



Chaminade University OF HONOLULU

Course Syllabus

[Chaminade University Honolulu](https://www.chaminade.edu)

3140 Waialae Avenue - Honolulu, HI 96816

www.chaminade.edu

Course Number:	BI-300
Course Title:	Science Writing
Department Name:	Biology
College/School/Division Name:	Natural Sciences and Mathematics
Term:	Fall 2022
Course Credits:	1
Class Meeting Days:	Wednesday
Class Meeting Hours:	9:30-10:20
Class Location:	Clarence T.C. Ching Hall, 253
Canvas Course	https://chaminade.instructure.com/courses/20498
Instructor Name:	Michael Weichhaus
Email:	michael.weichhaus@chaminade.edu
Phone:	808-440-4286
Office Location:	Wesselkamper 107
Office Hours:	Mon/Tue/Wed/Thu 11:30am-1:00pm

University Course Catalog Description

Intensive introduction to science writing. Overview of the purpose of scientific and medical publications, peer review, and criteria for inclusion in the literature. Students will focus upon the development of written arguments, discussion of data, and interpretation/analysis. Course will culminate in production and review of a grant proposal, clinical care plan, or clinical trial proposal, etc. Prerequisites: BI 216, BI 216L, BI 307 and BI 307L

Course Overview

This is a writing intensive class, where students are expected to participate in discussion about their writing projects, learn to write to a 'purpose' and learn to critique scientific writing.

Through this practice students will:

- Understand the difference(s) in approach to scientific writing compared to creative writing
- Appreciate the need for clarity and technical specificity of written work to meet standards in the field for peer review.
- Evaluate the basics of a peer-reviewed primary research articles, including conceptual framework and critical analysis of data.
- Be able to demonstrate that they know what is needed to summarize a group of scientific studies into an abstract.

- To complete and present the foundation for a new scientific study/hypothesis based on current published literature

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
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 ('Olelo 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 ('Olelo 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 ('Olelo 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 ('Olelo 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 ('Olelo No'eau 203) All knowledge is not taught in the same school

Biology Program Learning Outcomes

Upon completion the program in Biology, a graduating student will demonstrate the following competencies:

1. Apply the scientific method in the design and testing of hypotheses
2. Transform and display, statistically evaluate, validate, and interpret scientific data and communicate the results of such analyses effectively both orally and in writing.
3. Acquire and comprehend information from published scientific literature, databases and bioinformatics software to extract and interpret biological data
4. Recognize the chemical and physical principles that underlie all life forms, and the biological organization at the molecular, cellular, tissue, organ, organism, and system levels that emerge from these principles
5. Define the components and processes of genetic and epigenetic information transmission, and their determinant effects on the adaptive and evolutionary processes that they drive
6. Integrate an awareness of bioethical issues to positively influence the application of science to service, justice and peace in the solution of societal problems

Course Learning Outcomes

1. Compare and contrast scientific and creative writing.
2. Evaluate the purpose and process of scientific publications, peer review and criteria for inclusion in the literature
3. Develop written arguments, discussion of data and interpretation/analysis.

4. Create and review a personal statement and a grant proposal.
5. Determine strengths and weaknesses of group work to achieve a common goal

Alignment of Learning Outcomes

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

Alignment of Natural Sciences Courses with Marianist and Hawaiian values of the University.

The Natural Sciences Division provides an *integral, quality education*: sophisticated integrative course content taught by experienced, dedicated, and well-educated instructors.

- *We educate in family spirit* – every classroom is an *Ohana* and you can expect to be respected yet challenged in an environment that is supportive, inclusively by instructors who take the time to personally get to know and care for you.
- *We educate for service, justice and peace*, since many of the most pressing global issues (climate change, health inequity, poverty, justice) are those which science and technology investigate, establish ethical parameters for, and offer solutions to.
- *We educate for adaptation and change*. In science and technology, the only constant is change. Data, techniques, technologies, questions, interpretations and ethical landscapes are constantly evolving, and we teach students to thrive on this dynamic uncertainty.

