

MATH 231 – CALCULUS III (3 Credits)

INSTRUCTOR: Jody-Lynn Storm
OFFICE: Mana'opono 105A
OFFICE HOURS: MWF 10:30 am – 11:30 am
TR 11:30 am – 12:30 pm
And by appointment
OFFICE TELEPHONE: (808) 236 – 9277
EMAIL: jstorm@hawaii.edu
WEBSITE: <http://www.jodystorm.com>
EFFECTIVE DATE: Fall 2016

CRN	Days	Time	Classroom
63484	MW	8:30 am – 9:45 am	Mana'opono 115

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 O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

COURSE DESCRIPTION

Vector-oriented study of functions of several variables; partial differentiation and *line integrals; multiple integrals*. (3 hours lecture)

Note: Italicized topics are optional and generally covered in Math 232. Other topics covered in Math 231 include parametric curves, polar curves, vector algebra, and vector calculus.

Pre-Requisite(s): Grade of "C" or better in MATH 206 or equivalent or consent of instructor.

STUDENT LEARNING OUTCOMES

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

1. Analyze and apply principles, concepts, and properties from algebra, geometry, trigonometry, and calculus to solve problems.
2. Apply concepts and calculus properties of Cartesian space coordinates and vectors.
3. Apply principles and concepts from calculus to multivariable functions.
4. Use various strategies from this course to solve problems.
5. Utilize precise mathematical language and symbols and effectively communicate in written and/or oral form.

Note: All SLO assessments are embedded in class activities, homework, quizzes, or Exams.

LEARNING RESOURCES & MATERIALS

REQUIRED MATERIALS:

- Textbook: Multivariable Variable Calculus for Scientists and Engineers, by Briggs & Cochran, bundled with MyMathLab
 - If preferred you may just use the eBook on MyMathLab
- MyMathLab (MML) Access Code with eBook
 - Register online at <http://pearsonmylabandmastering.com/>
 - Use Course ID: **storm25944**
- Calculator: TI-83 or TI-84 (any model)

LEARNING RESOURCES:

- The Math Lab: La'akea (Library Learning Commons) Room 220
http://windward.hawaii.edu/About_WCC/Math_Lab/index.php
- The Testing Center (TTC): La'akea (Library Learning Commons) Room 228
Phone: (808) 235-7498
http://windward.hawaii.edu/Testing_Center/index.php
- Brainfuse Online Tutors: <http://windward.hawaii.edu/brainfuse/>
- OLA (UH online tutoring program): <http://manoa.hawaii.edu/ola/>
- WolframAlpha: <http://www.wolframalpha.com>
- Professor Leonard: <https://www.youtube.com/user/professorleonard57>
- Khan Academy Videos: <http://www.khanacademy.org>

COURSE TASKS & GRADING

Grades are posted on the Lualima gradebook. Grades for this course are based on the following course tasks:

3 unit exams @ 100 pts ea	300 pts	54% of possible pts
Final Exam	120 pts	21% of possible pts
Course Activity:		
Graded Problems	110 pts	20% of possible pts
MyMathLab	30 pts	5% of possible pts
Total	<u>560 pts</u>	

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

<u>Letter Grade</u>	<u>Definition</u>
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
I	See below

Note: CR/NC grades require written instructor consent. 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.

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

Note: 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.

A student may qualify for the I grade if (a) they are unable to take the final exam and (b) taking the final exam could possibly raise their course grade. The I grade is given by student request and must be approved by the instructor.

ADDITIONAL INFORMATION

ABSENCES

Although I do not take attendance, it is your responsibility to attend class. If you are absent, you are responsible for any important announcements or assignments given during the class you missed. You may refer to the class binder or meet with me during office hours to review any missed lecture material. Please do not send email requests for missed lecture material.

CALCULATORS

Some problems require the use of a graphing calculator. You are free to use any type of graphing device for homework problems, but may only use a TI-83 or TI-84 (any model) graphing calculator on exams. You may not use higher models, such as the TI-89 or the TI -Nspire on exams.

