

MATH 242 – CALCULUS II

4 Credits (CRN 63030 & 63050) Online Asynchronous

INSTRUCTOR: Jody-Lynn Storm

OFFICE: Hale Mana 'opono 105A, Windward Community College **OFFICE HOURS**: Mondays & Fridays 2-3pm via Zoom, and by appointment.

TELEPHONE: (808) 236 - 9277 **EMAIL:** jstorm@hawaii.edu

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

EFFECTIVE DATE: Summer 2024

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.

CATALOG DESCRIPTION

Differentiation and integration concepts of trigonometric, exponential, logarithmic and hyperbolic functions. Integration implements, infinite series, and applications of derivatives and integrals are also featured. (4 hours lecture)

Pre-Requisite(s): Grade of "C" or better in MATH 205 or MATH 241 or equivalent or consent of instructor.

STUDENT LEARNING OUTCOMES

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

- Demonstrate proficiency in determining limits, derivatives, and integrals associated with the topics in the course
- Use concepts from the course to solve applied problems
- Demonstrate proficiency in working with sequences or series
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

RESPONSIBILITIES OF STUDENTS

- Have access to a reliable high-speed internet connection
- Have adequate computer skills.
- Set aside adequate study time

- Check emails regularly
- Be self-motivated

COURSE TASKS AND GRADING

Grades are posted in the Laulima Gradebook. Grades for this course are based on the following course tasks:

POINT DISTRIBUTION							
Forums	6 posts @ 5 points each	30 pts					
Homework	26 assignments @ 10 points each	260 pts					
Portfolio	Written work for Homework	50 pts					
Quizzes	5 quizzes @ 50 points each (best of 2 attempts)	250 pts					
Final Exam	1 cumulative exam	200 pts					
Total Points		790 pts					

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

Letter Grade	<u>Definition</u>
A	90% - 100% of the cumulative points possible
В	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
\mathbf{W}	Official Withdrawal
I	Incomplete

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

The I grade is a temporary grade given at the instructor's discretion when a student has failed to complete a small part of a course because of circumstances beyond his or her control. A student may qualify for the I grade if (a) they are unable to take the final exam by the deadline and (b) taking the final exam could possibly raise their course grade.

COURSE CONTENT

- Logarithmic and Exponential functions
 - Inverse functions
 - Natural Logarithmic and Exponential Functions
 - o Logarithmic and Exponential functions with Other Bases
 - o Exponential Models
 - o Inverse Trigonometric Functions
 - o L'Hôpital's Rule and Growth Rates of Functions
- Integration Techniques
 - Integration by Parts

- o Trigonometric Integrals
- Trigonometric Substitution
- o Partial Fractions
- Numerical Methods of Integration
- Improper Integrals
- Differential Equations
 - Direction Fields
 - Separable Differential Equations
 - Special First-Order Linear Differential Equations
- Sequences and Infinite Series
 - Sequences
 - o Infinite Series
 - Divergence and Integral Tests
 - Comparison Tests
 - Alternating Series
 - o Ratio and Root Tests
- Power Series
 - Approximating Functions with Polynomials
 - Properties of Power Series
 - Taylor Series
 - Working with Taylor Series

REQUIRED MATERIAL

- The MyLab Math (MLM) Online Program via IDAP
- A graphing calculator, hand-held or online (i.e., Desmos)

MLM comes with the eBook *Calculus* 3rd ed., by Briggs. MLM registration will be through IDAP via the VitalSource link in Laulima.

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.

ADDITIONAL RESOURCES

WCC Resources

• Ka Piko Tutoring: https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/math-lab/

UH System Resources

- Tutor.com: https://windward.hawaii.edu/tutor.com/
- Distance Learning Homepage: http://www.hawaii.edu/dl/home

Other Online Resources

- Symbolab: https://www.symbolab.com
- Wolfram Alpha: http://www.wolframalpha.com
- Desmos Calculator: https://www.desmos.com
- Professor Leonard Videos: https://www.youtube.com/user/professorleonard57
- Khan Academy Videos: http://www.khanacademy.org

ADDITIONAL INFORMATION

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. There will be no make-up work and no extensions of due dates.

Final Exam: There will be one cumulative computer-based final exam through MLM. The final exam is worth 200 points. The exam is timed. The exam is not proctored and can be taken on any computer. Most of the questions on the final exam will come from the weekly quizzes.

Quizzes: There will be 5 weekly computer-based quizzes through MLM. The quizzes are scheduled every Friday (except the last Friday of the term). Each quiz is worth 50 points. The quizzes are timed. The quizzes are not proctored and can be taken on any computer. You will have 2 tries for each quiz. The 1st attempt must be submitted by the Friday deadline. The 2nd attempt can be submitted after the due date with no penalty. The final day to submit 2nd attempt on quizzes is Wednesday, August 7. The highest quiz score will go towards your course grade.

MLM Homework: Computer-based homework due daily through the MLM program. There will be a 1% deduction per day for problems submitted after the due date. Final date of submission for late homework is Wednesday, August 7.

Portfolio: For each MLM homework assignment you will show your work on a separate sheet of paper (or a tablet). Save your work as a pdf file (one file per MLM homework assignment) and upload the file to the Laulima Drop Box. Each file should be labeled with the appropriate MLM assignment name.

Forum Posts: There will be 6 forum posts at 5 points each. The posts are due on Thursdays, with the exception of Forum 1, which is due on Friday. The forum posts are not math related, instead they are an opportunity for us to get to know each other.

Extra Credit

- 1. CES Survey: 10 points of extra credit for completing the end-of-semester student survey.
- **2. Final Exam Review**: Up to 10 points of extra credit.

DISABILITIES ACCOMMODATIONS

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi Asato, Disabilities Counselor, can be reached at (808) 235-7472, jodiaka@hawaii.edu, or you may stop by Hale Kākoʻo 105 for more information.

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

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/

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

IMPORTANT DATES & SEMSTER SCHEDULE

7/2/2024	Last day to register
7/2/2024	Last day to receive 100% tuition refund
7/8/2024	Last day to receive 50% tuition refund
7/8/2024	Last day to drop (No "W" on transcript)
7/25/2024	Last day to withdraw from class ("W" on transcript)

Math 242 Summer 2024 Schedule										
	MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY	
JUL 1	Orientation (optional) 7.1	JUL 2	7.2	JUL 3	7.3	JUL 4	Holiday	JUL 5	7.4 Quiz 1 (7.1-7.3) Forum 1	
JUL 8	7.5	JUL 9	7.6	JUL 10	8.1-8.2	JUL 11	Forum 2 8.3	JUL 12	8.4 Quiz 2 (7.4, 7.5, 7.6, 8.2, 8.3)	
JUL 15	8.5	JUL 16	8.6-8.7-8.8	JUL 17	8.9	JUL 18	Forum 3 9.1-9.2	JUL 19	9.3 Quiz 3 (8.4, 8.5, 8.9, 9.2)	
JUL 22	9.4	JUL 23	10.1	JUL 24	10.2	JUL 25	Forum 4 10.3	JUL 26	10.4 Quiz 4 (9.3, 9.4, 10.1- 10.3)	
JUL 29	10.5	JUL 30	10.6	JUL 31	10.7	AUG 1	Forum 5 11.1	AUG 2	11.2 Quiz 5 (10.4-10.7, 11.1)	
AUG 5	11.3	AUG 6	11.4	AUG 7	Deadline to submit quizzes & homework	AUG 8	Forum 6 Final Exam Review	AUG 9	FINAL EXAM	