



Chaminade
University

Natural Sciences and Mathematics

Biology

BI-300: Science Writing

Henry 227, Tuesday 1:00–1:50pm | Credits: 1 | Section: [#] | Term: Fall 2026

Instructor Information

Instructor	Jonathan Baker
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Phone	808-739-8363
Office Location	Wesselkamper 110
Office Hours	Tuesdays 10am-1pm or by appointment
Virtual Office	By appointment
Virtual Office Hours	By appointment

Communication

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

School & Department

School	School of Natural Sciences and Mathematics
Location	Wesselkamper 115
Phone	(808) 440-4204
Questions?	Contact your instructor or the School of Natural Sciences and Mathematics

Course Description & Materials

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

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, using the process of proposal writing as the vehicle for developing them. Students will work toward a major project — a full proposal (grant, research, or other scientific initiative) — addressing topics including understanding audience priorities, crafting a compelling narrative, structuring proposals, strategic use of data and evidence, comparing writing styles, engaging specific audiences, addressing reviewers' expectations, and proposal revision and editing. By the end of the course, students will have a polished, submission-ready proposal strategically designed to maximize its chances of success.

Course Snapshot

Modality	Face-to-Face
Meeting Location	Henry 227
Meeting Days/Times	Tuesday, 1:00–1:50pm
Time Allocation	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 12.5 hours in class, 1 hour each for 8 homework assignments (8 hours total), 6 hours on Major Assignment 1, and 20.17 hours researching and writing Major Assignment 2.
Required Materials	There are no required textbooks. Other learning materials will be provided via Canvas.
Recommended Items	None.
Canvas	Course materials, announcements, and grades are posted to Canvas (chaminade.instructure.com). Course site: https://chaminade.instructure.com/courses/35934

Learning Outcomes

Program Learning Outcomes (PLOs)

Upon completion of the B.S. degree program in Biology, the student will be able to:

1. Explain fundamental biological concepts and their interrelationships across various levels of biological organization, from molecules to ecosystems, including cell biology, genetics, evolution, physiology, and ecology.
2. Perform laboratory, field and computational techniques relevant to biological research, including accurate data collection, analysis, and interpretation.
3. Compare, evaluate and develop scientific investigations using advanced methodologies, technologies, and resources, and communicate results effectively to professional and lay audiences.
4. Make ethically informed decisions in biological research and practice, considering bioethics, environmental ethics informed by indigenous and traditional knowledge and practices.
5. Analyze societal challenges related to health and the environment through the lens of biological science, recognizing how biological knowledge and associated career paths can contribute to studying, addressing and solving these challenges.

Course Learning Outcomes (CLOs)

Upon completion of BI300, the student will be able to:

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 the differences from 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.

Marianist Values

An education in the Marianist Tradition is marked by five principles. Reflect on how this course relates to one or more:

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.

This course connects most directly to Provide an Integral, Quality Education, Educate for Service, Justice and Peace, and Educate for Adaptation and Change: students learn to communicate scientific work clearly and persuasively so that it can serve real audiences, stakeholders, and communities.

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	CLO 4	CLO 5	CLO 6
Marianist Values	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5
PLOs	3	2	6	2	2	2
Native Hawaiian Values	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5	2, 4, 5
Gen Ed Outcomes(if applicable)						

Attendance & In-Class Participation

Attendance Policy

Students are expected to attend regularly. Notify the instructor by email as soon as possible when illness or another extenuating circumstance prevents attendance and make arrangements to complete missed work; it is the instructor's prerogative to adjust deadlines accordingly. Attendance is graded and counts for 10% of the course grade. Unexcused absences equivalent to more than a week of classes may lower the course grade, and two or more consecutive weeks of unexcused absence may result in withdrawal from the course by the instructor. Any student who stops attending without officially withdrawing may receive a failing grade.

Quick Reference — Absence Thresholds:

Excused Absence	Illness or another extenuating circumstance (e.g., documented medical or personal emergency) communicated to the instructor as soon as possible.
Unexcused Absence	Any absence not communicated to the instructor or not supported by documentation.
Warning Threshold	Unexcused absences totaling more than one week of class meetings — instructor may notify student.
Grade Penalty	Unexcused absences totaling more than one week of class meetings may lower the final course grade.
Course Failure	Two or more consecutive weeks of unexcused absence may result in withdrawal from the course by the instructor, or a failing grade if the student stops attending without officially withdrawing.

In-Class Participation Expectations

Active, respectful engagement is essential. Students are expected to come prepared and contribute meaningfully to discussions, activities, and collaborative work.

