UNIVERSITY of HAWAI'I
WINDWARD COMMUNITY COLLEGE
Ke Kulanui Kaiāulu o ke Koʻolau

# Math 243 - Calculus III

Fall 2025
3 Credits | CRN 62067
8-Week Course (8/25/2025 – 10/17/2025)

## Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawaiʻi and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Koʻolau region of Oʻahu 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: (808) 236-9277, Hale Manaʻopono 105A WCC Campus

Office Hours: Wednesday 12:00 - 1:00 pm and by appointment

Email: jstorm@hawaii.edu (email through Lamakū is preferred)

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

### About Me

I was born and raised on the Windward side of Oʻahu and currently live in Kāneʻohe. I received my AA degree in Liberal Arts from WCC and earned both my BA and MA in Mathematics from UH Mānoa. I have been teaching math at WCC since 2008.

### Communication & Regular Substantive Interaction (RSI)

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

*There are several ways to communicate in this course:*

- **Email:** Email through Lamakū is preferred. My normal work hours are Monday through Friday, 9:00 AM to 5:00 PM. I will respond within 24 hours, excluding weekends and holidays.
- **Voicemail:** You may leave a voicemail on my office phone.

- **Zoom Office Hours:** Drop-in Zoom office hours every Wednesday 12:00 - 1:00 pm. No appointment necessary. If you would like to meet at a different time, email me to schedule an appointment.
- **Q & A Lamakū Discussion Board:** You may post general questions about the course, homework, etc., to the Q & A forum. This is a public space where both students and the instructor can respond. Note: For private communication, please use email.

*I will also reach out to you regularly with course updates:*

- **Announcements:** Posted every Monday and Friday with general information and reminders about due dates.
- **Modules and Assignments:** Posted at least two weeks in advance of deadlines.
- **Grades:**
    - Posted in in the Lamakū Gradebook
    - MLM homework - updated every Monday
    - Forums - updated every Monday
    - Quizzes - uploaded within 5 days after due date
    - Final exam - uploaded Saturday, October 18
    - Extra credit – within 5 days after submission
- **Discussion Participation:** Weekly discussion topics will be posted. I'll occasionally join the conversation and respond to a few posts.
- **Videos**: Provide weekly videos & notes for each course topic.

### 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: Alakaʻi 121
- Phone: (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 via IDAP
- A graphing calculator, hand-held or online (i.e., Desmos)

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
    - Vectors in the plane and in space
    - Dot and Cross Products
    - Lines and Planes in Space
- Vector-Valued Functions
    - Calculus of Vector-Valued Functions
    - Motion in Space
    - Length of Curves
    - Curvature and Normal Vectors
- Functions of Several Variables
    - Graphs and Level Curves
    - Limits and Continuity
    - Partial Derivatives
    - The Chain Rule
    - Directional Derivatives and the Gradient
    - Tangent Planes and Linear Approximation
    - 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)

- Keeping Accessibility and UDL in Mind - Google Docs
- 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.

### Other Technology

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

- MyLab Math (MLM) via the VitalSource link in Lamakū (accessibility statement, privacy policy)
- ChatGPT is an AI tool (privacy policy)
- Google Gemini is an AI chatbot (accessibility statement, privacy policy).
- YouTube is used for delivering some of the course content (accessibility statement, privacy policy)
- Zoom is used for the Synchronous Sessions and 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 by Wednesday, August 27.