EXAMS

There are no retests for exams. The final exam is cumulative. Exams will be available at least 2 days in the WCC Testing Center. If you know in advance that you will be unable to take an exam during the assigned period, it is possible for you to take the exam earlier than the specified dates. If there is an emergency preventing you from taking an exam during the assigned period, a make-up exam will be scheduled. For each student, only one make-up exam may be taken. Make-up exams are given at the end of the semester.

GRADING

To receive full credit for problems done on exams or graded homework, you must show sufficient work in a clear and organized manner. Your work must be neat and organized. "Messy" and/or disorganized work will not receive full credit.

HOMEWORK

There is one homework assignment per textbook section. The assignments will be given in two parts:

- 1) MyMathLab Assigned problems
 - a) Submitted online
 - b) Due on the first day of each exam period
 - c) 20% point deduction for late submissions
- 2) Assigned graded problems from the textbook to turn in.
 - a) 5 pts each
 - b) Must be turned in at the start of class
 - c) No late submissions
 - d) No email submissions

Assignments and due dates are posted on the instructor's webpage. You may need to do more than the assigned homework problems to become comfortable with the concepts and skills.

Note: Chapters 11, 12, 13 in the multivariable (paperback) textbook corresponds to chapters 12, 13, 14 in the eBook.

CELL PHONES & OTHER ELECTRONIC DEVICES

Cell phones and other electronic devices should be silenced and put away prior to the start of class.

DISRUPTIVE BEHAVIOR

Please respect your fellow students and act accordingly. If a student takes part in disruptive behavior, the instructor reserves the right to exclude the student immediately from the class meeting.

ACADEMIC HONESTY

All exams must be done by your own individual effort. You may not consult with any classmates while taking exams. This would fall under the guidelines of academic integrity and any evidence of cheating will result in a score of 0 for all parties involved. An "F" will be assigned to students involved in cheating and will be reported to the Dean. See <http://windward.hawaii.edu/Policies/> for more information on the UH system-wide student conduct code.

I encourage you to work with your classmates on the homework assignments. However, the write up of the solution for each problem must be done on your individual effort.

DISABILITIES ACCOMMODATION STATEMENT

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 235-7448, lemke@hawaii.edu, or you may stop by Hale 'Akoakoa 213 for more information, or visit <http://windward.hawaii.edu/Disabilities/>

MATH 231 – TENTATIVE SCHEDULE
 MW 8:30 AM – 9:45 AM
 STORM – FALL 2016

IMPORTANT DATES	
AUG 26	Last day to register/add/drop and to receive 100% refund of tuition
SEP 12	Last day for 50% refund of tuition and to withdraw without a "W" grade.
NOV 3	Last day to withdraw with a "W" or choose CR/NC grade option. Last day to make up "I" grade from previous semester

	MONDAY		WEDNESDAY
AUG 22	Orientation	AUG 24	12.1
AUG 29	12.2	AUG 31	12.3
SEP 5	No Class Labor Day	SEP 7	12.4
SEP 12	13.1	SEP 14	13.2
SEP 19	13.3	SEP 21	13.4
SEP 26	13.5	SEP 28	Exam 1 (Ch12, 13.1-13.3) In Testing Center 9/28 - 10/3
OCT 3	13.6	OCT 5	13.7
OCT 10	13.8	OCT 12	13.9
OCT 17	13.9	OCT 19	14.1
OCT 24	14.2, 14.3	OCT 26	Exam 2 (13.4-13.9) In Testing Center 10/26 - 10/31
OCT 31	14.3	NOV 2	14.4
NOV 7	14.4, 14.5	NOV 9	14.5, 14.6
NOV 14	14.6	NOV 16	14.6, 14.7
NOV 21	14.7	NOV 23	Exam 3 (14.1-14.6) In Testing Center 11/23 - 11/28
NOV 28	14.7, 14.8	NOV 30	14.8
DEC 5	14.9	DEC 7	Final Exam Review
DEC 12	FINAL EXAM In Testing Center 12/12 - 12/15	DEC 14	