

Ke Kulanui Kaiāulu o ke Koʻolau

Math 243 - Calculus III

Spring 2025 3 Credits | CRN 60047 8-Week Course (1/13/2025 - 3/7/2025)

Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Instructor Information

How to Contact Your Instructor

Instructor: Jody-Lynn Storm

Office: Mana'opono 105A at Windward Community College

Office Phone: (808) 236-9277 Office Hours (via ZOOM):

- Thursdays 2:00 3:00 pm (drop-in with no appointment)
- Email to set up one-on-one sessions

Email: jstorm@hawaii.edu

ZOOM: https://hawaii.zoom.us/j/4083964886

Note: Email is the preferred method of communication. Instructor will respond within 24 hours excluding weekends and holidays.

Alternate Contact Information

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alaka'i 121Phone: (808) 235-7422

Course Information

Catalog Description

Vector algebra, vector-valued functions, differentiation in several variables, and optimization. (3 hours lecture)

Pre-Requisite(s): Grade of "C" or better in MATH 206 or MATH 242 or equivalent or consent of instructor.

Student Learning Outcomes

As a result of taking this course, students can expect to attain the following outcomes:

- 1. Apply concepts and techniques in vector calculus.
- 2. Apply principles and concepts from calculus to multivariable functions.
- 3. Use strategies from this course to solve applied problems
- 4. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

Required Materials

The MyLab Math (MLM) Online Program. MLM comes with the eBook Calculus 3rd ed., by Briggs. MLM registration will be through IDAP via the VitalSource link in Lamakū.

"This course will be participating in the Bookstore's Interactive Digital Access Program (IDAP). Through this program, you will access your course material digitally, and it will be available to you by the first day of class.

A charge for the digital course material through IDAP will be added to your MyUH account.

You have the option to opt-out of receiving your course material through IDAP. By opting-out, you will lose access to the course material and the charge will be refunded on your MyUH account. If you do not opt-out, the charge will stay on your MyUH account. Any unpaid charges on your MyUH account will turn into a hold. Holds on your account will prevent you from accessing various services within the University.

You may opt-out by visiting your unique Inclusive Access Student Portal, which can be found in your IDAP welcome email (Subject Line: "IMPORTANT: You have enrolled in an IDAP Course").

For more information regarding IDAP, please contact your campus bookstore."

Course Content

- Parametric Curves, Polar Curves, and Conic Sections
- Vectors and the Geometry of Space
 - o Vectors in the plane and in space
 - o Dot and Cross Products

- Lines and Planes in Space
- Vector-Valued Functions
 - Calculus of Vector-Valued Functions
 - o Motion in Space
 - Length of Curves
 - Curvature and Normal Vectors
- Functions of Several Variables
 - o Graphs and Level Curves
 - Limits and Continuity
 - o Partial Derivatives
 - o The Chain Rule
 - o Directional Derivatives and the Gradient
 - o Tangent Planes and Linear Approximation
 - o Maximum and Minimum Problems

Course Format

This is a fully online asynchronous 8-week course. There are no scheduled in-person activities. However, students are expected to virtually interact with each other via weekly discussion posts in Lamakū.

Course Technology

Lamakū Learning Management System (https://lamaku.hawaii.edu/d2l/home)

- Lamakū automatically logs you out if it does not detect activity for three hours. A warning message will appear, notifying you of the lack of activity. Activity is defined as clicking a button in Lamakū, such as "Save Draft" or "Next" (in a test), clicking on a course tab, or taking an action that sends information to the server.
- MyLab (MLM) via the VitalSource link in Lamakū

Regular Substantive Interaction

Online courses at Windward Community College follow these guidelines for ensuring quality instruction: RSI Definition-WCC.

Other Technology

Review the privacy/security policies before using the technologies we will be using in this class. Contact me if you would like to discuss the use of alternate options or technologies.