Students are expected to:

- Come prepared — complete readings and activities before each session.
- Participate actively in discussions and group work, demonstrating critical thinking.
- Engage respectfully and honor diverse perspectives.
- Use personal devices for course purposes only unless otherwise directed.
- Submit work by established deadlines to support course pacing.

Please set cell phones to silent during class. Laptops and tablets are encouraged for assigned online activities and readings but should be used for course purposes only.

Course Activities

In-Class Activities	<i>Class sessions are built around hands-on writing exercises and discussions tied to each week's strategic-writing topic.</i>
Homework / Assignments	<i>Weekly assignments are built around each student's project notebook (details explained in class) both for in-class and between-class project work; all assignments are linked to the larger course project.</i>
Quizzes / Exams	<i>In place of quizzes or exams, each student will meet one-on-one with the instructor three times during the semester. Each of these meetings is worth 10% of the grade; detailed instructions and a grading rubric will be provided in advance of the first one-on-one meeting in Week 3.</i>
Projects	<i>The entire course is organized around working on developing a research proposal, which is the major project for the class. In addition to the weekly project notebook writing, there are three writing assignments associated with the project: (1) a reference list (worth 10% of the course grade), (2) an AI-assisted iteration of the project outline (10%), and (3) the full final proposal draft (15%).</i>

Course Policies

Late Work	<i>Requests for extensions due to extenuating circumstances (e.g., documented computer or medical problems) will be considered, but in general work received after the deadline will not be graded (i.e., will receive a score of zero).</i>
Make-Up Work	<i>Within reason, weekly work can be made up; instructor will work individually with students based on specific circumstances. Note, however, that it will not be possible to make up large chunks of the week-to-week work late in the course (i.e., someone who has missed most of the course cannot do all the coursework at the end of the course and receive credit).</i>
Extra Credit	<i>No extra credit is available in this course.</i>
Incomplete Grade	<i>An incomplete grade may be given at the instructor's discretion when a significant medical or personal event prevents a student who has completed the majority of coursework with a passing grade from finishing on schedule. Issuance is not automatic.</i>
Syllabus Changes	The instructor reserves the right to modify this syllabus. Changes will be announced in class and posted to Canvas.

Grading Breakdown

Assignment	% of Course Grade
Attendance	10%
Research notebook	25%
Reference list	10%
Individual meetings	30%
AI proposal and critique	10%
Final proposal	15%
Total	100%

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's 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>

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
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.	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/
Campus Safety / SafeSwords	Security escort service for anyone who feels unsafe walking alone on campus at any time of day. Call security and a professional will escort you to your destination.	chaminade.edu/student-life/security/campus-safeswords-program/
CUH Alert Emergency Notification	Emergency text system. Register your cell number via the Chaminade portal and confirm the text to complete enrollment.	chaminade.edu

Weekly Course Schedule

Note: The instructor reserves the right to modify this schedule. Changes will be announced in class and posted to Canvas.

Date	Theme	Due Dates
8/18	Introduction	N/A
8/25	Strategic Writing Framework: The Hourglass	Notebook entries PDF due 8/25 after class; schedule one-on-one meeting for Week 3
9/1	NO CLASS MEETING – one-on-one meetings on project topic and significance	Notebook entries PDF due 2pm 9/1
9/8	Strategic Writing: The Big Why and the Piece of the Pie	Notebook entries PDF due after class
9/15	Strategic Writing: Approach and SMART Objectives	Notebook entries PDF due after class
9/22	Strategic Writing: Sources, Citations, Evidence, and Supporting Data	Notebook entries PDF due after class; List of references due after class; schedule one-on-one meeting for Week 7
9/29	NO CLASS MEETING – one-on-one meetings on evidence and supporting data	Notebook entries PDF due 2pm 9/29
10/6	Strategic Writing: Moving the Needle (Outcomes and Impact)	Notebook entries PDF due after class
10/13	NO CLASS MEETING – WELLNESS WEEK	NO ASSIGNMENTS DUE
10/20	Wait, can't AI just write the whole thing for me? (AI pitfalls; Iteration with AI and prompt engineering)	Notebook entries PDF due after class; AI assignment due 10/20, 11:59pm
10/27	AI assignment debrief; Writer's Room: Approach, SMART Objectives, and Specific Aims	Notebook entries PDF due after class; schedule one-on-one meeting for Week 12
11/3	NO CLASS MEETING – one-on-one meetings on specific aims	Notebook entries PDF due 2pm 11/3
11/10	Writer's Room: The Big Why and Piece of the Pie	Notebook entries PDF due after class
11/17	Writer's Room: Moving the Needle (Outcomes and Impact)	Notebook entries PDF due after class
11/24	Writer's Room: Executive Summary	Notebook entries PDF due after class
12/1	Writer's Room: open session	Final Draft due 12/1, 11:59pm