The study of science and technology can be formative, exploring human creativity and potential in the development of technologies and scientific solutions, the opportunity to engage in the stewardship of the natural world, and the opportunity to promote social justice. We provide opportunities to engage with the problems that face Hawai'i and the Pacific region through the Natural Sciences curriculum, in particular, those centered around severe challenges in health, poverty, environmental resilience, and erosion of traditional culture. The Marianist Educational Values relate to Native Hawaiian ideas of *mana*, *na'auao*, *ohana*, *aloha* and *aina*. We intend for our Natural Sciences programs to be culturally-sustaining, rooted in our Hawaiian place, and centered on core values of *Mai'au*, be neat, prepared, careful in all we do; *Makawalu*, demonstrate foresight and planning; *`Ai*, sustain mind and body; *Pa`a Na`au*, learn deeply.

Course Prerequisites

BI 216, BI 216L, BI 307 and BI 307L

Required Learning Materials

There are no required textbooks. Other learning materials will be provided via Canvas.

Technical Assistance for Canvas Users:

- Search for help on specific topics at help.instructure.com
- [Chat live with Canvas Support 24/7/365](#)

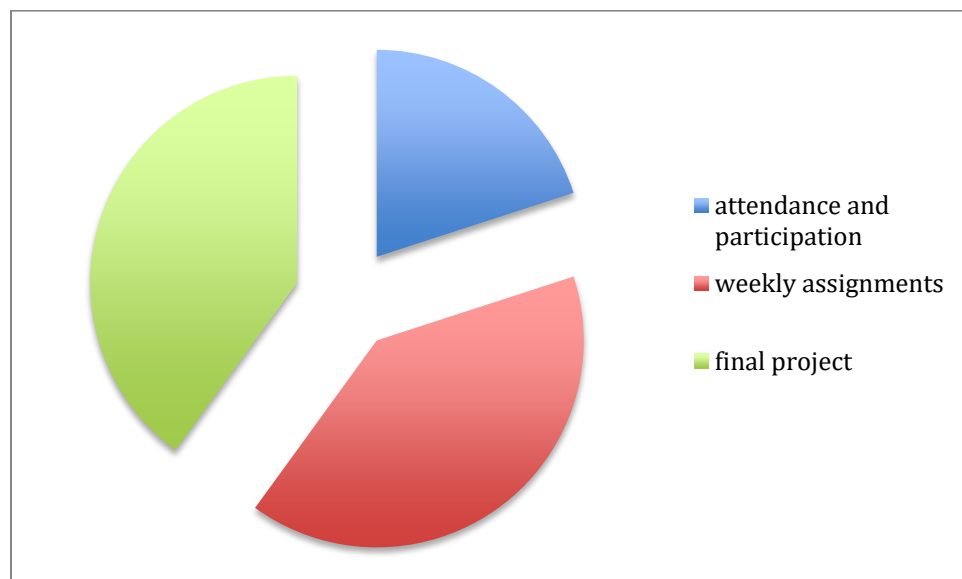
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu, or call (808) 735-4855

Tutoring and Writing Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua `Ike: Center for Student Learning in a variety of subjects (including, but are not limited to: biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua `Ike’s website (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via Smarthinking. Smarthinking can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – Smarthinking. For more information, please contact Kōkua `Ike at tutoring@chaminade.edu or 808-739-8305.

Assessment

Specific Assignment	% Of Grade	Due Date
Attendance	20%	Each week -semester long
Weekly writing assignments	40%	Each week - semester long
Final paper	40%	Finals week



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:

Letter Grade	Percentage	Description
A	>90%	Outstanding scholarship and an unusual degree of intellectual initiative
B	80-89%	Superior work done in a consistent and intellectual manner

C	70-79%	Average grade indicating a competent grasp of subject matter
D	60-69%	Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work
F	<60%	Failed to grasp the minimum subject matter; no credit given

Course Policies

Late Work Policy

Requests for extensions due to extenuating circumstances (documented computer or medical problems, for example) will be considered but in general work received after the deadline will not be graded (i.e., will receive a score of zero).

