

# **Course Syllabus**

<u>Chaminade University Honolulu</u> 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 2025

Course Credits: 1

Class Meeting Days: Wednesday
Class Meeting Hours: 11:30-12:20
Class Location: CTCC254







Phone: 808-778 8920 (text only, mention your name and BI300 when you text me please)

Office Location: CTCC 255

Office Hours: by appointment (please email me)

# 1. 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, clinical trial proposal, environmental impact plan, resource management proposal, etc., in an area aligned with the student's career aspirations. *Prerequisites*: EN 102, COM 101, BI 307, BI 307L or ENV 201 and ENV 201L or permission of instructor

## 2. Course Overview

This course is designed to equip future researchers and scientific professionals with the skills necessary to craft compelling, persuasive, and strategic scientific writing products. We will use the process of proposal writing, which is crucial for securing funding and advancing scientific projects, as a vehicle to develop these skills. The ability to write technical, authoritative, accurate, detailed and persuasive narrative that intentionally targets specific audiences is relevant to proposals, report writing, journal articles, business plans and dissemination of science across fields from biomedicine to sustainability. The skills you develop in writing a compelling and substantive narrative will support your future career goals, and you will choose a topic focus that is linked to your passion and priorities.

We will address the following topics:

<u>Understanding Audience Priorities:</u> Learn how to identify and align proposals with the specific goals and priorities of funding agencies or stakeholders.

<u>Crafting a Compelling Narrative:</u> Develop skills in creating a clear, logical, and persuasive narrative that effectively communicates the significance, innovation, and impact of your research or project.

<u>Structuring Proposals:</u> Master the art of organizing proposals into a coherent structure that enhances readability and persuasiveness.

<u>Strategic Use of Data and Evidence:</u> Learn how to strategically incorporate data, preliminary results, and evidence to strengthen your proposal's case.

<u>Comparing Writing Styles:</u> Understand the differences between proposal writing and other scientific writing forms, such as journal articles or literature reviews, and how to adapt your style to suit the purpose and audience.

<u>Engaging Specific Audiences</u>: Gain insights into how to tailor your writing to engage different audiences, including funders, reviewers, and stakeholders, by understanding their specific needs and expectations. <u>Addressing Reviewers' Expectations</u>: Learn how to anticipate and address potential concerns or objections from reviewers effectively.

<u>Proposal Revision and Editing:</u> Develop techniques for self-editing and peer review, focusing on refining the proposal to maximize its impact and effectiveness.

Throughout the course, you will work on a major project: developing a full proposal, which could be for a grant, research project, or other scientific initiatives. By the end of the course, you will have a polished, submission-ready proposal that is strategically designed to maximize the chances of success.

#### 3. 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:

- Education for formation in faith
- Provide an integral, quality education
- Educate in family spirit
- Educate for service, justice and peace
- Educate for adaptation and change

# 3. 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:

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

# 4. Course Learning Outcomes

- 1. **Analyze** the priorities of different audiences and stakeholders to effectively align a scientific project proposal with their specific goals and expectations.
- 2. **Construct** a coherent and persuasive narrative for scientific proposals that clearly communicates the significance, innovation, and potential impact of the proposed work.
- 3. **Assess** and **articulate** the potential return on investment (ROI) and broader impact of the proposed research, effectively communicating its value to funders and stakeholders
- 4. **Evaluate** and compare different scientific writing styles, identifying the commonalities between proposal writing and other forms of scientific writing, such as journal articles and literature reviews, and differences to writing forms such as creative writing or journalism,
- 5. **Apply** a strategic writing framework to incorporate data, preliminary results, and evidence effectively in proposals, strengthening the overall argument and case for support.
- 6. **Revise** and **edit** scientific proposals using peer and self-review techniques, improving the proposal's clarity, persuasiveness, and alignment with reviewers' expectations.

# 5. Alignment of Learning Outcomes

CLO	1	2	3	4	5	6
Marianist Values	2, 4, 5					
Biology PLO	3	2	6	2	2	2

# **6. Course Prerequisites**

EN 102, COM 101, BI 307, BI 307L or ENV 201 and ENV 201L or permission of instructor

# 7. Required Learning Materials

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

### 8. Course Website

https://chaminade.instructure.com/courses/35933.

# 9. Technical Assistance for Canvas Users:

- Search for help on specific topics or get tips in <u>Canvas Students</u>
- Live chat with Canvas Support for students
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this <u>video to get you started</u> with online guides and tutorials
- Contact the Chaminade IT Helpdesk for technical issues: <a href="helpdesk@chaminade.edu">helpdesk@chaminade.edu</a>, or call (808) 735-4855

# 10. 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 for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – TutorMe. For more information, please contact Kōkua 'Ike at tutoring@chaminade.edu or 808-739-8305.

#### 11. Assessment

Assignment	Points	% of Course Grade
Attendance	400	20%
Homework Assignments	600	30%
Major Assignment 1	200	10%
Major Assignment 2	800	40%
Total	2000	100%

#### **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, guizzes, tests, term papers, reports and the final examination.

