Course Syllabus

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Course Title: Systems Biology
Course Number: BI-420
Course credits: 3
Term: Spring 2026
Meeting Days: Mon, Wed, & Fri
Meeting Hours: 11:30 - 12:20pm
Meeting Location: room 102 Eiben, link to campus map (https://chaminade.edu/student-success/nso/nso-campus-map/)

Instructor: Michael Dohm, PhD
Department: Biology, School of Natural Sciences and Mathematics
Office: Wesselkamper Science Center (WSC) rm. 108
Office Phone: (808) 739 -- 8543
Office Hours: You are welcome to drop by anytime -- my Spring Schedule is posted outside my door & available in CANVAS (click to follow link (https://chaminade.instructure.com/courses/45013/pages/drd-schedule)).

Scheduled office hours:

Mon & Thurs	3 - 4:30pm
• Or by appointment -- send request in CANVAS. • You do not need an appointment to visit during scheduled office hours!	

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

Website: letgen.org (https://letgen.org/)

Syllabus topic quick links

Course Description

BI-420 Systems Biology is a one semester introduction help students connect mathematical concepts to biological real- world problems. Through hands-on exercises, discussion, and in-class projects, we will learn how mathematical models of biological networks are built and how the analysis of such models help to understand the system-level properties of networks.

University Course Catalog Description

This course will focus on the frontiers of our understanding of the multi-level networks that underlie biological systems. Lecture course reviewing the key concepts of the systems biology approach to ecological, organismal and cellular systems. Contribution of cornerstone technologies such as genomics, bioinformatics, proteomics and metabolomics will be reviewed, along with their computational foundations.

Course Prerequisites

BC 308 or BI 308 and BC 308L or BI 308L , BI 311 (recommended)

Course resources

Required textbook. *A First Course in Systems Biology, second edition, by* Eberhard Volt. ISBN: 978-0815345688. The text book is available in paperback or as eBook. Make sure to get an official copy, preferably through the **Chaminade University Bookstore (https://chaminade.bncollege.com/shop/chaminade/page/find-textbooks)** .

Required software. R statistical software (free); RStudio (free), Cytoscape (free), mathematics software (GNU Octave or SageMATH), Office suite software (presentation, spreadsheet, word processing) Google, Microsoft or LibreOffice.

Finding *additional* resources in addition to the required textbook is encouraged. Reading from a diversity of voices about a subject will benefit student learning. Recommended, but not required alternative textbooks include

- *An introduction to Systems Biology*, by Uri Alon
- **Mike's Biostatistics Book (https://biostatistics.letgen.org/)** , by Mike Dohm

- Journals:
  - **Systems Biology and Applications** (https://www.nature.com/npjsba/)
  - **Frontiers in Systems Biology** (https://www.frontiersin.org/journals/systems-biology)
  - **Computational and Systems Biology** (https://elifesciences.org/subjects/computational-systems-biology)

Course Management Software

BI420 is a web-enhanced course supported by CANVAS, Chaminade's CMS platform. Instruction takes place in the classroom, and technology, including the website, are used to complement and support face-to-face instruction. All lecture media, course handouts, including the syllabus, will be made available through our CANVAS site.

Link: **https://chaminade.instructure.com/courses/45013** (https://chaminade.instructure.com/courses/45013)

Technical Assistance for Canvas Users:

The BI-420 website is supported by the Canvas course management platform. CANVAS is the CMS adopted by Chaminade University. Assistance with CANVAS

- Search (**Google** (https://chaminade.instructure.com/courses/28868/assignments/google.com) , Bing, etc.) for help on specific topics or get tips in Canvas Students.
- Live chat with Canvas Support for students
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this video to get you started
- Online tutorials: click on “Students” role to access tutorials
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu or call (808) 735-4855

Course Credit Hour Expectations

BI-420 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 contact time with the instructor plus two hours of preparation time by the student. Thus, over the course of the semester, students enrolled in BI420 are expected to spend about 40 hours in class, 20 hours on **quizzes** (reading, problem solving), 35 hours on **homework** (coding, reading, problem solving), and up to 40 hours preparing for the **project**.

