

Course Syllabus

<u>Chaminade University Honolulu</u> 3140 Waialae Avenue - Honolulu, HI 96816 www.chaminade.edu

Course Number: PHY 150L

Course Title: Earth and Space Science Lab

Department Name: Physics

Term: Spring 2021 Course Credits: 1

Class Meeting Days: ONLINE/Computer LAB

Class Location: Chuuk, Micronesia

Instructor Name: Dr. Elena P. Gold Email: elena.gold@chaminade.edu

University Course Catalog Description

Course Overview

PHY150 Earth and Space Science (3) (See other section in Canvas for more information.)

Principles of earth and space science including volcanic geology, oceanography and astronomy with an emphasis on the Hawaiian Island chain. Fulfills natural science general education lecture requirement for non-science majors. Concurrent registration in PHY150L required.

PHY150L Earth and Space Science Laboratory (1)

Online laboratory exercises in support of PHY150. Fulfils natural science general education laboratory requirement for non-science majors. Concurrent registration in PHY150 required.

Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition in marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

- 1. Education for formation in faith
- 2. Provide an integral, quality education
- 3. Educate in family spirit
- 4. Educate for service, justice and peace
- 5. Educate for adaptation and change

Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God

- 2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep
- 3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
- 4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) Education is the standing torch of wisdom
- 5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) All knowledge is not taught in the same school

Learning Outcomes

Upon successful completion of the course, students will be able to:

- Describe the scientific method.
- Identify and describe all the members of our solar system.
- Describe the evolution of our solar system.
- Compare and contrast the characteristics of Earth with other planets.
- State characteristics of our Sun and Moon.
- Construct a hierarchy of objects in the observable universe, according to size and distance.
- Understand our planet as viewed from the Hawaiian sky.
- Describe what contributes to life on and the longevity of Earth.1

Alignment of Learning Outcomes

	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Essential Questions	1, 2, 3, 4	2, 3	2	3, 4	3
Marianist Values	2, 4, 5	2, 4, 5	2	2, 4, 5	2, 4, 5
Program Learning Outcomes	1, 2, 5	2, 5, 6, 7	5, 7	1, 2, 4, 5, 6, 7	1, 2, 5

Course Prerequisites

Students must be enrolled in PHY 150 in order to complete this course.

Required Learning Materials

Students must have:

- A Chaminade email account that is accessed regularly.
- Use of software including Microsoft office and pdf.
- Access to a working computer with appropriate virus protection software.
- A willing attitude and desire to learn

Course Website:

https://chaminade.instructure.com/

Technical Assistance for Canvas Users:

- Search for help on specific topics at help.instructure.com
- Chat live with Canvas Support 24/7/365
- Watch this video to get you started with online guides and tutorials
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu, or call (808) 735-4855

Assessment

Lab Activities Online	200 points
Quizzes	50 points
<u>Lab Exam</u>	50 points
Total	300 points

Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades are calculated from the student's daily work, class participation, quizzes, tests, term papers, reports and the final examination. They are interpreted as follows:

A Outstanding scholarship and an unusual degree of intellectual initiative

B Superior work done in a consistent and intellectual manner

C Average grade indicating a competent grasp of subject matter

D Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work

F Failed to grasp the minimum subject matter; no credit given

All Final grades will be posted in the student grade book in CANVAS and will be assigned according to the following or similar scale:

A 90 – 100% B 80 – 89% C 70 – 79% D 60 – 69% F 59% and below

Course Policies

This is not a correspondence course. You are required to perform your work following the schedule provided by the instructor on Canvas. Students will be given weekly assignments or exams to minimize the chance of students falling behind.

Late Work Policy

Deadlines for Assignments will be posted. In the event of internet interruption, I will be notified by your tutor and will adjust assignments as deemed necessary for all students. Do not assume I will adjust all assignments. Any adjustments are at the discretion of the instructor. Additionally, late assignments will not be accepted when students do not attend class for the full period. Only in the case of a documented emergency will late assignments be accepted. Please contact me within CANVAS/email in the event of an emergency.

Missing any part of this schedule may prevent completion of the course. If you foresee difficulty of any type (i.e., an illness, employment change, etc.) which may prevent completion of this course, notify the instructor as soon as possible. Failure to do so will result in failure for an assignment and/or failure of the course.

Grades of "Incomplete"

Incompletes are not generally granted. In the case of documented emergency along with prior consistent attendance to class, an incomplete may be granted. However, you must agree to an agreement. Incomplete grades not completed by the agreement date will be converted to an F.

Writing Policy

Please conform to the writing policies listed in assignments. Please use complete sentences when answering short answer or essay questions.

Instructor and Student Communication

Questions for this course can be emailed to the instructor <u>elena.gold@chaminade.edu</u>. Online conferences can be arranged. Response time will take place up to 1-2 days.

Cell phones, tablets, and laptops

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

Disability Access

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from the Counseling Center by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center at (808) 735-4845 for further information.

ADA Accommodation Updates/Reminders

Effective August 1, 2020, Kōkua 'Ike:Center for Student Learning (Kōkua 'Ike), a unit within the Office of Advising and Career Development, provides academic and other accommodations for students with disabilities. To assist students to be able to participate in the various programs, services, and activities of the institution, Kōkua 'Ike requires the support, cooperation, and partnership of faculty, other teaching staff, and administrators within the University community.

ADA Accommodation Contact Information:

Kristin Hirata, Tutor Coordinator Email: kristin.hirata@chaminade.edu

Phone: 808.739.8305

For general inquiries email: ada@chaminade.edu

UPDATES:

- Accommodation letters will be valid for the entire academic year, unless updatesto accommodations are approved by Kōkua "Ike.
- Students will be responsible for timely notification of approved accommodations by submitting their Accommodation Letter to faculty.
- Kōkua 'lke will no longer email faculty to inform them of a student's accommodation.
- Students are responsible for scheduling test administration appointments with Kōkua 'Ike. Students are highly encouraged to schedule appointments as soon as their testing schedule becomes available.

Title IX Compliance

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for

all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

Attendance Policy

The following attendance policy is from the 2018-2019 Academic Catalog (p. 57-58). Faculty members should also check with their divisions for division-specific guidelines.

Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade. Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu ADA Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes. Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

Academic Conduct Policy

From the 2018-2019 Undergraduate Academic Catalog (p. 42):

Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook: https://studentaffairs.chaminade.edu/wp-content/uploads/sites/28/2018-19-NEW-STUDENT-HANDBOOK.pdf

Schedule

WEEKS	TOPICS/ASSIGNMENTS		
1	Lab Safety		
2	Scientific Method		

3	Motion
4	Earth's Changing Surface
5	Quiz 1
6	Solar System
7	Doppler Effect
8	Electromagnetic Spectrum
9	Quiz 2
10	Spectra
11	The Moon
12	
13	Telescopes
14	Review
15	Lab Exam
16	