# De Anza College

Syllabus: Physics 50 PHYS Do50 31Z

Spring quarter, 2022

Instructor: Sewan Fan

### Contact Me

- You may send an email directly to my campus address, fansewan@fhda.edu.
- Another way is by Canvas, for more information: How do I send a message from within my Canvas Course?
- Email: fansewan@fhda.edu
- Office hours normally one hour before Friday lecture
- Mobile: (831) 593-9604



- Canvas Zoom Office hours: Normally 10 minutes before zoom meetings begins and send email if need to have an office hour
- The instructor would reply to emails within 48 hours, although during the day I check messages frequently and usually reply sooner than that. If you have not heard from me within 48 hours of sending your message, I probably did not receive it, so please contact the instructor again.

For best effect in email please add a title "Physics 50 class"

Please note, due to the on going virus pandemic, this course is delivered in a synchronize real time online format

That is, regular online meetings by way of zoom would be conducted at the scheduled times as stated in De Anza College schedule for this course

# Physics zoom meeting ID

Zoom meeting ID for remote online class meetings would be available in a Canvas module

Lectures online Tuesday and Thursday 05:30 PM-07:20 PM

## Course Description

A study in basic problem solving techniques in mechanics as a preparation for PHYS 4A.

Please refer to the course outline for further details

Course Outline (deanza.edu)

# **Course Objectives**

- **A.** Review relevant mathematics
- **B.** Examine kinematics
- C. Analyze Newton's laws
- **D.** Investigate momentum
- E. Categorize and investigate energy
- F. Discuss rotation with applications to problem solving

# **Expanded Description: Content and Form**

- **A.** Review relevant mathematics
- 1. Discuss basic algebra concepts
- 2. Examine graphing techniques
- 3. Explain trigonometry
- **4.** Analyze vector methods
- **B.** Examine kinematics
- 1. Discuss displacement
- 2. Define velocity
- **3.** Define acceleration
- 4. Analyze the kinematical equations and problem solving
- **a.** Discuss one dimensional kinematics
- **b.** Discuss two dimensional kinematics
- C. Analyze Newton's laws
- 1. Discuss Newton's first law
- 2. Discuss Newton's second law
- a. Define forces
- b. Analyze in detail extensive problem solving utilizing the second law
- 3. Discuss Newton's third law
- **D.** Investigate momentum
- **1.** Define momentum
- 2. Explain the conservation of momentum
- E. Categorize and investigate energy
- **1.** Explain work
- 2. Define the forms of energy
- a. Discuss kinetic energy
- **b.** Define potential energy
- **3.** Discuss the work-energy theorem
- **F.** Discuss rotation with applications to problem solving
- 1. Explain rotational kinematics
- 2. Analyze rotational dynamics
- 3. Define angular momentum

#### Textbook

Required Textbook

Physics 5<sup>th</sup> Edition by James S. Walker with Mastering Physics access code

18 week access code ISBN: 9780136781356

Important Orientation Information

Students are required to attend an online orientation before they can begin the online class:

• Online Orientation: First meeting of class Thursday 4/7/22 at 5:30PM

Please note, a zoom meeting ID would be available to attend online orientation in Canvas within Modules or send by email for first week of class

Students who cannot attend orientation must view the recorded version of the orientation.

### **Exams**

There are **three exams** for this course as listed below:

- Midterm 1: Thursday 4/28/22 at 5:30PM (become familiar with online proctoring tool)
- Midterm 2: Thursday 5/26/22 at 5:30PM (become familiar with online proctoring tool)
- Final exam: Tuesday 6/21/22 at 6:15PM

If you require any special accommodation for the proctored midterm and final, please contact me **as soon as possible** to set up **online proctoring** or make arrangements

# Required Materials and Technology

- Computer or mobile device capable of accessing the Internet (see Canvas Computer Specifications)
- Fairly recent Mac or PC (not more than three years old) with a current operating system
- Current browser (Firefox or Chrome are preferable)
- High-speed Internet access for viewing online videos and more
- Google and Microsoft accounts that will allow you to access additional tools
- A working microphone

#### Course Calendar with Due Dates

If you require special accommodations for the midterm and final exams, please let the instructor know well in advance of the scheduled date so can make arrangements.