Course Assessment

Quizzes are multiple-choice or one word-answer format and will be taken online via the Canvas. Quizzes are scheduled outside of scheduled class time. Quizzes will be available for a minimum of 24-48 hours to access and complete the assignment. However, once you start, you are permitted 50 minutes to complete and submit the quiz. You have the right to take any or all quizzes by paper; you would then take the quiz as part of an arranged proctored session outside of regular class hours but before the due date for the quiz. The advantage

of taking the quizzes online is that it permits rapid grading and immediate feedback – because the quizzes are predominately multiple choice, you will receive immediate feedback once the quiz closes. The quizzes are open-book, open-notes; however, you are strongly encouraged to avoid the temptation to complete the quizzes simply by looking through your text and notes for answers. First, you will likely run out of time. Second, the quizzes are intended to demonstrate your current understanding of the material.

Worksheets a required element for BI-420. Homework and quizzes are delivered via CANVAS. Homework is assigned to help students apply, analyze, and explain models discussed in chapter readings and lectures. Due dates for assignments are reported as month/day (mm/dd). In general, assignments are due by 5PM HST on the date due. Details about each graded element are discussed in class with materials posted in Canvas. There are a total of eleven (11) homework assignments; lowest score may be dropped.

Project. Completion of an individual project is required. Students select a systems problem, research the topic, develop and test a model, provide an executive summary supported by appendices, and produce a 10 min video about the project. Project is completed by completing peer evaluation.

Participation: A total of 50 points are possible for regular attendance and consistent class participation. Students with regular attendance, defined as no more than four, nonconsecutive, unexcused absences during the semester. Attendance is important, but active, meaningful participation during class will also be evaluated. You will be expected to facilitate classroom and forum exam discussions by asking questions; you are also expected to respond to discussion forum postings and contribute to classroom discussions.

Grading

A total of 500 points are available from Exams (2), quiz and worksheets (14), a single project, and attendance and participation. Points available and weights for each graded element are listed in the table.

Item	How many?	Points per item	Points	Weight
Quiz & worksheets	14	10 or 20	190	38%
Exams	2	60	120	24%
Project	1	140	140	28%
Participation	Daily		50	10%
			500	100%

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 from within Canvas.

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%	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	< 50%	Failed to grasp the minimum subject matter; no credit given

Course Schedule

Click **here to view the Lecture and Assignments schedule for BI-420 (https://chaminade.instructure.com/courses/45013/pages/bi420-schedule)** . The schedule is tentative and subject to change by the instructor.

Student (Course) Learning Outcomes

At the conclusion of BI-420, students will be able to:

1. Systems Biology Foundations: Define systems biology and analyze how advances in molecular biology and computing enabled large-scale biological data analysis.
2. Omics Technologies: Describe and compare experimental technologies used to generate genomic, transcriptomic, epigenomic, microbiome, metabolomic, and proteomic data.
3. Omics Data Analysis: Retrieve, clean, integrate, and interpret multi-omic data sets to extract biological meaning.
4. Data Visualization: Use advanced visualization tools to analyze and communicate patterns in large biological data sets.
5. Systems Applications: Apply systems-level approaches to analyze a contemporary problem in medical or environmental biology.
6. Team Science Communication: Collaborate in a team to solve a systems-biology problem and communicate results through written and video-based scientific products.

Biology Program Learning Outcomes (PLO)

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

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. Design and conduct 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.

Map CLO and PLO

	PLO1	PLO2	PLO3	PLO4	PLO5
Systems Biology Foundations	X	X	X		
Omics Technologies	X	X	X		
Omics Data Analysis		X	X		
Data Visualization		X	X		
Systems Applications	X	X	X		X
Team Science Communication		X	X	X	

University Learning 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 (‘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; pela iho la ka nohana ‘ohana (‘Ōlelo 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 noʻeau (ʻŌlelo Noʻeau 1430) Education is the standing torch of wisdom
5. Educate for Adaptation and Change (Aina) ʻAʻohe pau ka ʻike i ka hālau hoʻokahi (ʻŌlelo Noʻeau 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 Hawaiʻi 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.

