matter.

- Chair's name: Doug Singleton
- Department name: Physics
- Chair's email: dougs@mail.fresnostate.edu
- Department phone number: (559) 278-5281

Intellectual Property: All course materials, including but not limited to the syllabus, readings, quiz questions, exam questions, and assignments prepared by the instructor are property of the instructor and University. Students are prohibited from posting course materials online (e.g., Course Hero) and from selling course materials to or being paid for providing materials to any person or commercial firm without the express written permission of the professor teaching this course. Doing so will constitute both an

academic integrity violation and a copyright violation. Audio and video recordings of class lectures as well as images of chat or messages shared during course sessions are prohibited unless I give you explicit permission in advance. Students with an official letter from the Services for Students with Disabilities office may record the class if SSD has approved that service. Otherwise, recordings of lectures are included in the intellectual property notice described above. These provisions exist regardless of the modality of the course. That is they apply to in-person, hybrid and online courses.

Student Ratings of Instruction: In the final weeks of the semester, you will be asked to complete a short survey to provide feedback about this class. The primary goal of student ratings is to help your instructor improve the class. Feedback will also be reviewed by the department chair and the college dean. You will be given 15 minutes of class time to complete student ratings. Please offer feedback honestly and thoughtfully. Your participation is appreciated. You can access your student rating surveys and get more information at [Fresno State Student Ratings for Instruction \(SRI\)](https://studentaffairs.fresnostate.edu/financialaid/policies/sap/index.html)

University Policies

Students with Disabilities: Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. For more information, contact Services to Students with Disabilities in the University Library, Room 1202 (278-2811).

Financial Aid Satisfactory Academic Progress Standards and Appeals Process:
<https://studentaffairs.fresnostate.edu/financialaid/policies/sap/index.html>

The following University policies can be found on the web at:

- [Adding and Dropping Classes](#)
- [Cheating and Plagiarism](#)
- [Computers](#)
- [Copyright Policy](#)
- [Disruptive Classroom Behavior](#)
- [Honor Code](#)
- [Title IX](#)

Fresno State is committed to fostering a safe, productive learning environment for all students. Title IX and CSU policy prohibit discrimination on the basis of sex, which includes sexual harassment, domestic and dating violence, sexual assault, sexual exploitation, and stalking. We understand that sexual violence can impact a students' *ability to be successful* in the learning environment. We encourage students who have experienced sexual misconduct *to seek information on where to report from any member of our faculty or staff in order to ensure that the university can provide students with the necessary resources and supportive measures.*

As an instructor, I have a mandatory reporting responsibility as a part of my role. It is my goal that you feel comfortable sharing information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep the information you share private to the extent possible. However, I am required to report any information I receive regarding sexual misconduct or information about a crime that may have occurred during your time at Fresno State.

Students can report incidents of alleged sexual misconduct to either or both of the following resources:

Office of Compliance and Civil Rights | occr.fresnostate.edu | 559.278.5003
Fresno State Police Department | fresnostate.edu/police | 559.278.8400

Students can also report other incidents of discrimination or harassment to:

Office of Compliance and Civil Rights | occr.fresnostate.edu | 559.278.5003

Students can access *confidential support* from two separate resources on campus:

Counseling Services | studentaffairs.fresnostate.edu/health/counseling | 559.278.2734
Survivor Advocacy Services | fresnostate.edu/survivoradvocate | 559.278.6796

Pregnancy or Related Conditions:

[Pregnant Students](#) or those with related conditions should contact the Title IX Coordinator in the Office of Compliance and Civil Rights for assistance. The Title IX Coordinator can coordinate specific actions to prevent sex discrimination and ensure the student's equal access to educational programs or activities.

Office of Compliance and Civil Rights | occr.fresnostate.edu | 559.278.5003

[Parent scholars](#) provides information on priority registration and other support for parenting students.

[Services for Students with Disabilities](#) can also provide assistance with [accommodations](#).

If you have concerns and you are unsure who to contact, please visit the [Concern & Action Guide](#).