If you're having difficulty with the course, please contact the instructor as soon as possible.

| Spring qua  | rter 2022               |                 |
|-------------|-------------------------|-----------------|
| Tentative C | ourse Schedule          |                 |
| Week of     | Topics                  | <u>Chapters</u> |
| 4/4         | Introduction to Physics | 1               |
|             |                         |                 |

| 4/11        | One Dimensional Kinematics<br>Vectors in Physics  | 2, 3        |
|-------------|---|-------------|
| 4/18        | Vectors in Physics<br>Two Dimensional Kinematics  | 3, 4        |
| 4/25        | Two Dimensional Kinematics<br>Newton's Laws of Motion   | 4, 5        |
| A           | All sections First Midterm Thursday, 4/28   | /22         |
| 5/2         | Applications of Newton's Laws<br>Rotation   | 6           |
| 5/9         | Work and Kinetic Energy   | 7           |
| 5/16        | Potential Energy and Conservation of Energy<br>Gravitation  | 8           |
| 5/23        | Linear Momentum and Collisions  | 9           |
| No cla      | ass Monday 5/30/22 Memorial day   |             |
| A           | All sections Second Midterm Thursday, 5/  | 26/22       |
| Last d      | ay to drop with a grade of W is Friday 5/2  | 27/22       |
| 5/30        | Rotational Kinematics and Energy  | 10          |
| 6/6         | Rotational Dynamics and Static Equilibrium  | 11          |
| 6/13        | Gravity   | 12          |
| *:          | ***Final Exam Tuesday June 21st, 2022***  | **          |
|             | ote, for final exam format to be decided and students noon, a working microphone and be able to communicate |             |
| For details | s of spring quarter dates, please visit the <u>Academic Calendar (d</u>                                     | leanza.edu) |
|             |   |             |

Details for each assignment are found within the Canvas course.

| Assignments   | Weight |
|---|--------|
| End of Chapter home work Assignments Discussions, Self assessment | 15%    |
| Quizzes   | 5%     |
| Midterm 1 and 2 Exams   | 50%    |
| Final Exam  | 30%    |
| Total   | 100%   |
| Passing Course Grade  | 60%    |

# Grading are as follows:

98 percent or above for "A plus"

92 to 97.9 percent for "A"

90 to 91.9 percent for "A minus"

88 to 89.9 percent "B plus"

82 to 87.9 percent for "B"

80 to 81.9 percent for "B minus"

78 to 79.9 percent for "C plus"

70 to 77.9 percent is "C"

There is no "C minus" grade

68 to 69.9 percent "D plus"

62 to 67.9 percent "D"

60 to 61.9 percent "D minus"

Below 60% "F"

Please note, there is no incomplete grade provided

#### Time Commitment & Recommended Skills

- This course has total of 4 **quarter units** and will take approximately **20 hours per unit.** Your time commitment may vary based upon your own level of experience with web technologies.
- You are also expected to submit work and begin reading and submitting assignments based on the assigned due dates if posted for that assignment.
- Although this class is designed for beginning Canvas users, you should have the following:
  - Basic computer skills (word processing, e-mail, file management)
  - o Basic Internet skills (use of browser, searches, uploading/downloading files)
  - Familiarity with discussion boards
  - An open mind and willingness to try new things

## When will Grades be Posted?

# Quiz and midterm exams grades

The grades would normally be available at the next following week of class.

## Submission deadlines

Quiz, midterms and /or papers not graded before the assignment due date. This is for both of our benefits.

Instructor would address questions and comments submitted with assignments at the time of grading that specific assignment.

This is not a self-paced course, and you would be required to work together as a class within the live zoom meetings and certain group/partner online laboratory activities.

Therefore, the quiz and assignments are date-restricted to open as appropriate for the assignments.

It is entirely possible that date may be set incorrectly, so please let me know if you should have access to something, and it hasn't opened yet.

# Late Policy

There is no make up or late work accepted or redo of discussions, self assessment, homework, quiz, midterm exams and final exam.

It is strongly recommended that you draft (and save) all assignments in Microsoft Word (or other word processing program) and then **copy and paste** the information into discussion forum postings.

That way you will have a copy saved on your computer should anything go wrong. Keep a copy of all of assignments you wish to include in your computer.

Quiz and Midterm grades would be posted in the grade book within 7 days after the due dates.

If a grade is not posted, then the assignment was missing in the appropriate drop box folder.

Check the grade book and drop box throughout the course to review quiz and midterm feedback.

When possible, there would also be a hard copy score sheet with all your scores available for viewing after each midterm exam.

If you have questions or concerns about a grade, please contact me ASAP. **Do not wait until final grades have been posted to discuss missing assignments or missing grades in the gradebook**.

Contact the instructor in advance if you are going to miss an assignment.

Timely communication is an e-learning best practice.

Prior email notice to the instructor in sufficient time to allow for discussing an alternative schedule if needed.

One missed work might be excused with circumstances on a case by case basis and make decisions accordingly.

If an emergency arises that prevents you from completing your work on time, please email me as soon as possible so that arrangements can be made for you to keep up in the class.

Emergencies are defined as anything which is serious and unexpected.

Emergencies cannot be written on the calendar in advance.

Examples of emergencies are: heart attacks, car accidents, a serious health crisis of the student or in the student's immediate family.

Examples of non-emergencies are: family weddings, vacations, conferences or any other event which can be planned around.