Alignment of BI420 with Marianist and Hawaiian values of the University

BI420 Systems Biology provides a rigorous, integrative educational experience that prepares students to analyze complex biological systems using computational and quantitative approaches. The course trains students to synthesize diverse biological data with mathematical modeling, programming (R and Python), and artificial intelligence and machine learning methods to investigate real-world problems in personalized medicine, drug discovery, and bioengineering. Moving beyond single-gene or single-protein perspectives, BI420 emphasizes emergent properties and dynamic interactions across biological networks, fostering a systems-level understanding of health, disease, and biological function. These competencies reflect the core practices of contemporary biological and biomedical research. Successful completion of BI420 represents the culmination of students' upper-division training in biology, building directly on prior coursework including BI311, BI320/L, BI321/L, BI411L, and BI471/L. Throughout the semester, new topics are explicitly connected to these

foundational courses and integrated with concepts from mathematics, chemistry, and physics. This approach reinforces the interdisciplinary nature of modern biology and ensures that students understand biological systems within the broader scientific enterprise.

This course also focuses on educating in the family spirit. This is done by emphasizing that science is not done in a vacuum. Throughout the semester there are several small group projects/presentations both within the lecture and the lab. These are designed to not only assist student in learning the subject matter but to encourage them to build relationships within the peer groups. In order to foster collaborative learning homework assignments are given such that students are instructed to answer in their own words; however students are strongly encouraged to work with their peers to find and discuss the answers to these questions.

Course and University Policy, Reminders, and Notices:

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 (mailto:ada@chaminade.edu)** each semester if changes or notifications are needed.

Kōkua ʻIke: Tutoring & Learning 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 ʻIke: 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 ʻIke's (https://chaminade.edu/student-success/kokua-ike/)** 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 ʻIke at **tutoring@chaminade.edu (mailto:tutoring@chaminade.edu)** or 808-739-8305.

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. 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.

Nondiscrimination Policy & 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 (https://chaminade.edu/titleix/nondiscrimination/)** . On-campus Confidential Resources may also be found here at **CAMPUS CONFIDENTIAL RESOURCES (https://chaminade.edu/titleix/resources-and-support/)** .

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/)** .

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)** . 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 (https://chaminade.edu/compliance/title-ix-nondiscrimination-policy/)** .

Hazing Prevention Resources and Athlete Helpline:

Assists athletes, parents, coaches, and any allies interested in ensuring physical and mental safety for sports communities by offering confidential emotional support, crisis intervention, informational athlete-focused resources, and guidance related to concerns about any type of abuse—including hazing.

Chaminade University's Hazing Policy:

https://catalog.chaminade.edu/studenthandbook/codeofconduct (https://catalog.chaminade.edu/studenthandbook/codeofconduct)

(https://catalog.chaminade.edu/studenthandbook/codeofconduct) https://hazingpreventionnetwork.org/athlete-helpline/ (https://hazingpreventionnetwork.org/athlete-helpline/)

(https://hazingpreventionnetwork.org/athlete-helpline/) https://hazingpreventionnetwork.org/how-to-report-hazing/ (https://hazingpreventionnetwork.org/how-to-report-hazing/)

Basic Needs Resources:

https://chaminade.edu/basic-needs/ (https://chaminade.edu/basic-needs/)

Campus Safety/ SafeSwords

A program for students, faculty and staff, who may feel uncomfortable or unsafe walking alone on campus, at any time of the day. Call security, and a security professional will meet you at your location on campus. The security professional will escort you to your residence hall, car, etc. Students may utilize this when walking to and from night classes around campus or after late night events. **SafeSwords webpage (https://chaminade.edu/student-life/security/campus-safeswords-program/)**