Emergency Information: In the event of an emergency, everyone in the campus community becomes a partner in the response. To ensure you are prepared and remain calm you must make yourself familiar with campus protocols. To contact the Fresno State Police Department call 559.278.8400 from your cell phone or 911 from a campus phone. Prior to an emergency, assess your environment for options depending on the emergency. Identify all possible exit routes, in an emergency always use the closest most safe exit. Once you exit the building go to the predetermined evacuation assembly

point, if that is unavailable then go to an open safe space away from the emergency. Identify where and how you can secure yourself inside if you need to shelter in place or hide from a threat. Be prepared to help guide those around you and assist individuals who may be in need. Additional information can be found at www.fresnostate.edu/emergency

University Services

The following University services can be found on the web at:

- [Associated Students, Inc.](#)
- [Students with Disabilities](#)
- [Dream Success Center](#)
- [Library](#)
- [Learning Center Information](#)
- [Student Health and Counseling Center](#)
- [Academic Success Coaching](#)
- [Survivor Advocacy](#)
- [Writing Center](#)

Subject to Change Statement

THIS SYLLABUS AND SCHEDULE ARE SUBJECT TO CHANGE IN THE EVENT OF EXTENUATING CIRCUMSTANCES.

Course Calendar

Date	Exam	Points
Tue. & Wed., 9/15 & 16 / 2026 8:30 AM – Pencils down @ 4:30 PM	1st Midterm Bulldog Testing Center	100
Tue. & Wed., 10/13 & 14 / 2026 8:30 AM – Pencils down @ 4:30 PM	2nd Midterm Bulldog Testing Center	100
Mon. & Tue., 11/9 & 10 / 2026 8:30 AM – Pencils down @ 4:30 PM	3rd Midterm Bulldog Testing Center	100
Tue. & Wed., 12/15 & 16/2026	Final Exam Bulldog Testing Center	100

Date	Exam	Points
8:30 AM – Pencils down @ 4:30 PM		

Tentative Course Schedule

(May be given as a separate document)

Following are schedules showing class meeting dates for Tuesday-Thursday course.

Table 3 Fall 2026 Tentative Course Schedule: Tuesday, Thursday Courses

Day	Date	Topic	Reading Assignment
1	Tues., Aug 25	Course Syllabus & General Rules Fundamental Quantities, Units, Significant Figures (study on students' own & will test on Midterm 1) 1-D Kinematics	Math Review On Sapling (Self Test) Syllabus Posted on Canvas Ch1 Units and Measurement 1.1 The Scope and Scale of Physics 1.2 Units and Standards 1.3 Unit Conversion 1.4 Dimensional Analysis 1.5 Estimate and Fermi Calculations 1.6 Significant Figures 1.7 Solving Problems in Physics (study on students' own; end-of-chapter problems of Tipler Chapter 1 will be assigned but not collected and will be included in the exams) Ch3 Motion along a straight line 3.1 Position, Displacement, and Average Velocity 3.2 Instantaneous Velocity and Speed 3.3 Average and Instantaneous Acceleration 3.4 Motion with Constant Acceleration
2	Thurs., Aug 27	1-D Kinematics	Ch3 Motion along a straight line 3.4 Motion with Constant Acceleration 3.5 Finding Velocity and Displacement from Acceleration
3	Tues., Sept 1	Vector Addition	Ch2 Vectors 2.1 Scalars and Vectors 2.2 Coordinate Systems and Components of a Vector 2.3 Algebra of a Vectors

Day	Date	Topic	Reading Assignment
4	Thurs., Sept 3	2-D Kinematics	Ch4 Motion in 2 and 3 Dimensions 4.1 Displacement and Velocity Vectors 4.2 Acceleration Vector
5	Tues., Sept 8	2-D Kinematics & Projectile Motion	Ch4 Motion in 2 and 3 Dimensions 4.3 Projectile Motion
6	Thurs., Sept 10	Relative & Circular Motion	Ch4 Motion in 2 and 3 Dimensions 4.5 Relative Motion in 1 and 2 Dimensions 4.4 Uniform Circular Motion
7	Tues., Sept 15	Relative & Circular Motion	Ch4 Motion in 2 and 3 Dimensions 4.4 Uniform Circular Motion
8	Thurs., Sept 17	Newton's Laws	Ch5 Newton's Laws of Motion 5.1 Forces 5.2 Newton's 1 st Law 5.3 Newton's 2 nd Law 5.4 Mass and Weight 5.5 Newton's 3 rd Law Ch13 Gravitation 13.1 Newton's Law of Universal Gravitation
9	Tues., Sept 22	Forces & Free-Body Diagrams	Ch5 Newton's Laws of Motion 5.7 Drawing Free-Body Diagrams 5.6 Common Forces
10	Thurs., Sept 24	Forces & Free-Body Diagrams	Ch6 Applications of Newton's Laws 6.1 Solving Problems with Newton's Laws 6.3 Centripetal Force Ch13 Gravitation 13.4 Satellite Orbits 13.5 Kepler's 3 rd Law of Planet Motion
11	Tues., Sept 29	Friction	Ch6 Applications of Newton's Laws 6.2 Friction 6.3 Centripetal Force
12	Thurs., Oct 1	Work & Kinetic Energy	Ch7 Work and Kinetic Energy 7.1 Work 7.2 Kinetic Energy 7.3 Work-Energy Theorem

