

Math 242 (Calculus II) Course Syllabus

(Credits: 4 / CRN#: 60149 / Mode: Online - Asynchronous / Semester: Fall 2021)

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>>

Dedicated Zoom Office Hours: W 11:30am – 1:00pm, F 10:30am – 1:00pm, & 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 Koʻolau region of Oʻahu 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. Pre-Requisites: Grade of C or better in MATH 205 or MATH 241 or equivalent or consent of instructor.

Learning Resources and Materials

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.

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 along graphing calculator TI 83/84 (regular or plus) is recommended. Reliable computer with access to broadband internet is required for this course. You will be allowed to use at least a scientific calculator on all exams.

Tasks and Grading

Point Distribution			
Consultations	Three Meetings @ 10 points each	020 pts	
Homework	28 Assignments on MML @ 10 points each	280 pts	
Portfolio	Written Work for HW and Exam Reviews	100 pts	
Exams	Four Unit Exams @ 100 points each	400 pts	
Final Exam	Combination of Everything Learned in Class	200 pts	
Total Points		1000 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 make a decision 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, guizzes, or exams.

Basic Rubrics for Grading Multistep and Word Problems				
	- Shows complete understanding of a problem's mathematical concepts and procedures			
Full	- Performs algorithms correctly using appropriate notation and precise mathematical language			
Credit	Gives an elaborate and effective explanation of the solution process in an organized way			
Partial Credit	- 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			
	selects an appropriate strategy for solving the problem			
	- Shows effective explanation and some evidence of a systematic solution process			
	- Shows some understanding of a problem's mathematical concepts and procedures			
Very Little Credit	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			
	- Shows no understanding of a problem's mathematical concepts and procedures			
No	- Identifies no relevant information, algorithmic pattern, or evidence of a solution process			
Credit	- Fail to explain significant parts of the problem or omit it altogether			

Exams

There will be four scheduled unit exams (worth 100 points each) and a comprehensive final exam (worth 200 points) for this course. A sample exam or review sheet will be provided to assist you in studying for each exam. Best way to prepare for the exam is to study related homework and review sheet problems. For exam due dates, refer to the last page of the syllabus. Make-up for any missed exams is not allowed after the due date. All exams are conducted through MyMathLab.com and students must show their work on separate sheet of paper. I will share additional information about each exam at least week prior to the due date (this will primarily depend on COVID-19 situation at that time). I will replace your lowest unit exam with your final exam percentage if the final exam percentage is higher than the lowest unit exam.

Homework

There are total of 28 homework assignments in this course that are available online at MyMathLab.com. Due date for each homework is indicated on the schedule page of this syllabus. On average student are expected to complete two homework assignments per week (Wednesdays and Saturdays). You may attempt a homework problem as many times as needed, till you get it right. You may continue to work on the homework assignments 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. Note that December 17th is the absolute last day you will be allowed to work on homework assignments. I encourage you to work together on homework by utilizing the online tools such as message board to communicate with each other. 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. To earn portfolio points, scan your written work after you complete each homework into a pdf file (one file per homework) and upload it to Drop Box folder in laulima. 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 semester.

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:

- The link provides information about WCC Math Lab and other services available at WCC
- 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.
- The link provides complete lecture videos on topics in Calculus II by Professor Leonard.

Consultations

There are two 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. Your first must be done within first week of classes so that I can go over any questions you may have regarding the syllabus, homework assignments, exams, where to get help, or getting started use the online system. The other consultation can be done anytime during the semester for various reasons such as go over your mistakes on a particular exam, help with homework or exam review, or discuss your progress in class (preferably before the drop date). Any general questions regarding the class or ways to improve grades can also be discussed. Note that purpose of these consolations is for us to connect with each other at least couple of 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 your succeed in this class. You can reach Roy Inouye (located in Hale Kakoʻo 106), Interim Disabilities Counselor, at (808) 235-7448 or at royinouy@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 navtei@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 will be limited in spring 2021 due to COVID-19).
- 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.
- 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

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235-7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235-7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

Student's Responsibilities

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

- 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 242 Fall 2021 Schedule for Assignments and Exams		
Week	Dates (M-F)	Homework Assignments (All HWs are Due by Midnight of Assigned Date)
1	8/23 – 8/27	HW #01 – Section 7.1 (Due Wednesday)
		HW #02 - Section 7.2 (Due Saturday)
2	8/30 – 9/03	HW #03 - Section 7.3 (Due Wednesday)
		HW #04 - Section 7.4 (Due Saturday)
3*	9/6 – 9/10	HW #05 - Section 7.5 (Due Wednesday)
		HW #06 - Section 7.6 (Due Saturday)
4^	9/13 – 9/17	Exam 1 (Due Wednesday 9/15)
		HW #07 - Section 8.1 (Due Saturday)
5	9/20 - 9/24	HW #08 - Section 8.2 (Due Wednesday)
		HW #09 - Section 8.3 (Due Saturday)
6*	9/27 – 10/1	HW #10 - Section 8.4 (Due Wednesday)
		HW #11 - Section 8.5 (Due Saturday)
7	10/4 – 10/8	HW #12 - Section 8.9 (Due Wednesday)
		Exam 2 (Due Monday 10/11)
8	10/11 – 10/15	HW #13 - Section 9.1 (Due Wednesday)
		HW #14 - Section 9.2 (Due Saturday)
9	10/18 – 10/22	HW #15 - Section 9.3 (Due Wednesday)
		HW #16 - Section 9.4 (Due Saturday)
10	10/25 – 10/29	HW #17 - Section 9.5 (Due Wednesday)
		Exam 3 (Due Monday 11/1)
11	11/1 – 11/5	HW #18 - Section 10.1 (Due Wednesday)
		HW #19 - Section 10.2 (Due Saturday)
12*	11/8 – 11/12	HW #20 - Section 10.3 (Due Wednesday)
		HW #21- Section 10.4 (Due Saturday)
13	11/15 – 11/19	HW #22 - Section 10.5 (Due Wednesday)
		HW #23 - Section 10.6 (Due Saturday)
14*	11/22 – 11/26	HW #24 - Section 10.7 (Due Wednesday)
	,,	Exam 4 (Due Monday 11/29)
15	11/29 – 12/3	HW #25- Section 11.1 (Due Wednesday)
	11/20 12/0	HW #26 - Section 11.2 (Due Saturday)
16	12/6 – 12/10	HW #27- Section 11.3 (Due Wednesday)
10	12/0 12/10	HW #28 - Section 11.4 (Due Saturday)
17**	12/13 – 12/17	Final Exam Review, Consultation, & Upload Written HW to Laulima Dropbox Due by 12/17
17	12/10 - 12/11	Final Exam (MML Computer Based) - Must complete by 17-Dec
\Drop D	atos:	
^Drop Dates: *Holidays:		September 14, 2021 – Last day to withdraw without a W grade September 6, 2021 – Labor Day
		November 11, 2021 – Veterans' Day
		Trovollibor 11, 2021 — Volciulio Duy

7

November 25-26, 2021 – Thanksgiving Break