## 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:

| Letter Grade | Definition |
|---|---|
| A | 90% - 100% of the cumulative points possible |
| B | 80% - 89% of the cumulative points possible |
| C | 70% - 79% of the cumulative points possible |
| D | 60% - 69% of the cumulative points possible |
| F | Less than 60% of the cumulative points possible |
| CR | 70% or above of the cumulative points possible |
| NC | Less than 70% of the cumulative points possible |
| W | 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 Fridays. 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

- 8/26/2025 – Last day to register & and drop with 100% refund of tuition.
- 9/3/2025 – Last day to withdraw without a “W” grade and to receive 50% refund of tuition
- 9/26/2025 – Last day to withdraw with a "W" grade or to choose CR/NC grade option.

| WEEK | DATES (Mon-Fri) | ASSIGNMENTS (Due By Friday Unless Stated Otherwise) |
|---|---|---|
| 1 | 8/25 – 8/29 | • IDAP (MLM) Registration - Due Wednesday (satisfies student participation verification)<br>• MLM: My Lab Tutorial (optional), 12.1, 12.2 |
| 2 | 9/1 – 9/5 | • MLM: 12.3, 12.4, 13.1<br>• Forum #1<br>• MLM: Quiz 1 Review (optional -extra credit)<br>• MLM: Quiz 1<br>• Upload Quiz 1 work |
| 3 | 9/8 – 9/12 | • MLM: 13.2, 13.3, 13.4<br>• Forum #2<br>• MLM: Quiz 2 Review (optional -extra credit)<br>• MLM: Quiz 2<br>• Upload Quiz 2 work |
| 4 | 9/15 – 9/19 | • MLM: 13.5, 14.1, 14.2<br>• Forum #3<br>• MLM: Quiz 3 Review (optional -extra credit)<br>• MLM: Quiz 3<br>• Upload Quiz 3 work |

| WEEK | DATES (Mon-Fri) | ASSIGNMENTS (Due By Friday Unless Stated Otherwise) |
|---|---|---|
| 5 | 9/22 – 9/26 | • MLM: 14.3, 14.4, 14.5<br>• Forum #4<br>• MLM: Quiz 4 Review (optional -extra credit)<br>• MLM: Quiz 4<br>• Upload Quiz 4 work |
| 6 | 9/29 – 10/3 | • MLM: 15.1, 15.2, 15.3<br>• Forum #5<br>• MLM: Quiz 5 Review (optional -extra credit)<br>• MLM: Quiz 5<br>• Upload Quiz 5 work |
| 7 | 10/6 – 10/10 | • MLM: 15.4, 15.5, 15.6<br>• Forum #6<br>• MLM: Quiz 6 Review (optional -extra credit)<br>• MLM: Quiz 6<br>• Upload Quiz 6 work |
| 8 | 10/13 – 10/17 | • MLM: 15.7 – Due Wednesday<br>• Late MLM Homework – Due Wednesday<br>• Forum #7 – Due Thursday<br>• Final Exam Review (optional – extra credit) – Due Thursday<br>• Final Exam – Due Friday<br>• Upload Final Exam work – Due Friday<br>• 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

- UH ITS Help Desk – email help@hawaii.edu 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 winhelp@hawaii.edu, 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 Lamakū Help 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 Kako'o 106) for more information.

## TRIO PROGRAM

The Federal TRiO Programs are educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds. TRiO includes six outreach and support programs targeted to serve and assist low-income, first-generation college students and students with disabilities in progressing through the academic pipeline from middle school to post-baccalaureate programs. Here is their contact info:https://windward.hawaii.edu/trio/

## 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.

## LGBTQ+

The University of Hawai'i system and Windward Community College are committed to building an inclusive community that supports and advocates for all Students, Staff, and Faculty. We welcome all members of our campus community to our campuses: transgender, māhū, and people of all gender identities. All members of our campus community deserve a work and educational environment free from harassment or bullying based on their sexual orientation, gender identity, or expression. University of Hawai`i Commission on LGBTQ+ Equality at their website: http://www.hawaii.edu/offices/president/lgbtq/ Windward Community College Commissioner: Scott Sutherland, scottjks@hawaii.edu

## 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:

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 & UH System Confidential Advocate
Phone: (808) 235-7393
Email: dkahale3@hawaii.edu
Email: advocate@hawaii.edu
Office: Hale Kākoʻo 101

Karen Cho, Deputy Title IX Coordinator
Phone: (808) 235-7404
Email: kcho@hawaii.edu
Office: Hale ʻAlakaʻi 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/