- YouTube is used for delivering some of the course content (<u>accessibility statement</u>, privacy policy)
- Zoom is used for virtual office (accessibility statement, privacy policy)

Participation Verification

Campuses are required by federal regulations to verify the participation of students in their classes. In accordance with Executive Policy 7.209, all students in the University of Hawai'i system are required to establish "participation" to ensure that they are not dropped from their class(es). Effective fall 2021, students who fail to participate by the late registration period for a class will be administratively dropped from that class. Students may also be dropped from dependent prerequisite and/or corequisite classes if both courses do not establish participation.

Note: To meet participation verification for this course students must register for MLM via the VitalSource link in Lamakū.

Grading Policy

Attendance and Class Preparation

This is an online class and students are expected to keep pace with module assignments. Students are required to complete assignments by the posted deadlines, and interact with the instructor and other members of this online class with professionalism. This is an 8-week accelerated course. It is vital to keep up with the material. Thus, there will be no make-up work and no extensions of due dates.

Assessment Tasks and Grading

Grades for the course are posted in the Lamakū gradebook. Grades are based on the following:

ASSIGNMENT	POINTS	TOTAL
4 Quizzes	50 pts each	200
1 Final Exam	100 pts	100
21 MLM Homework Assignments	10 pts each	210
7 Forum (Discussion) Posts	5 pts each	35
Total		545

Each letter grade for the course will be assigned according to the level of achievement as provided in the table below:

<u>Definition</u>
90% - 100% of the cumulative points possible
80% - 89% of the cumulative points possible
70% - 79% of the cumulative points possible
60% - 69% of the cumulative points possible
Less than 60% of the cumulative points possible
70% or above of the cumulative points possible
Less than 70% of the cumulative points possible
Official Withdrawal

Note: CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline.

Note: The W grade is given only when the student officially withdraws from the course by the posted deadline.

Exams & Quizzes

- There are 6 computer-based quizzes due on Fridays. Each quiz is worth 50 points. The 2 lowest quiz scores will be dropped.
- There is one cumulative computer-based final exam due the last Friday of the term.
- The quizzes & final exam are timed, but not proctored and can be taken on any computer or device that runs MLM.
- For each quiz and exam, show work on paper or a tablet. Work will be uploaded to Lamakū. There is a penalty for quizzes and exams submitted with no work.

MyLab Math (MLM) Homework

There are 21 computer-based homework assignments at 10 points each. Homework is due Fridays by 11:59 pm. There will be a 1% deduction per day for problems submitted after the due date. Final submission for late homework will be the Wednesday in the last week of class.

Forum Posts

There will be 7 posts (usually due on Friday). Each post is worth 5 points.

Extra Credit

- The final exam review is worth up to 5 points of extra credit.
- The end of semester student survey (CES) is worth 5 points of extra credit.
- Each quiz review is worth up to 5 points of extra credit.

Schedule

Important Dates

- 1/14/2025 Last day to register & and drop with 100% refund of tuition.
- 1/22/2025 Last day to withdraw without a "W" grade and to receive 50% refund of tuition
- 2/13/2025 Last day to withdraw with a "W" grade or to choose CR/NC grade option.

	DATES	ASSIGNMENTS
WEEK	(Mon-Fri)	(Due By Friday Unless Stated Otherwise)
1	1/13 – 1/17	 IDAP (MLM) Registration - Due Wednesday (satisfies student participation verification) MLM: My Lab Tutorial (optional), 12.1, 12.2