Excused Makeup Work - There is no make up work or turn in assignments early or late for this course

Up to 1 homework, discussion and/or self assessment might be excused if good reason is provided and notified early by email if possible

One homework, discussion and/or self assessment might be excused if good reason is provided.

Excused means your 1 missed work not used to count against your total score

# **Exceptions to the above**

Internet line drop, power outage, or other situations

Please contact the instructor early to be excused if you have internet connection problems or other items

# Made the wrong choice on quiz and exams

It is the student's responsibility to make the correct choice on quiz and exams.

The instructor would not help students fix their mistakes on selecting the wrong choice for quiz and exams to help student get a higher score that they like.

## Incorrectly marked questions on quiz and exams

If there arises on quiz and or exams incorrectly marked questions then up to maximum of 1 week to report to the instructor to possibly make corrections

After one week past, no change to quiz or exam scores possible

Again, please report incorrectly marked questions within 1 week from exam date not more than one week.

No adjustments would be made after one week from exam

### **Extensions**

Please complete all assignments on time to avoid needing extensions

Due to end of chapter homework are done online using publisher learning platform, there is no extension provided to open up homework assignments for early or late submissions

Please help us out, complete all end of chapter homework assignments on time to avoid asking for extensions

It is the student's responsibility to check assignment due dates from time to time to ensure completing all assignments

#### **Time Zone Error**

Also, please note, due to publisher learning platform, please do not try to do the end of chapter homework assignments at 3 hours before the deadline to avoid triggering a time zone error that closes the assignment earlier than expected.

That is, the deadline time for an assignment may not be according to your local time zone but set for another time zone made default by the publisher.

# **Attending Internationally**

Also, if you are not in the United States, the publisher learning software to do the homework might not be accessible in your country.

## The next higher letter grade

Please do not send email to instructor to request for next higher letter grade to your liking

Please help us out, again, please do not send email to instructor asking to change your letter grade to the next higher letter grade to a letter grade that you like

Requests to round up your score to the next higher range to obtain a higher letter grade would not be entertained

**Incompletes** - (I's) will not be provided.

## Special Learning Needs Related Accommodations

"Students who have been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorized for the current quarter. If you are not registered with DSS and need accommodations, please go to the DSS office in the Registration & Student Services Building (RSS) – Room 141 for information on eligibility and how to receive support services. You can also go online to <a href="https://www.deanza.edu/dsps/">https://www.deanza.edu/dsps/</a> (Links to an external site.) for additional information."

DSS Location: RSS Building, Suite 141

Phone: 408-864-8753

On the web: https://www.deanza.edu/dsps/ (Links to an external site.)

Email: DSS@deanza.edu

# Attendance and Drops

Students who demonstrate regular online attendance and participation will receive maximum benefit from their investment in this course. Students who miss the orientation session would normally be dropped from the class. Until the 75% point in the semester, students missing one week of assignments will be disqualified from the class, which means students may dropped. After the drop date, students who have not dropped must receive an evaluative grade, which may include an F.

# Attendance Policy

Students are expected to attend all sessions of each class. Instructors may drop students from class if they do not attend the first class meeting (orientation in case of an online class). Excessive absences (not logging into the class in Canvas for more than a week) may lead to disqualification (being dropped) from a course by the instructor

### Course Format

This course is designed to be offered as a fully synchronize online course with dedicated times, and all work must be completed by the date listed in the syllabus and/or within the module itself.

This means this course is delivered regularly each week by way of live zoom meetings.

Lab reports for section 04Z lab (Thursday's lab) are turned in during the live zoom meetings.

It is divided into modular content Units (including Orientation) plus an extra resources module.

Each content unit includes assignments and/or a quiz that must be completed according to the due dates.

Participants will also be involved in group discussions and self assessment

Peer review activities if needed during the Physics lab time are also included

# Netiquette (Conduct Online)

Any student who posts a message that is deemed by the instructor to be derogatory, abusive, threatening, sarcastic, rude, inflammatory or otherwise offensive shall immediately have his or her Discussion Forum privileges suspended pending an investigation into the matter. Further postings of a like nature shall be punishable under the conditions specified in the Code on the entry page of Canvas.

## Grade Scale and Policy

As previously stated, this is a graded course and students must achieve 65% and more on the graded activities in order to pass this course.

The instructor reserves the right to change the terms of this syllabus as conditions warrant.

# Canvas Login Information:

- Student Login Instructions: How to Log in to Canvas MyPortal login tips https://www.deanza.edu/apply-and-register/apply/myportal login.html
- **Please Note:** To prevent problems, make sure your email address on file in Admissions and Records and in MyPortal is correct.
- De Anza College Online Learning Resource for Students Online Learning Resource Hub for Students (deanza.edu)

**Important:** A free Canvas app is available for you to connect to our site with your mobile device. Here's the complete instructions of free Canvas App.

# **Student Learning Outcome(s):**

\*Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics.