



School of Education and Behavioral Sciences
Elementary Education for Oceania

ED 324 Elementary Science Methods

Online | Credits: 3 | Section: 90-4 | Term: [Fall 2026]

Instructor Information

Instructor	<i>Toni Marie Mapuana Kauai, Ph.D.</i> <i>I have had the honor and privilege of teaching in the Elementary Education in Oceania program for the Carolina College and Pastoral Institute since 2015. I began teaching the Elementary Math Methods course and now currently teach the Elementary Science Methods course and the Curriculum Foundations course.</i>
Email	tonimarie.kauai@chaminade.edu
Phone	(808) 557-5998
Office Location	Not applicable
Virtual Office	Zoom (ID 576 734 3222)
Virtual Office Hours	By appointment only

Communication

Communication is via my Chaminade Email address. You can expect a response back within 24 hours.

School & Department

School	School of Education and Behavioral Sciences
Location	Brogan Hall, 110
Phone	(808) 739-4652
Questions?	Contact your instructor or the School of Education and Behavioral Sciences

Course Description & Materials

Catalog Description

This course focuses on helping the classroom teacher uncover big picture concepts through inquiry-based science activities, then planning dynamic science units based on these understandings. Successful candidates will acquire an understanding of big ideas in physical, life, and earth and space science; develop inquiry-based science skills; and learn how to plan and teach meaningful units and lessons for Kindergarten to 6th grade students.

Co-requisites/Pre-Requisites: [Add relevant info, e.g., ENG 22 or ENG 24 or equivalent or higher with a grade of "C" or better and MATH 82 or equivalent or higher with a grade of "CR" or consent of instructor]

Course Snapshot

Modality	Online Asynchronous
Time Commitment	This is a three-credit hour course requiring 135 clock hours of student engagement, per the official CUH Credit Hour Policy. Over the 15 weeks of this course, students will spend 45 hours in class, 45 hours completing course readings, 3 hours each week writing reflection content (15 hours total), and 30 hours studying for and taking the final exam.
Required Materials	Buxton, C.A. & Provenzo, E.F. (2012). <i>Place-based science teaching and learning</i> . Thousand Oaks, CA: SAGE.
Canvas	This course is delivered through Canvas (chaminade.instructure.com). [Briefly note how Canvas is used: modules, announcements, submissions, grades]

Learning Outcomes

Program Learning Outcomes (PLOs)

Upon completion of Elementary Education in Oceania, the student will be able to:

1. Knowledge of subject matter.
2. Knowledge of how students develop and learn and engagement of students in developmentally appropriate experiences that support learning.
3. Knowledge of how to teach subject matter to students and the application of a variety of instructional knowledge that are rigorous, differentiated, focused on the active involvement of the learner.
4. Knowledge and use of appropriate assessment strategies that enhance the knowledge of learners and their responsibility for their learning.
5. Skills in the planning and design of meaningful learning activities, that support and have a positive impact on student learning based upon knowledge of subject matter, students, the community, curriculum standards, and integration of appropriate technology.

Course Learning Outcomes (CLOs)

Upon completion of [course], the student will be able to:

1. Develop a balanced lesson plan focusing on the learner, science content in one domain, outcomes, and assessment plans, and an instructional blueprint which addresses the needs of all learner abilities and types in the K-8 classroom.
2. Demonstrate an understanding of, one, big ideas and concepts in science, aligned with K-8 FSM benchmarks; two, scientific inquiry; and three, the Nature of Science.
3. Analyze and apply teaching models and strategies informing sound decisions to effectively plan lessons and units that are relevant, meaningful, and place-based with respect to Chuuk's students. Employ culturally appropriate pedagogical practices and utilize community and place-based resources to facilitate the learning process for students in grades K-8.

Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is 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, and integrity of creation.

5. Educate for adaptation and change.

The School of Education and Behavioral Sciences are committed to an integral, quality education that begins with respect for the complexity and diversity of each person. Subsequently, this course engages the whole person with quality activities that challenge the intellectual, emotional, aesthetic, physical, and ethical dimensions that make up a student's life experience.

Native Hawaiian Values

Education is central to both Marianist and Native Hawaiian culture — both seek transformative, value-centered learning that serves the marginalized. This is reflected in the 'Ōlelo No'eau (Hawaiian proverbs) below:

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 ('Ōlelo No'eau 1200) — Recognize others, be recognized, help others, be helped.
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.

