



Math 241 (Calculus I) Course Syllabus

(Credits: 4 / CRN#: 64058 / Mode: Online - Asynchronous / Semester: Spring 2023)

Professor: Navtej (Johnny) Singh || Office Location: Manaopono 110

E-Mail: navtej@hawaii.edu << This is the best way to get in touch. Provide name & class information >>

Zoom Video Link: <https://hawaii.zoom.us/j/2025344398> <<Meeting ID: 202 534 4398 >>

Dedicated Zoom Office Hours: M 11am – 1pm, W 2:30pm – 4:30pm, & by appointment

Office Telephone #: (808) 236 – 9278 << If I don't answer leave a message with contact information >>

Websites: <https://laulima.hawaii.edu> & www.MyMathLab.com

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

Basic mathematical concepts, topics in differentiation, and introductory integration of algebraic and trigonometric functions. Applications of differentiation and integration will be demonstrated. (4 hours lecture). Pre-Requisite(s): Grade of "C" or better in MATH 140 or equivalent, satisfactory math placement test score, or consent of instructor.

Learning Resources and Materials

This course is 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.

I recommend that you have a graphing calculator utility to help you with homework. A free graphing utility is available at <https://www.desmos.com>. In addition, there are various graphing applications available for use on smartphones and tablets. If you are planning to buy a stand alone graphing calculator TI 83/84 (regular or plus) is recommended. Reliable computer with access to broadband internet is required for this course. You are allowed to use a scientific calculator the exam.

Tasks and Grading

Point Distribution		
Consultations	Three Meetings @ 10 points each	030 pts
Homework	27 Assignments on MML @ 10 points each	270 pts
Portfolio	Written Work for HW	050 pts
Exams	Four @ 75 points each	300 pts
Final Exam	Comprehensive	200 pts
Total Points		850 pts

Letter grades will be assigned based on the following standard scale:

A \Rightarrow 90% \uparrow ; B \Rightarrow 80% \uparrow ; C \Rightarrow 70% \uparrow ; D \Rightarrow 60% \uparrow ; F \Rightarrow below 60%;

Other grade options include N, CR, NR, I, and W. See the following information for detail:

"The 'N' grade indicates that the student has worked conscientiously, attended regularly, finished all work, fulfilled course responsibilities, and has made measurable progress. However, either the student has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level, or the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal or family emergencies." If you would like to request for N grade in this class, you must provide a formal letter of request to me no later than the time of final examination addressing how you have met the criteria for N grade. Then I will decide on whether or not you qualify for the N grade.

The CR/NC grades require written instructor consent. Overall score of 70% or higher is consider CR and below 70% is NC. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline. If a student does not apply for CR/NC grading option at the Admissions Office by the required deadline and if s/he does not withdraw, a letter grade (A, B, C, D, F, N) will be assigned for the course. 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 option when a student has failed to complete a small part of a course because of circumstances beyond his or her control. The "I" grade is given by student request and must be approved by the instructor.

Student Learning Outcomes

Upon completion of the course, the student will be able to:

- Demonstrate proficiency in determining limits, derivatives, and integrals.
- Use calculus techniques to analyze and solve applied problems.
- Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

All SLOs assessment are embedded in class activities, homework, quizzes, or exams.

Basic Rubrics for Grading Multistep and Word Problems	
Full Credit	<ul style="list-style-type: none"> - Shows complete understanding of a problem's mathematical concepts and procedures - Performs algorithms correctly using appropriate notation and precise mathematical language - Gives an elaborate and effective explanation of the solution process in an organized way
Partial Credit	<ul style="list-style-type: none"> - Shows near understanding of the problem's mathematical concepts and procedures - Using appropriate notation, performs algorithms completely that may contain minor errors. - Identifies most relevant information and shows a general understanding - Shows effective explanation and some evidence of a systematic solution process
Very Little Credit	<ul style="list-style-type: none"> - Shows some understanding of a problem's mathematical concepts and procedures - Performs algorithms that may contain major computational errors - Identifies some relevant information and shows limited understanding - Shows little evidence of a solution process or use of appropriate mathematical language - Gives some explanation of the solution process but may be vague or difficult to interpret
No Credit	<ul style="list-style-type: none"> - Shows no understanding of a problem's mathematical concepts and procedures - Identifies no relevant information, algorithmic pattern, or evidence of a solution process - Fail to explain significant parts of the problem or omit it altogether

Exams

There will be four scheduled unit exams and a comprehensive final exam for this course. Best way to prepare for the exams is to study related homework and provided practice exams (or review sheets). For exam dates, refer to the last page of this syllabus. Make-up for any missed exams is not allowed after the due date. However, I will replace your lowest unit exam with your final exam percentage if the final exam percentage is higher than the lowest unit exam. Note that all exams are conducted via mymathlab.com, and some or all exams (including the final) may need to be taken in the proctored environment. Instructor will share more information via email about each exam at least a week prior to exam dates.

