UNIVERSITY of HAWAI'I®
WINDWARD
COMMUNITY COLLEGE

Math 241 (Calculus I) Course Syllabus

(Credits: 4 / CRN#: 64413 / Mode: Online / Semester: Fall 2018)

Instructor: *Navtej (Johnny) Singh*

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Office Location: *Manaopono 110*

Office Hours: *MF 9am – 10am, MWF 11:30am – 12:30pm, & by appointment*

Office Telephone #: *(808) 236 – 9278* << *Use this during office hours for elaborate help*>>

Website: www.MyMathLab.com (Secondary Site: https://laulima.hawaii.edu)

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

Everything you need for this course is available online at the http://www.MyMathLab.com website. We will utilize most of the tools available through this website. You must get an access code for this course to use all course material. You can get this by one of two ways: Buy the access code directly from MyMathLab website when registering for the course online or buy the textbook which comes with the access code. Textbook for this online course is " Calculus for Scientists and Engineers" by Briggs, Cochran, & Gillett (single variable portion or full textbook). Purchase of the physical textbook is not required since all material including e-book is available online. If you are going to purchase a hard copy of this textbook, make sure that your textbook comes with a valid access code. Buying just an access code is cheaper than buy the textbook with code. I recommend that you have a graphing calculator utility to help you with homework. A free graphing utility is available at http://www.graphcalc.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 are allowed to use a scientific calculator the exam.

Getting Started with This Online Course

- Go to www.MyMathLab.com and click on Register under students.
- Enter the Course ID singh81848 when required.
- Follow the online instructions to complete the registration process.
- There will be an option to either buy an access code or enter the one that came with your textbook.
- Tech support: https://support.pearson.com/getsupport/s/contactsupport or call 1-800-677-6337.

Tasks and Grading

Point Distribution		
Consultations	Three Meetings @ 10 points each	030 pts
Homework	32 Assignments on MML @ 10 points each	320 pts
Portfolio	Written Work for HW and Exam Review	050 pts
Exams	Four @ 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.

Basic Rubrics for Grading Multistep and Word Problems	
Full Credit	- 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	- 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
Very Little Credit	- 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	- 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 written chapter exams (worth 100 points each) and a comprehensive computer based final exam (worth 200 points) for this course. Graphing calculators are not permitted on the exams, but you can use scientific calculators instead. A sample exam or review sheet will be provided to assist you in studying for each proctored exam. Best way to prepare for the exam is to study homework and fully understand how to do all review sheet problems. For the written exams, make sure to show you work since there will be an opportunity to earn partial credit. For exam dates, refer to the last page of this syllabus. Make-up for any missed exams is not allowed after the due date.

Testing Site

The website http://www.hawaii.edu/dl/testcenters provides information on all available testing sites in Hawaii. Your default test taking site will be The Testing Center (TTC) located in the WCC library Room 228. You may call at (808) 235 – 7498 to find out additional information at this testing site. If this location is inconvenient or you reside on one of the neighboring islands, please let me know your preferred test taking location at the beginning of the semester so that I can mail your exams to the appropriate testing location.

Homework

There are total of 32 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 13th 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 come by my office during the 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 chapter exam review sheets and final exam review. To earn portfolio points, scan your written work after you complete each homework or exam review into a word or pdf file (one file per homework) and upload it to Drop Box 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

I encourage you to stop by my office anytime you need help. If you live away from WCC campus, you can call my office during office hours (or use google chat/video using navtej@hawaii.edu ID with advanced notice). You may get additional help by utilizing the free walking tutoring service by going to the math lab located in WCC library room 226 or at your native campus. There is a free online 24 hours live tutoring available through Brainfuse (wcc.hawaii.edu/brainfuse) via myuh.hawaii.edu (find Brainfuse link under my tools). You may also utilize the following websites:
http://manoa.hawaii.edu/ola - Provides free live interactive tutoring during weekdays
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. I prefer students come in person for the consultations, but can be done via phone call, email, or video conference.

- 1st Consultation: This must be done within first week of classes so that I can go over any questions you may have regarding the syllabus, quizzes, homework assignments, exams, where to get help, or getting started use the online system.
- 2nd Consultation: This can be done any time around mid-semester to get help on exam review, go over your mistakes on a particular exam, 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.
- 3rd Consultation: This meeting should be take place somewhere close to the end of the semster. The time can be used to ask questions about the final exam or discuss overall grades.

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

Communication

The following methods will be used to communicate:

- You can send me an e-mail anytime and I will do my best to response within 24 hours on instructional days (perhaps much sooner). This is an effective method of communication if you expect a short response.
- If you need to speak with me, you can call me at my office (808) 236 – 9278 during my office hours or leave a message for me to return your call.
- 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 is a good way to get help of homework problems.
- If you live at a distance and visual communication is necessary such as help on complicated homework problems, you can connect with me (with advanced notice) via google chat/video using the UH ID navtej@hawaii.edu.
- Online discussion board can be used to interact with classmates by asking homework questions and answering previously posted problems.
- Additionally, I may utilized the blackboard celebrate through laulima to hold review session (more information will be provided if such tool need to be used).

