

# Course Syllabus

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Chaminade  
University  
OF HONOLULU

## BI311 Biostatistics

Department of Biology, School of Natural Sciences & Mathematics

Fall Semester 2024

Credits: 3

### Meeting times & location:

Section 1: Mon, Wed & Fri, 9:30 - 10:20am

**Location:** Sullivan Library, room 102

**Instructor:** Michael Dohm, PhD

**Department:** Biology, School of Natural Sciences and Mathematics, Chaminade University of Honolulu

**Office:** Wesselkamper Science Center (WSC) rm. 108

Phone: (808) 739 -- 8543

**Office Hours:** 10:30am - 12:30pm, Mon & Wed or by appointment

**E-mail:** mdohm [at] chaminade.edu (current students, please use CANVAS messaging)

**Website:** [letgen.org](https://letgen.org)  (<https://letgen.org>)

A pdf version of the syllabus is available from the [Syllabus Archive](https://syllabus.chaminade.edu/)  (<https://syllabus.chaminade.edu/>).

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## Course Description

Biostatistics is a lecture, web-enhanced and hands-on course designed to provide students with the opportunity to develop analytical and statistical reasoning skills appropriate for biology. It is the first of two courses in biostatistics and epidemiology (BI 312) at Chaminade. Statistical reasoning may be defined as the ability to understand and use probability arguments and to recognize the distinction between specific and generalized conclusions. After an introduction to data sets and the three philosophical positions of statistical hypotheses (frequentist, likelihood, and Bayesian), students will learn to apply statistical reasoning to questions about biological processes. During the semester, students will be given an introduction to (1) statistical tools and approaches used in biological and biomedical research, and (2) experimental design and analysis. Students will learn about probability, error concepts, inference, and to identify and estimate via experimental design or simulation impacts of experimental versus biological sources of error on conclusions. Students will move from descriptive statistics and issues of parameter estimation to factorial experimental design (ANOVA, contingency tables), and general linear and logit models, all with examples and problem sets from biology.

### Statistical reasoning

Statistical reasoning may be defined as the ability to understand and use numbers to communicate findings and to support opinions. Statistical reasoning is important to your future, for two reasons. The biological sciences are, by their nature, an experimental science: all disciplines in biology involve the presentation and analysis of data. Consider a biomedical example: You work as an AIDS counselor in a major U.S. city. Before you is the result of a male client's HIV test. It is positive, meaning the ELISA and Western Blot tests detected HIV in the blood sample. The client, who insists that he does not fit any known risk behavior group, now sits before you, waiting to hear the results. Your training has given you the following facts: (1) less than 0.01% of men fitting this category (heterosexual, no IV drug use) are infected with HIV in the U.S.; (2) the sensitivity of the tests is very high, 99.9% (sensitivity is defined as the percentage of individuals with a disease who are correctly classified by a test as having the disease); and the specificity of the tests is also high, 99.9% (specificity is defined as the percentage of individuals without a disease who are correctly classified by a test as not having the disease).

How do you communicate the client's test results?

Statistical reasoning is common to our daily lives. The above example illustrates the problem from the perspective of a counselor, but as citizens, we are faced with a barrage of numbers: our risk of developing a particular disease (breast cancer, 1 in 9 women; prostate cancer, 1 in 9 men, etc.); our risk from dying under general anesthesia (on average, about 0.01% or 1 death every 10,000 U.S. cases); our risk of dying in a car crash versus our risk of dying in a plane crash. Data summaries, projections and predictions, and declarations of probability and likelihood are important tools for communicating complex information. The media commonly employ these tools to present information to you: The latest results from clinical trials of an HIV drug therapy, putative links between diet and health, effects of environmental toxins on health... the list is long.

Often, the portrayal of medical and health news in the media is conflicting, and the lack of consistency can be explained in part by failure to communicate the statistical issues. One result from the media's poor presentation of science results is the impression that just about everything and anything can be shown to adversely affect health... not a very useful conclusion. More importantly, exaggerated claims are made with numbers, and it may be difficult to sort fact from interpretation from fiction when numbers are used.