Day	Date	Topic	Reading Assignment
			7.4 Power
13	Tues., Oct 6	Conservative Forces Work & Potential Energy	Ch8 Potential Energy and Conservation of Energy 8.2 Conservative and Non-Conservative Forces 8.1 Potential Energy of a System
14	Thurs., Oct 8	Conservation of Energy	Ch8 Potential Energy and Conservation of Energy 8.3 Conservation of Energy 8.4 Potential Energy Diagrams
15	Tues., Oct 13	Center of Mass	Ch9 Linear Momentum and Collisions 9.6 Center of Mass
16	Thurs., Oct 15	Conservation of Momentum	Ch9 Linear Momentum and Collisions 9.1 Linear Momentum 9.2 Impulse and Collisions 9.3 Conservation of Linear Momentum
17	Tues., Oct 20	Conservation of Momentum Perfectly Inelastic Collision (i.e., Totally Inelastic Collision)	Ch9 Linear Momentum and Collisions 9.1 Linear Momentum 9.2 Impulse and Collisions 9.3 Conservation of Linear Momentum 9.4 Types of Collisions
18	Thurs., Oct 22	Conservation of Momentum Perfectly Inelastic Collision (i.e., Totally Inelastic Collision)	Ch9 Linear Momentum and Collisions 9.1 Linear Momentum 9.2 Impulse and Collisions 9.3 Conservation of Linear Momentum 9.4 Types of Collisions
19	Tues., Oct 27	Perfectly Inelastic Collision (i.e., Totally Inelastic Collision) Explosion	Ch9 Linear Momentum and Collisions 9.3 Conservation of Linear Momentum 9.4 Types of Collisions 9.7 Rocket Propulsion
20	Thurs., Oct 29	Rotational Kinematics	Ch10 Fixed Axis Rotation 10.1 Rotational Variables 10.3 Relating Angular and Translational quantities 10.2 Rotation with constant angular Acceleration
21	Tues., Nov 3	Rotational Kinetic Energy & Moment of Inertia	Ch10 Fixed Axis Rotation

Day	Date	Topic	Reading Assignment
		Parallel Axis Theorem	10.4 Moment of Inertia and Rotational Kinetic Energy 10.5 Calculating Moment of Inertia
22	Thurs., Nov 5	Torque Newton's 2 nd Law for Rotation Rotational Dynamics	Ch10 Fixed Axis Rotation 10.6 Torque 10.7 Newton's 2 nd Law for Rotation
23	Tues., Nov 10	Static Equilibrium	Ch12 Static Equilibrium 12.1 Conditions for Static Equilibrium 12.2 Examples of Static Equilibrium
N/A	Thurs., Nov 12	Holiday, Veterans Day	
24	Tues., Nov 17	Static Equilibrium	Ch12 Static Equilibrium 12.1 Conditions for Static Equilibrium 12.2 Examples of Static Equilibrium
25	Thurs., Nov 19	Conservation of Angular Momentum	Ch11 Angular Momentum 11.2 Angular Momentum 11.3 Conservation of Angular Momentum 11.4 Precession of a Gyroscope (Possibly Omitted)
26	Tues., Nov 24	Simple Harmonic Motion (i.e., S.H.M.)	Ch15 Oscillations 15.1 Simple Harmonic Motion 15.2 Energy in Simple Harmonic Motion 15.3 Comparing Simple Harmonic Motion and Circular Motion 15.4 Pendulum (Possible Omitted)
N/A	Thurs., Nov 26	Thanksgiving Break	
N/A	Tues., Dec 1	Thanksgiving Break	
27	Thurs., Dec 3	Fluid Statics	Ch14 Fluid Mechanics 14.1 Fluids, Density, and Pressure 14.2 Measuring Pressure
28	Tues., Dec 8	Fluid Statics	Ch14 Fluid Mechanics 14.3 Pascal's Principle and Hydraulics 14.4 Archimedes' Principle and Buoyancy

Day	Date	Topic	Reading Assignment
29	Thurs., Oct 29	Fluid Dynamics Last Day of Instruction	Ch14 Fluid Mechanics 14.5 Fluid Dynamics 14.6 Bernoulli's Equation

Table 3 Finals Week Schedule

Finals week	Days	Dates
Final Exam Preparation & Faculty Consultation Days:	Thursday and Friday	Dec. 10 and 11
Final Semester Examinations	Monday – Thursday	Dec. 14 to 17
Final Exam in this course	Tuesday	Dec. 15