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 additonal 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.

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.

Foundations Symbolic Reasoning Hallmarks

Math 241 fulfills the three credits General Education Requirement for Foundations Symbolic for both the AA degree at WCC and a Bachelor's degree at UH Manoa as well as UH West Oahu. Consequently, it meets the hallmarks of the symbolic reasoning requirement.

- Students will be exposed to the beauty, power, clarity and precision of formal systems.
- Instructors will help students understand the concept of proof as a chain of inferences.
- Instructors will teach students how to apply formal rules or algorithms.
- Students will be required to use appropriate symbolic techniques in the context of problem solving, and in the presentation and critical evaluation of evidence.
- The course will not focus solely on computational skills.
- Instructors will build a bridge from theory to practice and show students how to traverse this bridge.

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.

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. Ann Lemke can be reached at (808) 235-7448, lemke@hawaii.edu, or you may stop by Hale ʻAkoakoa 213 for more information.

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.

Math 241 Fall 2018 Schedule for Assignments and Exams

Week	Dates (M-F)	Homework Assignments (All HWs are Due by Midnight of Assigned Date)
1	8/20 – 8/24	HW #01 - Section 2.1 (Due on Wedneday, 8/22)
		HW #02 - Section 2.2 (Due on Saturday, 8/25)
2	8/27 – 8/31	HW #03 - Section 2.3 (Due on Wedneday, 8/29)
		HW #04 - Section 2.4 (Due on Saturday, 9/1)
3*	9/3 – 9/7	HW #05 - Section 2.5 (Due on Wedneday, 9/5)
		HW #06 - Section 2.6 (Due on Saturday, 9/8)
4^	9/10 – 9/14	HW #07 - Section 2.7 (Due on Wedneday, 9/12)
		HW #08 - Section 3.1 (Due on Saturday, 9/15)
Exam 1 (Written) on Chapter 2 Available at the Testing Center on 10-Sep & Must Complete by 17-Sep		
5	9/17 – 9/21	HW #09 - Section 3.2 (Due on Wednesday, 9/19)
		HW #10 - Section 3.3 (Due on Saturday, 9/22)
6	9/24 – 9/28	HW #11 - Section 3.4 (Due on Wednesday, 9/26)
		HW #12 - Section 3.5 (Due on Saturday, 9/29)
7	10/1 – 10/5	HW #13 - Section 3.6 (Due on Wednesday, 10/3)
		HW #14 - Section 3.7 (Due on Saturday, 10/6)
8	10/8 – 10/12	HW #15 - Section 3.8 (Due on Wednesday, 10/10)
		HW #16 - Section 4.1 (Due on Saturday, 10/13)
Exam 2 (Written) on Chapter 3 Available at the Testing Center on 8-Oct & Must Complete by 15-Oct		
9	10/15 – 10/19	HW #17 - Section 4.2 (Due on Wednesday, 10/17)
		HW #18 - Section 4.3 (Due on Saturday, 10/20)
10	10/22 – 10/26	HW #19 - Section 4.4 (Due on Wednesday, 10/24)
		HW #20 - Section 4.5 (Due on Saturday, 10/27)
11	10/29 – 11/2	HW #21- Section 4.6 (Due on Wednesday, 10/31)
		HW #22 - Section 4.7 (Due on Saturday, 11/3)
12*	11/5– 11/9	HW #23 - Section 4.9 (Due on Wednesday, 11/7)
		HW #24 - Section 5.1 (Due on Saturday, 11/10)
Exam 3 (Written) on Chapter 4 Available at the Testing Center on 5-Nov & Must Complete by 12-Nov		
13	11/12 – 11/16	HW #25- Section 5.2 (Due on Wednesday, 11/14)
		HW #26 - Section 5.3 (Due on Saturday, 11/17)
14*	11/19 – 11/23	HW #27- Section 5.4 (Due on Wednesday, 11/21)
		HW #28 - Section 5.5 (Due on Saturday, 11/24)
15	11/26 – 11/30	HW #29- Section 6.1 (Due on Wednesday, 11/28)
		HW #30 - Section 6.2 (Due on Saturday, 12/1)
Exam 4 (Written) on Chapter 5 Available at the Testing Center on 26-Nov & Must Complete by 3-Dec		
16	12/3 – 12/7	HW #31- Section 6.3 (Due on Wednesday, 12/5)
		HW #32 - Section 6.4 (Due on Saturday, 12/8)
Final Exam (MML Computer Based) Available on 10-Dec & Must complete by 13-Dec at the Testing Center		

^Drop Dates: September 11, 2018 – Last day to withdraw without a W grade

*Holidays: September 3, 2018 – Labor Day

November 12, 2018 – Veterans' Day

November 22-23, 2018 – Thanksgiving Break