## Course Resources

### Required Text(s)

1. **[Mike's Biostatistics Book](https://biostatistics.letgen.org/)** [↗](https://biostatistics.letgen.org/), ebook available at no cost from course web site.
2. **[Mike's Biostatistics Workbook](https://mikeworkbook.letgen.org/)** [↗](https://mikeworkbook.letgen.org/), provided in class and via course web site at no cost

### Other textbooks (recommended but not required)

#### Helpful, short books on Biostatistics

1. Weaver, A., and S. Goldberg. 2011. *Clinical biostatistics and epidemiology made ridiculously simple*. MedMaster.
  2. Motulsky, 2015. *Essential biostatistics: A nonmathematical approach*. Oxford University Press
- Books on R
1. Knell, R. 2013. *Introductory R: A Beginner's Guide to Data Visualisation and Analysis Using R [Kindle Edition]*. At less than \$6, this is a really good, short book to answer many of your questions about R.
  2. Everitt, B. S., and T. Hothorn. 2009. *A Handbook of Statistical Analysis Using R, 2nd edition*. Chapman and Hall/CRC. This book is a reference to using R with focus on use of the command line and scripts.

### Other (bio)statistics textbooks (We used these books in previous Biostatistics courses)

1. Glover, T., and K. Mitchell. 2008. *An Introduction to Biostatistics*, 2nd edition. Waveland Press.
2. Norman, G. R., and D. L. Streiner. *Biostatistics: The Bare Essentials*. People's Medical Publishing

House.

- Whitlock, M. C., and D. Schluter. 2008. *The Analysis of Biological Data*. Roberts and Company.

## Software

We use the R, an open source and free statistical programming language. From the [R-project webpage](https://www.r-project.org/about.html) [↗](https://www.r-project.org/about.html) (<https://www.r-project.org/about.html>): "R is an integrated suite of software facilities for data manipulation, calculation and graphical display." Instructions for access to R will be discussed during the first week of the semester. While R is not required to install R onto their own computers, this is highly recommended; students will need access to statistical software. Spreadsheet and writing apps are required.

## Course Management System (CMS)

BI311 is a web-enhanced course: We meet at the scheduled times like any traditional course, but components of the course are available to you at all times throughout the semester. Chaminade University relies on CANVAS to help manage courses. Access to the site is via <https://chaminade.instructure.com/courses/35948> [↗](https://chaminade.instructure.com/courses/35948) (<https://chaminade.instructure.com/courses/35948>). Logon instructions will be provided on the first day of class. Slides presented during class time are posted on the course website for your use. Homework, quizzes and related materials are also made available on the site.

## Course Credit Hour Expectations

BI311 is a three-credit hour course and therefore requires a minimum of 135 hours of student engagement (see CUH Credit Hour Policy). One university semester credit hour typically includes one hour of in-class contact time with the professor plus two hours of preparation time by the student. Thus, over the course of the semester, students enrolled in BI311 are expected to spend about 40 hours in class, 20 hours on quizzes, 35 hours on homework, and up to 40 hours preparing for the four exams (3 midterm plus a 2-hour final exam). These times are approximate -- individual needs may vary. Time spent outside of class by students may be better expressed by tasks to do. For example, students can re-write and update lecture notes, perform focused reading from the textbook and other resources, coding and problem solving, developing concept maps, and creating and taking practice exams.

## Course Assessment

**Homework:** Up to twelve (12) homework problem sets that will help you understand concepts that we cover in class. Each set is worth **8 points**. *Lowest TWO homework scores will be dropped from your record*. Homework will include, but are not limited to the following kinds of tasks: calculations and formula derivations, presenting experimental designs, methods and statistical results using tables and graphs. Homework is presented in [Mike's Workbook for Biostatistics](https://mikeworkbook.letgen.org/) [↗](https://mikeworkbook.letgen.org/) (<https://mikeworkbook.letgen.org/>); completed homework are submitted to CANVAS. Although some work may be done during class time, students should expect work will need to be completed outside of

class time. You may work together on homework, but each student must turn in their own homework. Additional work, ungraded, may be assigned in order to enhance skills or emphasize concepts.

Homework are due prior to exams that they support.

**Work on your own:** Your textbook, [Mike's Biostatistics Book](https://biostatistics.letgen.org/), also has many problems to work on: I will recommend many, but will not grade work from the textbook. While these are not required, the more you do, the more you will benefit. You can expect a learning curve with biostatistics -- it is imperative that you make the effort on your own, outside of class, to do as much applied work as you can. We will discuss some of these problems in class as part of lecture.

**Quizzes:** Ten (10) weekly quizzes will be assigned, each up to **10 points**; these TRUE/FALSE and multiple choice questions are designed to test your knowledge and provide instant feed-back.