Alignment of Course Learning Outcomes

	CLO 1	CLO 2	CLO 3
Marianist Values	X	X	X
PLOs	X	X	X
Native Hawaiian Values	X	X	X

Participation & Regular and Substantive Interaction (RSI)

Student Participation Expectations

This asynchronous course requires consistent, meaningful engagement with content, peers, and the instructor each week. Logging in without completing activities does not count as participation.

Students are expected to:

- Complete assigned readings, lectures, and activities within designated timeframes.
- Log in regularly to review module instructions, announcements, deadlines, feedback, and grades.
- Contribute substantively to discussions — post original responses and engage thoughtfully with peers within the required window.
- Demonstrate preparation, reflection, and critical thinking in all interactive components.
- Meet established deadlines to support collaborative learning and remain on track with the weekly sequence.

Regular and Substantive Interaction (RSI) — Instructor Commitments

- **Weekly Communication:** Weekly announcements and/or module overviews clarifying objectives, key concepts, and assignment expectations.
- **Substantive Engagement:** Instructor-facilitated discussion engagement — prompting analysis, clarifying misunderstandings, connecting posts to course concepts, summarizing takeaways.
- **Timely Feedback:** Clear grading criteria and substantive feedback on all graded work.
 - Email inquiries: response by [X] (see Communication policy above)
 - Weekly graded work (discussions, assignments): within [X] school days of the due date
 - Major assessments/projects: within [X] school days of the due date
- **Monitoring & Outreach:** Active monitoring of Canvas engagement with proactive outreach and referrals for students who miss deadlines or fall behind.

Course Policies

Late Work	<i>Late work will be accepted but will be deducted at 0.5 point/week</i>
Syllabus Changes	The instructor reserves the right to modify this syllabus. Changes will be communicated via Canvas announcements.

Final Grades

Final grades are submitted to Self-Service (selfservice.chaminade.edu):

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

Important Information

Academic Honesty

Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, plagiarism, **and unauthorized and/or undisclosed AI usage**, in addition to more obvious dishonesty. See catalog section *Student Use of Artificial Intelligence in Academic Work* for further information.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Director of the Academic College. Punishment for academic dishonesty will be determined by the instructor, Director, and the Dean of Academic College and may include an “F” grade for the work in question, an “F” grade for the course,

academic notice, or dismissal from the University.

AI (Artificial Intelligence) Statement

Chaminade University recognizes the increasing role of artificial intelligence (AI) technologies in academic and professional environments. AI encompasses, but is not limited to, generative AI platforms, automated writing or content generation software, coding assistants, and similar tools. Students must ensure all submitted work genuinely reflects their knowledge and effort. Using AI to produce or significantly complete graded assignments, exams or other academic tasks – defined as use that substitutes for or substantially replaces a student’s own analysis, reasoning or written expression – without explicit instructor approval is considered academic misconduct and will be dealt with according to the University’s Academic Honesty Policy.

If an instructor has reasonable grounds to question whether submitted work genuinely reflects a student’s own knowledge, authorship, or mastery of course material — or whether it meets the course’s expectations for AI use — the instructor may require the student to provide additional or alternative evidence of authorship and content mastery. Such evidence may include drafts, notes, revision history, source materials, process explanations, oral discussion, in class work, or completion of an alternative assessment. A student’s refusal or inability to provide such evidence may be considered, along with other available information, in evaluating whether the work meets course requirements and stated learning outcomes. Instructors will not rely solely on AI detection software or other automated tools in making grading or academic integrity determinations. Such determinations will be based on the totality of the available information and handled in accordance with applicable University policies and procedures. See the catalog section *Student Use of Artificial Intelligence in Academic Work* for further information.

Title IX and Nondiscrimination

Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. For pregnant and parenting students, I am also obligated to provide you with similar resources for support and protections available to you. My goal is to make sure that you are aware of the range of options available to you and have access to the resources and support you need.

Contact information and reporting options: chaminade.edu/titleix/nondiscrimination/. File a report via the [Campus Incident Report Form](#).

Nondiscrimination Policy and Notice of Nondiscrimination

The university is committed to comply with all State and Federal statutes, rules, and regulations which prohibit discrimination. The university is committed to a policy of nondiscrimination on the basis of race, sex, gender identity and expression, age, religion, color, national origin (including shared ancestry and ethnic characteristics), ancestry, citizenship, disability, genetic information, marital status, breastfeeding, arrest and court record (except as permissible under State law), sexual orientation, or status as a covered veteran. Inquiries about Title IX or general Civil Rights concerns

may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both and contact information may be found [HERE](#). *On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](#).*

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at: <https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the [Campus Incident Report form](#). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates.

The NOTICE of NONDISCRIMINATION can be found here: [Notice of Nondiscrimination](#).

Student with Disabilities Statement

Kōkua 'Ike

Accessibility Services recognizes disability as a valued aspect of diversity and ensures equal access to the educational environment in accordance with Section 504 of the Rehabilitation Act; the Americans with Disabilities Act, as amended; and the principles and professional standards of the Association on Higher Education and Disability. Access is supported through reasonable accommodations and referrals to campus and community resources.

Appointments with the Accessibility Services Coordinator are available through Stellic at <https://chaminade.stellic.com> and may be held virtually or in person. Drop-in appointments are also welcome.

Students seeking support must meet with the Accessibility Services Coordinator as early as possible, even if they are unsure whether they have appropriate documentation of their disability or its impacts. The Accessibility Services Coordinator prioritizes listening to students' experiences and will discuss any documentation needs during the initial intake meeting. Students may seek support at any time.

Learn more at <https://chaminade.edu/ada-accommodations>.

Learn more at <https://chaminade.edu/career-services>.

Assessment of Student Work

Chaminade University may use student work anonymously to assess achievement of course, program, and institutional learning outcomes as part of ongoing quality improvement efforts.

Campus Resources & Support Services

The following resources are available to all Chaminade students. Reach out early — these services exist to support your success.

Resource	Description	Contact / Website
Accessibility Services (Kōkua 'Ike)	Accommodations under Section 504 and ADA. Contact early — appointments via Stellic, virtual or in person.	ada@chaminade.edu chaminade.edu/ada-accommodations Accessibility Services Sign up

Resource	Description	Contact / Website
Tutoring & Academic Coaching (Kōkua 'Ike)	Tutoring and Academic Coaching Services support students' progression toward their academic, personal, and professional goals with clarity and intention. Services include individualized support in English, math, nursing, sciences, and social sciences, as well as guidance in developing goals and study strategies.	https://chaminade.edu/tutoring-academic-coaching-services
Career Services	Career Services supports students throughout their career journeys. Services include individualized job search strategy coaching, resume reviews, job interview coaching, and access to career-related resources and opportunities.	chaminade.edu/career-services
Basic Needs Resources	Support for food insecurity, housing instability, and other basic needs.	chaminade.edu/basic-needs/
Title IX / Nondiscrimination	Reporting and support for sex discrimination and gender-based violence. Campus Incident Report Form available online.	chaminade.edu/titleix/resources-and-support/
Hazing Prevention	Confidential support, crisis intervention, and reporting for any type of abuse including hazing.	hazingpreventionnetwork.org/athlete-helpline/
CUH Alert Emergency Notification	Emergency text system. Register your cell number via the Chaminade portal and confirm the text to complete enrollment.	chaminade.edu
Campus Safety/ SafeSwords	A program for students, faculty and staff, who may feel uncomfortable or unsafe walking alone on campus, at any time of the day. Call security, and a security professional will meet you at your location on campus. The security professional will escort you to your residence hall, car, etc. Students may utilize this when walking to and from night classes around campus or after late night events	SafeSwords Webpage

Weekly Course Schedule

Note: The instructor reserves the right to modify this schedule. Changes will be communicated through Canvas announcements.

Wk of	Theme	Info / Activities	Due Dates
8/17	Introduction to Place-Based Science Teaching and Learning	Readings and discussions	8/19 & 21
8/24		Readings and discussions	8/26 & 28

Wk of	Theme	Info / Activities	Due Dates
8/31	Activities to Promote Place-Based Science Teaching in the Classroom	Readings and discussions	8/31, 9/2 & 4
9/7		Readings and discussions	9/7, 9, & 11
9/14		Readings and discussions	9/14, 16, & 18
9/21	Activities to Promote Place-Based Science Teaching in the School Building	Readings and discussions	9/21 & 25
9/28		Readings and discussions	9/28 & 30, 10/2
10/5		Readings and discussions	10/5, 7, & 9
10/12	Activities to Promote Place-Based Science Teaching on the School Grounds	Readings and discussions	10/12 & 14
10/19		Readings and discussions	10/19, 21, & 23
10/26		Readings and discussions	10/28 & 30
11/2	Activities to Promote Place-Based Science Teaching in the Neighborhood	Readings and discussions	11/2, 4, & 6
11/9		Readings and discussions	11/9, 11, & 13
11/16		Readings and discussions	11/18
11/23	Activities to Promote Place-Based Science Teaching in the Broader Community	Readings and discussions	11/23
11/30		Readings and discussions	12/2 & 4
12/7		Readings and discussions	12/7 & 9