Grades of "Incomplete"

Should you encounter a significant medical or personal event that prohibits you from completing the course requirements within the time that is allocated for this course, an incomplete grade can be given. Issuance is not automatic, and is at the discretion of the faculty member. An incomplete grade may be assigned to a student who has successfully completed with at least a passing grade the majority of the work of the course, and who has an unavoidable and compelling reason why the remainder of the work cannot be completed on schedule.

Writing Policy

Guidance on written assignment formatting and citation style will be provided in class.

Instructor and Student Communication

Questions for this course can be emailed to the instructor at michael.weichhaus@chaminade.edu. Online, in-person and phone conferences can be arranged. Response time will take place up to 24 hours.

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 Kōkua 'Ike: Center for Student Learning 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 Kōkua 'Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

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 [Academic Catalog](#).

Students are expected to attend regularly all courses for which they are registered. Students 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, calling the instructor's campus extension, or by leaving a message with the instructor's division office. 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 Tutor 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 [Academic Catalog](#):

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, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an "F" grade for the course, suspension, or dismissal from the University.

Violations of Academic Honesty: Violations of the principle include, but are not limited to:

- Cheating: Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices in any academic exercise.
- Fabrication and Falsification: Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of inventing or counterfeiting information for use in any academic exercise.
- Multiple Submissions: The submission of substantial portions of the same academic work for credit (including oral reports) more than once without authorization.
- Abuse of Academic Materials: Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource materials.
- Complicity in Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.
- Plagiarism: Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source) Examples include, but are not limited to:
 - Copying or borrowing liberally from someone else's work without his/her knowledge or permission; or with his/her knowledge or permission and turning it in as your own work.
 - Copying off someone else's exam or paper.
 - Allowing someone to turn in your work as his or her own. DO NOT provide your work to someone else for reference.
 - Not providing adequate references for cited work.
 - Copying and pasting large quotes or passages without properly citing them.

Credit Hour Policy

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 37.5 hours of engagement. For example, in a one credit hour traditional face to face course, students spend 50 minutes in class per week for 15 weeks, resulting in a minimum of 12.5 instructional hours for the semester. Students are expected to engage in reading and other assignments outside of class for at least 2 additional hours per week, which equals an additional 25 hours. These two sums result in total student engagement time of 37.5 hours for the course, the total engagement time expected for each one credit course at Chaminade.

The minimum 37.5 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

Schedule

Week	Dates	Topic	Writing Task*
1	Aug 24	Syllabus and course overview	Think about what your topic will be
2	Aug 31	What subject do you care about?	Pick a subject area for final paper
3	Sept 7	Why do you care?	Significance draft
4	Sept 14	Identifying the problem and how to fix it	Put together presentation for the next class (topic, problem, what you will do to fix it)
5	Sept 21	PRESENT MY TOPIC AND WHAT I'M GOING TO FIX	
6	Sept 28	Approach: What am I going to do and how am I going to do it?	First draft of approach
7	Oct 5	Making the aims SMART and choosing the best to test your hypothesis	1. Making aims SMART 2. Be ready to share project next week
8	Oct 12	What does success look like?	
9	Oct 19	Aims vs. Experiments	Draft of approach
10	Oct 26	Budget and Logistics	Budget and logistics section
11	Nov 2	Putting the whole thing together	All sections so far plus background
12	Nov 9	Innovation	Innovation section
13	Nov 16	Writing an abstract – the shortest but hardest part	All sections of proposal Last chance for feedback!
14	Nov 23	Discussion on paper deadline tonight	Hand in final paper November 23
15	Nov 30	End of semester party	

***Writing tasks are due at midnight on the Sunday following class (e.g., choosing a subject will be discussed Aug 31st in class, and the picking a subject area assignment is due on Sunday, Sept 4th).**

The instructor may modify elements of this syllabus according to the operational needs of the class.