Quizzes are due prior to exams that they support.

**Four exams, exam1 - 3 each up to 70 points, exam4 worth 90 pts:**

- On or about Week 05: Exam 1 will cover material from Chapters 1 - 6,
- On or about Week 08: Exam 2 will include selected topics from Exam 1 and will cover material from Chapters 6 - 10
- On or about Week 10: Exam 3 will include selected topics from Exam 1 & 2 and cover material from Chapters 12 - 15
- Finals week: Exam 4 will include selected topics from Exam 1, 2 & 3 and cover material from Chapters 16 - 18

All readings are from [Mike's Biostatistics Book](https://biostatistics.letgen.org/)

The exams focus on your understanding of important concepts, your ability to evaluate experimental designs, and your ability to recognize and apply appropriate statistics to be employed given sets of data or particular experimental designs. Exam questions will be drawn from homework and/or from suggested problems in the textbook.

**Because of the nature of biostatistics, all exams after Exam 1 should be viewed as cumulative.** *Progression through the biostatistics course is a cumulative knowledge process.* Following Exam 1 and continuing through the fourth exam, you will be expected to draw on concepts and facts introduced in the first weeks of the course. Thus, all exams after Exam 1 are cumulative and you can expect to be asked on concepts drawn from any point prior to the exam date.

**Optional Independent Project.** The best way to learn statistics is to work with your own data. Students will design, implement, collect and analyze data relevant to student's interest. Group projects are possible provided there are significant questions that can support individual reports. Students must propose and receive approval for the project no later than the end of the third week of the semester.

Students will submit a written report (draft, final) and produce a short video presentation. The project is optional. Because I feel so strongly about the learning opportunity, you may submit a project in place of the fourth exam.

**Class attendance and participation:** Attendance is part of your grade -- up to 10%. You are expected to come to class prepared, to participate fully in class by asking questions, bringing attention to media announcements of relevance to biostatistics, by helping in data collection needed for homework projects, and by consistent & regular participation in the weekly Discussion forums on CANVAS. I also encourage all of you to assist fellow students with computer and statistical software-related questions. Perfect attendance is neither expected nor required. However, missing two or more classes is not acceptable and requires documented evidence to continue in the course -- all instructors may initiate Administrative withdrawal of a student for consistent absence. Excused absences medical (with Doctor note), jury duty, note from the Dean of Students, and participation in Chaminade-sponsored activities.

## Grading

### Official grade records

Canvas provides a way for you to monitor your graded assignments. This is convenient, but students should be aware that the final word about grades depends on the Official Grade Book for the course. Thus, although the Canvas record will show your points for an assignment, be advised that your assigned grade is finalized by the official grade book, which is maintained by Dr Dohm. You may always inquire about your current standing in the course by sending a [message to Dr Dohm, within Canvas \(https://chaminade.instructure.com/conversations\)](https://chaminade.instructure.com/conversations).

Points available and weights for each graded element are listed in the table.

Item	How many?	Each	Semester Points	Weight
Quizzes	10	5	50	10%
Homework	12	8	100	20%
Exams	3	70	210	42%
Final exam*	1	90	90	18%
Attendance	Daily	4	50	10%
Total			500	100%

\*Optional project

With instructor approval, a student project may be used to replace Exam04

Project	1	90
	Draft	50
	Final	20
	Presentation	20

## Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. They are interpreted as follows:

A	90 - 100%	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	50 - 69%	Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work.
F	< 49%	Failed to grasp the minimum subject matter; no credit given

## Course Schedule

### Major assignments schedule

Week	Item
5	Exam01
6	Project draft
9	Exam02
12	Exam03
16	Project final
	Project
16	presentation
Finals	Exam04

Click [here for the BI311 schedule of lectures and all assignments](https://chaminade.instructure.com/courses/35948/pages/bi311-schedule)  
[. \(https://chaminade.instructure.com/courses/35948/pages/bi311-schedule\)](https://chaminade.instructure.com/courses/35948/pages/bi311-schedule).

## Student (Course) Learning Outcomes

Students will

1. Demonstrate statistical results and data presentation through appropriate use of summary tables,

graphics, and written summary sentences.