#### They are interpreted as follows:

Α	90% of points or more	Outstanding scholarship and an unusual degree of intellectual initiative
В	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
prerec	quisite course work	
F	59% of points or fewer	Failed to grasp the minimum subject matter; no credit given

# 11. Class Schedule

Class				kly	
Dates	Class Session	Homework		Points	
This class embraces student collaboration with generative AI tools so long as that collaboration is transparent, ethical and accurate. See section 12 (c) for a key to the different classifications of assignments (N/A, N, C and X) based on acceptable application of generative AI tools.					
Week 1	Class cancelled due to Spiritual Convocation	1.1. Worksheet: Passion, Problems and Products (N/A)	0	50	
Aug 25 Week 2	Introductions, Goals, Scientific Writing Lotto	1.2. <u>Reading/Reflection:</u> see link in Canvas (N)  2.1. <u>Worksheet</u> : Comparative writing styles exercise (X)	20	50 50	
Sept 1	mileadetions, coals, ocientine triting zotto				
Week 3 Sept 8	Strategic Writing Framework: The Hourglass	3.1. Worksheet: Choose Your Own Adventure (N/A)	20	50	
Week 4	Strategic Writing: The Big Why and the Piece of the Pie	4.1. Worksheet: Big Why and Piece of the Pie (N/A)	20	50	
Sept 15 Week 5	Strategic Writing: Devil's in the Details (Approach and	4.2. <u>Reading/Reflection</u> . see link in Canvas (N)  5.1. Worksheet: Your SMART Objectives (N/A)	20	50 50	
Sept 22	SMART Objectives)	5.1. <u>worksheet.</u> Four SMART Objectives (N/A)  5.2. <u>Reading /Reflection</u> : see link in Canvas (N)	20	50	
Week 6 Sept 29	Strategic Writing: Moving the Needle (Outcomes and Impact)	6.1. Worksheet: ROI, Outcomes and Impacts (N/A)	20	50	
Week 7 Oct 6	Strategic Writing: Evidence and Supporting Data	7.1. Worksheet: Using evidence and supporting data (N/A) 7.2. Reading/Reflection: see link in Canvas (N)	20	50 50	
Week 8 Oct 13	Partnering with generative AI: Chat GPT Pitfall Bingo	8.1. <u>Reading/Reflection</u> : see link in Canvas (N)	20	50	
Week 9 Oct 20	Partnering with generative AI: Iteration and Promptengineering	<b>9.1.</b> <u>Major Assignment 1</u> : Chat GPT iteration of your Strategic Writing Project outline. (X)	20	200	
Week 10 Oct 27	Writer's Room: The Big Why and Piece of the Pie	10.1. <u>Major Assignment 2</u> : Your Strategic Writing Project (C)	40	800	
Week 11 Nov 3	Writer's Room: Approach and SMART Objectives	Continue working on 10.1	40		
Week 12 Nov 10	Writer's Room: Moving the Needle (Outcomes and Impact)	Continue working on 10.1	40		
Week 13 Nov 17	Peer Review Session	Continue working on 10.1	80		
Week 14 Nov 24	Writer's Room: Executive Summary	Continue working on 10.1	40		
Week 15 Dec 1	Class Cancelled	Continue working on 10.1			
	1	TOTALS	400	1600	
TOTAL POINTS AVAILABLE					

## 12. Course Policies

## (a) 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).

#### (b) 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.

### (c) Writing Policy

Guidance on written assignment formatting and citation style will be provided in class. <u>Use of Generative AI is</u> classified by assignment as follows:

- N/A: Not applicable
- N: For assignments with this classifier do not use a generative AI to generate whole or part of your answers. Cutting and pasting text from a generative AI output is not acceptable.
- C: Collaboration with a generative AI is acceptable but do not cut and paste its products without your own modification, paraphrasing or revision. Include the required citation that lists which generative AI tools you used and describes how you used them.
- X: The assignment is designed for you to experiment with generative AI and you may cut and paste as directed in the assignment instructions

#### (d) Instructor and Student Communication

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

#### (e) 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.

#### (f) Student with Disabilities Statement

Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008). Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them. Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors each semester, as the student is responsible to notify Kokua Ike via email at ada@chaminade.edu each semester if changes or notifications are needed.

### (g) Title IX and Nondiscrimination Statement

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.

Nondiscrimination Policy & Notice of Nondiscrimination: Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and its regulations, including in admission and employment. Inquiries about Title IX 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 at the <a href="Chaminade University Title IX Office Contact Information and Confidential Resources website">Chaminade University Title IX Office Contact Information and Confidential Resources website</a>. On-campus Confidential Resources may also be found here at CAMPUS CONFIDENTIAL RESOURCES.

## (h) Attendance Policy

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, 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 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.

## (i) Student Conduct Policy

Campus life is a unique situation requiring the full cooperation of each individual. For many, Chaminade is not only a school, but a home and a place of work as well. That makes it a community environment in which the actions of one students may directly affect other students. Therefore, each person must exercise a high degree of responsibility. Any community must have standards of conduct and rules 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 under Student Life. For further information, please refer to the Chaminade Catalogue.

#### (j) 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 a minimum of 45 hours of engagement, regardless of varying credits, duration, modality, or degree level. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester. Terms that have alternative lengths, such as 10 week terms, should have an equivalent amount of faculty instruction and out-of-class student work to meet each credit hour. Direct instructor engagement and out-of-class work result in total

student engagement time of 45 hours for one credit. The number of engagement hours may be higher, as needed to meet specific learning outcomes.

Specific Credit Situations. The minimum 45 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.

This is a one-credit hour course requiring 45 clock hours of student engagement, per the official CUH Credit Hour Policy. Students enrolled in this course are anticipated to spend 10.83 hours in class, 1 hour each for 8 homework assignments (8 hours total), 6 hours on the Major Assignment 1, and 20.17 hours researching and writing the Major Assignment 2.

## (k) 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, 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. For the most up to date information, please refer to the Academic Honesty Policy on the Chaminade University Catalog website.

# (l) CUH Alert Emergency Notification

To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cellphone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

#### (m) Assessment for Student Work

With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

#### (n) Subject to change

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

# 13. Easter Egg.

If you read this far tell me the secret message 'EASTER EGG" at our first class meeting. And I'll send you a Starbucks gift!