Homework

There are 27 homework assignments in this course available via MyMathLab.com due by the date indicated on the schedule page of this syllabus. On average students are expected to complete about two homework assignments per week. You may attempt a homework problem as many times as needed, till you get it right. You may continue to work on the homework after the due date; however, there will be a 1% penalty per day on the homework done after the due date. While this may not be much for a day or two late submissions, it will add up to a high percentage over longer period. Refer to the schedule page for the absolute last day to work on the homework assignments. To receive help on the homework, students are welcome to reach out to me during dedicated office hours or make an appointment for consultation.

Portfolio

Since MyMathLab only requires you to enter the final answer, it is important that you understand the correct process leading to the final answer. Therefore, I am asking you to show your work for each homework

problem on a separate sheet of paper that will be part of your portfolio. In addition, your portfolio should include written work for the final exam review. To earn portfolio points, simply scan your written work for each homework as pdf file (one file per homework) and upload it to Drop Box at laulima.hawaii.edu. Make sure uploaded files are clearly labeled with correct assignment name and number. Note that your portfolio work will be graded based on neatness, completion, and organization at the end of the term.

Getting Help

In addition to reaching out to me for help (via zoom using the ID 2025344398 or google meet using the ID navtej@hawaii.edu), you may also utilize the following websites resources:

- [Ka Piko Center](#) - Provides online tutoring via WCC Math Lab
- <http://manoa.hawaii.edu/ola> - Provides free live interactive tutoring during weekdays
- <http://www.hawaii.edu/tutor> – Provides free 24/7 online tutoring using your UH username & password.
- <http://www.khanacademy.org> – Provides small lecture videos on selected topics
- www.wolframalpha.com – Provides computational tools, facts, and examples.
- <https://www.youtube.com/playlist?list=PLF797E961509B4EB5> – Provides complete lecture videos on topics in Calculus I by Professor Leonard.

Consultations

There are three required consultations for this class worth 10 points each that can be conducted via connecting through zoom video with me during dedicated office hours or scheduling a meeting at a time that is convenient for both of us.

- 1st Consultation: Your participation in class orientation will count as your 1st consultation. During the orientation, I will go over the course syllabus and answer any questions or concerns students may have about this class.
- 2nd and 3rd Consultations: This can be done any time during the term to get help on homework, go over your mistakes on a particular exam, discuss if your uploaded work is acceptable, or check your progress in class (preferably before the drop date). Any general questions regarding the class or ways to improve grades can also be discussed.
- Extra Consultations: Additional consultations can take place somewhere close to the end of the semester. The time can be used to ask questions about the final exam or discuss overall grades.

Note that purpose of these consultations is for us to connect with each other at least few times during the semester. I encourage you to reach out to me for help as often as needed.

Disabilities Accommodation

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 Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. You can reach Roy Inouye (located in Hale Kako'o 106), Interim Disabilities Counselor, at (808) 235-7448 or at royinouye@hawaii.edu.

Communication

The following methods will be used to communicate:

- E-mail will be our primarily mode of communication (make sure to check your UH email frequently). I will do my best to response to your emails within 24 hours on instructional days (perhaps much sooner). This is an effective method of communication if you expect a short response.
- You can connect with me via **Zoom Video using the ID 202 534 4398** or via Google Video using the UH ID navtej@hawaii.edu during dedicated office hours (or schedule an appointment).
- If you go to windward community college or live nearby, you can stop by office anytime during my office hours or make an appointment to see me (This option is limited during summer).
- Alternatively, you can also connect with me via my office phone (808) 236 – 9278 during my office hours or leave a message for me to return your call.
- Online discussion board can be used to interact with classmates by asking homework questions and answering previously posted problems.

Important Information

Please check your @hawaii.edu e-mail account frequently for important announcements. Note this syllabus is subject to change in extenuating circumstances. All online homework assignments are due by midnight of the deadline date. All due dates for homework assignments and exams are listed on the schedule below. If you need to discuss your performance, I recommend you get in touch with me as soon as possible. E-mail is the preferred method of communication. Instructor will inform you of any additional opportunity such as extra credit when or if they become available. For important academic information refer to WCC website www.windward.hawaii.edu or go to www.hawaii.edu for system wide information. Plagiarism, or copying and use of another's work without proper acknowledgment, is not permitted and may result in failing grade for the course. In the event instructor cannot be reached, you may contact the Academic Affairs Office (located in Alakai 121) at (808) 235-7422 or email wccaa@hawaii.edu.