2. Identify and distinguish among data types, variables, and parameters from published research.
3. Choose, defend, and contrast among kinds of statistical tests given data sets and description of an experiment.
4. Describe the difference between description, hypothesis testing, and prediction in statistics.
5. Interpret and evaluate results of statistical inference and justify statistical choices.
6. Recognize, identify, and interpret output from statistical software.

## Biology Program Learning Outcomes

Upon completion of the B.S. degree program in Biology the student will demonstrate:

1. An understanding of the scientific method and the ability to design and test a hypothesis
2. The ability to visualize, statistically evaluate, validate and interpret scientific data, and to communicate science effectively both orally and in writing
3. The ability to acquire and comprehend information from published scientific literature and to employ computational resources in the resolution of biological problems
4. An understanding of the chemical and physical principles that unite all life forms, and of biological organization at the molecular, cellular, tissue, organ, organism and system levels
5. The ability to 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. An understanding of the entry requirements, career pathways and progression for the major post-graduate fields of research, education and the health professions

## Map CLO and BPLO

CLO	PLO
1	1, 2, 3
2	1, 2, 3
3	1, 2, 3
4	1, 2, 3
5	1, 2, 3
6	2, 3, 6

## University outcomes

### 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

## 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 the 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 Maiau, be neat, prepared, careful in all we do; Makawalu, demonstrate foresight and planning; `Ai, sustain mind and body; Pa`a Na`au, learn deeply.

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## Course and University policies

### 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 on Account > TutorMe. For more information, please contact Kōkua 'Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

### 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](https://chaminade.edu/student-success/kokua-ike/)  (<https://chaminade.edu/student-success/kokua-ike/>) 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](https://chaminade.edu/student-success/kokua-ike/)  (<https://chaminade.edu/student-success/kokua-ike/>) via email at [ada\[at\]chaminade.edu](mailto:ada[at]chaminade.edu) each semester if changes or notifications are needed.



### 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 [Chaminade University Title IX Office Contact Information and Confidential Resources website](https://chaminade.edu/compliance/contact-information/) . On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](https://chaminade.edu/compliance/contact-information/) .

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/>  [\(https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/\)](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](https://cm.maxient.com/reportingform.php?ChaminadeUniv&layout_id=0)  [\(https://cm.maxient.com/reportingform.php?ChaminadeUniv&layout\\_id=0\)](https://cm.maxient.com/reportingform.php?ChaminadeUniv&layout_id=0). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates. The [NOTICE of NONDISCRIMINATION](https://chaminade.edu/compliance/title-ix-nondiscrimination-policy/)  [\(https://chaminade.edu/compliance/title-ix-nondiscrimination-policy/\)](https://chaminade.edu/compliance/title-ix-nondiscrimination-policy/) can be found here: Notice of Nondiscrimination.

## 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.

## 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.

## Canvas "grading"

Canvas "grades" are tentative and not official. Canvas scores available to students are not official until the instructor announces such to the class. Official grading is done by the instructor and records are kept on the instructor's computer.

## Instructor and Student Communication

Please ask questions during class -- interrupt the lecture, it's OK!

Weekly discussions are available, too. Please post and do respond to classmate postings!


Outside of class, use CANVAS Messaging to communicate with the instructor, not CUH email.

Questions about assignments, but not grade challenge for assignments should be asked during class time. All questions for this course can be posted to the instructor via CANVAS Messaging. Online (e.g., Zoom) and in-person conferences can be arranged. Most messages to Canvas will be replied within 24 hours between Monday and Friday; messages sent to instructor on Friday will be replied to on Monday. Please note that questions or communication about the course sent to instructor's chaminade.edu e-mail may take up to 7 days for response. In general, the reply will not answer the question but will request you repost at the proper venue (CANVAS Messaging).

Graded materials will generally be returned within 7 - 10 days.

CANVAS allows Comments and the instructor will use this feature to add context to grading of assignments. If you have questions or are instructed to follow up based on Comments, please communicate via CANVAS Messaging, not by adding to the assignment comments.

## Attendance Policy

The following attendance policy is from the [Chaminade University Undergraduate Catalog](https://catalog.chaminade.edu/generalinformation/academicaffairs/policies/attendance)  (<https://catalog.chaminade.edu/generalinformation/academicaffairs/policies/attendance>): 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.