	DATES ASSIGNMENTS	
WEEK	(Mon-Fri)	(Due By Friday Unless Stated Otherwise)
2	1/20 – 1/24	 MLM: 12.3, 12.4, 13.1 Forum #1 MLM: Quiz 1 Review (optional -extra credit) MLM: Quiz 1 Upload Quiz 1 work
3	1/27 – 1/31	 MLM: 13.2, 13.3, 13.4 Forum #2 MLM: Quiz 2 Review (optional -extra credit) MLM: Quiz 2 Upload Quiz 2 work
4	2/3 – 2/7	 MLM: 13.5, 14.1, 14.2 Forum #3 MLM: Quiz 3 Review (optional -extra credit) MLM: Quiz 3 Upload Quiz 3 work
5	2/10 – 2/14	 MLM: 14.3, 14.4, 14.5 Forum #4 MLM: Quiz 4 Review (optional -extra credit) MLM: Quiz 4 Upload Quiz 4 work
6	2/17 – 2/21	 MLM: 15.1, 15.2, 15.3 Forum #5 MLM: Quiz 5 Review (optional -extra credit) MLM: Quiz 5 Upload Quiz 5 work
7	2/24 – 2/28	 MLM: 15.4, 15.5, 15.6 Forum #6 MLM: Quiz 6 Review (optional -extra credit) MLM: Quiz 6 Upload Quiz 6 work
8	3/3 – 3/7	 MLM: 15.7 – Due Wednesday Late MLM Homework – Due Wednesday Forum #7 – Due Thursday Final Exam Review (optional – extra credit) – Due Thursday Final Exam – Due Friday Upload Final Exam work – Due Friday CES Survey (optional – extra credit) – Due Friday

Academic Integrity

Work submitted by a student must be the student's own work. However, students are free to work with each other or use AI on MLM homework assignments.

Students are not allowed to collaborate with each other or use AI on quizzes or exams.

In this class, students who commit academic dishonesty, cheating, or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

Windward CC Student Conduct Information

UH System Student Conduct Policy EO 7.208

Student Responsibilities

- Have access to a reliable high-speed internet connection
- Have adequate computer skills.
- Check emails regularly
- Be self-motivated
- Set aside adequate study time

How to Seek Academic or Technical Support

Academic Support

- Windward Community College Library
- Library eResources
- Ka Piko Writing Lab
- Ka Piko Speech Lab
- Ka Piko Math Lab
- Evening and Online Learning at Windward Community College
- STAR Balance

Technical Support

- <u>UH ITS Help Desk</u> email <u>help@hawaii.edu</u> or call 956-8883 (or 1-800-558-2669) for Lamakū and most technology support. Available 24 hours a day, 7 days a week, including holidays.
- Student Tech Support email <u>winhelp@hawaii.edu</u>, call 808-235-7437, or stop by in person at Hale La'akea 228. Available Monday—Friday from 8:00 am—4:00 pm.

- Lamakū Click on the <u>Lamakū Help</u> link in the menu bar at the top of the Lamakū homepage to fill out and submit a question and get your answer via email.
- Information Security for Students

College Policies & Support Services

Disabilities Accommodations Statement

The Windward Community College's Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this class. The Disabilities Counselor can be reached at 808-235-7448, wccdsso@hawaii.edu, or stop by the office (Hale Kakoʻo 106) for more information.

Basic Needs

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the UH System Basic Needs website.

Mental Health Counseling

Mental Health and Wellness at Windward Community College counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at the WCC Mental Health & Wellness website.

UH Alerts

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit UH Alerts website for more information.

Financial Aid

If you are receiving financial aid and are contemplating not completing the course, BEFORE you withdraw, it is highly recommended that you contact the Financial Aid Office at 808-934-2712 or email them at wccfao@hawaii.edu to discuss the impact this decision may have on your financial aid eligibility.

Student Conduct Code

Windward Community College follows the University of Hawai'i Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward

Community College, the student has placed herself/himself under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs or online.

Title IX - Sex Discrimination And Gender-Based Violence Resources

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, 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. If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Leslie Cabingabang, UH System Confidential Advocate

Phone/Text: (808) 348-0432 or (808) 341-4952

Email: advocate@hawaii.edu

Office: Hale Kāko'o 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator

Phone: (808) 235-7468 Email: mozoa@hawaii.edu Office: Hale Kākoʻo 109

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393 Email: dkahale3@hawaii.edu

Office: Hale Kākoʻo 101

Karen Cho, Deputy Title IX Coordinator

Phone: (808) 235-7404 Email: kcho@hawaii.edu Office: Hale 'Alaka'i 120

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. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources, and the University's Policy, Interim EP 1.204, go to manoa.hawaii.edu/titleix/