Foundations Quantitative Reasoning Hallmarks

Math 241 also fulfills 3 credits of the General Education requirements for both an A.A. degree at WCC and a Bachelor's degree at 4 year UH institutions. Consequently, it meets the hallmarks of the quantitative reasoning requirement. This course will:

1. provide students with theoretical justifications for, and limitations of, mathematical or statistical methods, and the formulas, tools, or approaches used in the course.
2. include application of abstract or theoretical ideas and information to the solution of practical quantitative reasoning problems arising in pure and applied research in specific disciplines, professional settings, and/or daily and civic life.
3. provide opportunities for practice and feedback that are designed to help students evaluate and improve quantitative reasoning skills by including a course component at least once per week with a maximum 30:1 student-to-teacher ratio.
4. be designed so that students will be able to

- a. identify and convert relevant quantitative information into various forms such as equations, graphs, diagrams, tables, and/or words;
- b. select appropriate techniques or formulas, and articulate and evaluate assumptions of the selected approaches;
- c. apply mathematical tools and perform calculations (including correct manipulation of formulas);
- d. make judgments, create logical arguments, and/or draw appropriate conclusions based on the quantitative analysis of data, the assumptions made, the limitations of the analysis, and/or the reasonableness of results; and
- e. effectively communicate those results in a variety of appropriate formats.

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:

UH Confidential Advocate
Phone: (808) 348-0663
Email: advocate@hawaii.edu

Desrae Kahale, Mental Health
Counselor & Confidential Resource
Phone: (808) 235-7393
Email: dkahale3@hawaii.edu

Karen Cho, Title IX Coordinator
Phone: (808) 235-7474
Email: kcho@hawaii.edu

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/

Student's Responsibilities

Responsible students take ownership of their actions by exhibiting the following behaviors:

- Take an active role in learning and set aside adequate time for doing assignments
- Maintain a positive and inquiry attitude towards learning.
- Complete assignments by the designated dates with attention to quality of work.
- Actively communicate with instructor and seek immediate help when needed.
- Be proactive and do not procrastinate since new concepts are built on previously learned material.

Math 241 Spring 2023 Schedule for Assignments and Exams		
Week	Dates (M-F)	Homework Assignments (All HWs are Due by Midnight of the Assigned Date)
1	1/9 – 1/13	HW #01 - Section 2.2 (Due on Wednesday, 1/11)
		HW #02 - Section 2.3 (Due on Saturday, 1/14)
2*	1/16 – 1/20	HW #03 - Section 2.4 (Due on Wednesday, 1/18)
		HW #04 - Section 2.5 (Due on Saturday, 1/21)
3	1/23 – 1/27	HW #05 - Section 2.6 (Due on Wednesday, 1/25)
		HW #06 - Section 3.1 (Due on Saturday, 1/28)
4^	1/30 – 2/3	HW #07 - Section 3.2 (Due on Wednesday, 2/1)
		Exam 1 (up to section 3.2) – Must complete by Saturday Feb. 5 th
5	2/6 – 2/10	HW #8 - Section 3.3 (Due on Wednesday, 2/8)
		HW #9 - Section 3.4 (Due on Saturday, 2/11)
6	2/13 – 2/17	HW #10 - Section 3.5 (Due on Wednesday, 2/15)
		HW #11 - Section 3.6 (Due on Saturday, 2/18)
7*	2/20 – 2/24	HW #12 - Section 3.7 (Due on Wednesday, 2/22)
		HW #13 - Section 3.8 (Due on Saturday, 2/25)
8	2/27 – 3/3	HW #14 - Section 3.9 (Due on Wednesday, 3/1)
		Exam 2 (From Section 3.3 to 3.9) – Must Complete by Saturday March 5 th
9	3/6 – 3/10	HW #15 - Section 4.1 (Due on Wednesday, 3/8)
		HW #16 - Section 4.2 (Due on Saturday, 3/11)
10**	3/13 – 3/17	Spring Break
		Spring Break
11	3/20 – 3/24	HW #17 - Section 4.3 (Due on Wednesday, 3/22)
		HW #18 - Section 4.4 (Due on Saturday, 3/25)
12	3/27 – 3/31	HW #19 - Section 4.5 (Due on Wednesday 3/29)
		HW #20 - Section 4.7 (Due on Saturday, 4/1)
13*	4/3 – 4/7	Exam 3 (On Chapter 4) - Must Complete by Wednesday April 5 th
		HW #21 - Section 4.9 (Due on Saturday, 4/8)
14	4/10 – 4/14	HW #22- Section 5.2 (Due on Wednesday, 4/12)
		HW #23 - Section 5.3 (Due on Saturday, 4/15)
15	4/17 – 4/21	HW #24- Section 5.4 (Due on Wednesday, 4/19)
		HW #25 - Section 5.5 (Due on Saturday, 4/22)
16	4/24 – 4/28	HW #26- Section 6.1 (Due on Wednesday, 4/26)
		HW #27 - Section 6.2 (Due on Saturday, 4/29)
17	5/1 – 5/5	Exam 4 (From Section 4.9 to 6.2) - Must Complete by Wednesday May 3 rd
		Sunday, May 7 th is the last day to submit any late work
18	5/8 – 5/12	Final Exam (Computer Based) Available on May 5 th & Must complete by May 11 th

^Drop Dates: February 1, 2023 – Last day to withdraw without a W grade

*Holidays: January 16, 2023 – Martin Luther King Junior Day

February 20, 2023 – Presidents' Day

April 7, 2023 – Good Friday