## Online Attendance

During the first three weeks (subject to change), this course is primarily online. Attendance for this course during the online phase is based on the (1) timely submission of assignments and/or (2) logging onto the course at least once per week. Students will receive credit for 'attending' the class each time a weekly assignment is submitted and/or each time student signs on to the course and navigate to at least one page or module removed from the home page within the Canvas system for the course. Some weekly lessons require the submission of one assignment, some require two. Each lesson will indicate when it is complete. The student is responsible for pressing the 'submit' button each time he or she has completed an assignment. If the page indicating that the assignment has been submitted does not appear, then the assignment has not been submitted.

## Late Work Policy

There are no make-ups for quizzes, unless a physician's note documents your absence during quizzes. Journal article presentations CANNOT be made-up. Quizzes and assignments are due by 8:59am HST on the assigned date. Up to 10% grade reduction will be assessed for each 12 hour late assignment. All quizzes and assignments close by 3 days post the due date.

## Grades of "Incomplete"

Students and instructors may negotiate an incomplete grade when there are specific justifying circumstances. An Incomplete Contract (available from the Divisional Secretary and the Portal) must be completed. When submitting a grade, the "I" will be accompanied by the alternative grade that will automatically be assigned after 30 days. These include IB, IC, ID, and IF. If only an "I" is submitted the default grade is F. The completion of the work, evaluation, and reporting of the final grade is due within 30 days after the end of the semester or term. This limit may not be extended.

## Writing Policy

Instructions for the writing assignments are detailed for each individual assignment on the canvas course page.

Potential resources for writing assignments:

- Google Scholar
- Pubmed
- Sullivan Library

## Cell phones, tablets, and laptops

Instructor policy: Students are encouraged to use personal digital devices during class provided such use does not distract others or interfere with class activities.

University policy. Music Devices and Cellular Phones: *Unless specifically permitted by your instructor* [emphasis by instructor], use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class. 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.

## Recording of lecture material

Students may not record audio or video of lectures conducted by the instructor nor of any media presented during the lecture without prior permission from the instructor. All materials presented in class by the instructor will be made available to students.

## 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.

Violations of Academic Integrity: 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 an 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.
- Plagiarism: Intentionally or knowingly presenting the work of another as one's own original work (i.e., without proper acknowledgment of the source).
- 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 includes, but is not limited to:

- Complete or partial copying directly from a published or unpublished source without proper acknowledgement to the author. Minor changes in wording or syntax are not sufficient to avoid charges of plagiarism. Proper acknowledgement of the source of a text is always mandatory.
- Paraphrasing the work of another without proper author acknowledgement.
- Use of generative artificial intelligence (AI) without permission by instructor. Sentences, paragraphs, or entire papers written by AI is not original work.
  - Students are encouraged to utilize change tracking and history functions of their word processing software to help document that a work is original to the student.
- Submitting as one's own original work, however freely given or purchased, the original exam, research paper, manuscript, report, computer file, or other assignment that has been prepared by another individual.







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

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## CANVAS assignments

The CANVAS summary is provided for your convenience -- check Course Schedule page for deadlines

## Course Summary:

Date	Details	Due
Fri Oct 27, 2023	 <a href="https://chaminade.instructure.com/courses/35948/assignments/356807">Bonus opportunity - Due by Friday 6 Nov</a> <a href="https://chaminade.instructure.com/courses/35948/assignments/356807">(https://chaminade.instructure.com/courses/35948/assignments/356807)</a>	due by 11:59pm
Mon Nov 27, 2023	 <a href="https://chaminade.instructure.com/courses/35948/assignments/356824">Homework11</a> <a href="https://chaminade.instructure.com/courses/35948/assignments/356824">(https://chaminade.instructure.com/courses/35948/assignments/356824)</a>	due by 11:59pm
Wed Aug 21, 2024	 <a href="https://chaminade.instructure.com/courses/35948/assignments/356825">Homework: Quick look at R</a> <a href="https://chaminade.instructure.com/courses/35948/assignments/356825">(https://chaminade.instructure.com/courses/35948/assignments/356825)</a>	due by 11:59pm
Thu Aug 22, 2024	 <a href="https://chaminade.instructure.com/courses/35948/assignments/356787">Quiz00</a> <a href="https://chaminade.instructure.com/courses/35948/assignments/356787">(https://chaminade.instructure.com/courses/35948/assignments/356787)</a>	due by 11:59pm
Sun Aug 25, 2024	 <a href="#">BI311 -- Your first week &amp; R access</a>	to do: 7pm
	 <a href="#">Homework - software</a>	due by 11:59pm