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. CANVAS does not keep track of any BONUS assignment scores given. 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.
- DrD has an open-office policy -- if he's in his office you are encouraged to drop by and chat about biology!
- Official office hours are Monday & Thursday 3 - 4:30pm

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 Thursday; Weekend or Friday messages 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)** : 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

Assignments are due according to the BI-420 schedule and we use CANVAS to assist management of due dates. CANVAS provides two dates, the **due date** and a later date and time that the assignment may be submitted (displayed as **Available** and date/time range). Class policy holds that there is up to 12 hour grace period from the due date, but no additional time post the last submit date and time.

Quizzes and homework are due by 5pm HST on the assigned date. If CANVAS is used for the quiz or assignment, note that CANVAS may mark the work late -- however, per the first sentence in this notice, there is up to 12 hour grace period.

After the grace period, a 10% grade reduction may be assessed for each 12 hour late assignment. All quizzes and assignments close by 3 days post the due date.

There are no make-ups for exams, homework, or quizzes without a physician's note or letter from Dean of Students office documents your absence during the assignment due date. Journal article presentations CANNOT be made-up. In the absence of such notes, you are still encouraged to communicate with the instructor should you expect to miss a class assignment.

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 integrity is the commitment by all members of the academic community -- educators, researchers, scholars, and students -- to act with honesty, trust, fairness, respect, and responsibility. 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 (https://catalog.chaminade.edu/academicaffairs/policies/academichonesty)** on the Chaminade University Catalog website.

CANVAS assignments

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

Course Summary:

Date	Details	Due
Fri Jan 16, 2026	**Quiz00 (https://chaminade.instructure.com/courses/45013/assignments/474455)**	due by 5pm
Mon Feb 23, 2026	**Exam01 (https://chaminade.instructure.com/courses/45013/assignments/474471)**	due by 12:20pm
Mon Apr 6, 2026	**Exam02 (https://chaminade.instructure.com/courses/45013/assignments/474470)**	due by 12:20pm
	Academic honesty statement (https://chaminade.instructure.com/courses/45013/assignments/464205)	
	Cytoscape gene network analysis (https://chaminade.instructure.com/courses/45013/assignments/464207)	
	Cytoscape usability survey01 (https://chaminade.instructure.com/courses/45013/assignments/464206)	
	Explore more Cytoscape capabilities (https://chaminade.instructure.com/courses/45013/assignments/464208)	

Date	Details	Due
	Final project (https://chaminade.instructure.com/courses/45013/assignments/464209)	
	First Cytoscape network (https://chaminade.instructure.com/courses/45013/assignments/464210)	
	First system - Spreadsheet (https://chaminade.instructure.com/courses/45013/assignments/464211)	
	First system, now in R (https://chaminade.instructure.com/courses/45013/assignments/464212)	
	my first Hill function (https://chaminade.instructure.com/courses/45013/assignments/464221)	
	Practice writing equations (https://chaminade.instructure.com/courses/45013/assignments/464213)	
	Project Peer evaluation (https://chaminade.instructure.com/courses/45013/assignments/464214)	
	R app Usability Survey01 (https://chaminade.instructure.com/courses/45013/assignments/464204)	
	Second Cytoscape exercise (https://chaminade.instructure.com/courses/45013/assignments/464215)	
	Second system, from simple to complex (https://chaminade.instructure.com/courses/45013/assignments/464216)	
	Spreadsheet Usability Survey01 (https://chaminade.instructure.com/courses/45013/assignments/464203)	
	Taking a Euler walk (https://chaminade.instructure.com/courses/45013/assignments/464217)	
	Week02 to do list (https://chaminade.instructure.com/courses/45013/assignments/464218)	
	What's the data life cycle? Make a mind map (https://chaminade.instructure.com/courses/45013/assignments/464219)	

Date	Details	Due
	What's your system? (https://chaminade.instructure.com/courses/45013/assignments/464220)	