

MATH 140 -PRECALCULUS: TRIGONOMETRY & ANALYTIC GEOMETRY

3 Credits (CRN 64471)

MW 8:00 – 9:30AM Castle High School Room 46)

INSTRUCTOR: Jody-Lynn Storm

OFFICE: Hale Mana'opono 105A, Windward Community College

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OFFICE HOURS: Thursdays 2:30-3:30pm via Zoom

EFFECTIVE DATE: Spring 2023

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

Studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence.

Pre-requisites: Grade of "C" or better in MATH 135 or equivalent, satisfactory math placement test score, or consent of instructor.

STUDENT LEARNING OUTCOMES

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

- 1. Employ algebraic and geometric representations of trigonometric functions and other relations.
- 2. Use appropriate techniques to analyze and solve application problems requiring the use of trigonometry or analytical geometry.
- 3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

FOUNDATIONS QUALITATIVE (FQ) REASONING HALLMARKS

Math 140 fulfills 3 credits of the General Education requirements (Foundations: Quantitative) for both an A.A. degree at WCC and a Bachelor's degree at 4 year UH institutions. Consequently, it meets the following hallmarks:

- 1. Provide students with theoretical justifications for, and limitations of, mathematical or statistical methods, and the formulas, tools, or approached 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 student 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.
 - e. effectively communicate those results in a variety of formats.

COURSE TASKS & GRADING

Grades for the course are recorded in the Laulima Gradebook and are based on the following:

Assignment	Points	Total
Unit Exams (2)	100 points each	200
Final Exam (1)	100 points	100
Homework	5 points each	100
Class Activities	5 points each	100
Total		500

LEARNING RESOURCES & MATERIALS

Required materials:

- Textbook A Graphical Approach to Precalculus with Limits, 7th Edition, by Hornsby, Lial & Rockswold
- Scientific calculator

WCC Learning Resources

- Ka Piko Tutoring: https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/
- TRIO: https://windward.hawaii.edu/services-for-students/tutoring/trio-sss/

Uh System Resources

- OLA (UH online tutoring program: http://manoa.hawaii.edu/ola/
- Tutor.com: https://windward.hawaii.edu/tutor.com/

ADDITIONAL INFORMATION

 ABSENCES: If you are absent, you are responsible for any important announcements or assignments given during the class you missed. Refer to the class binder to review any missed lecture material. • EXAMS: There are no retests or make-ups for exams. The final exam is cumulative. If you are unable to attend class on an exam day, it may be possible for you to take the exam earlier than the specified day.

If the score earned on the final exam is higher than your lowest exam score, then your lowest exam score will be replaced with the percent earned on the final exam.

- HOMEWORK: Will be assigned weekly. Odd problems will be assigned from the textbook. You will work the problems on separate paper. Work should be done in a neat and logical order. You are responsible for checking the answers and correcting your work.
- IN-CLASS ACTIVITIES: In-class worksheets will be turned in for credit. These activities are considered class participation points.
- GRADING: To receive full credit for problems done on exams and in-class activities, you must show sufficient work in a clear and organized manner. Messy and/or disorganized work will not receive full credit.
- CELL PHONES & OTHER DEVICES: Cell phones and other electronic devices should be silenced prior to the start of class.
- DISRUPTIVE BEHAVIOR: Do not be disruptive. Please respect your fellow students and act accordingly.

ACADEMIC INTEGRITY

Work submitted by a student must be the student's own work. You are free to work with each other on homework and class activities. However, work on exams must be of your own merit. In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

WCC Policies: https://windward.hawaii.edu/Policies/

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 can be reached at (808) 235-7448, jodiaka@hawaii.edu, or you may stop by Hale Kākoʻo 106 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:

Desrae Kahale *Confidential Resource* 808-235-7393 dkahale3@hawaii.edu

Jojo Miller, *Confidential Campus Advocate* 808-348-0663 jojo.miller@hawaii.edu

Leslie Cabingabang *Senior Confidential Advocate* 808-348-0432 leslie.cabingabang@hawaii.edu

To file a report online: https://report.system.hawaii.edu/student

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			
Jan 17	Last day to register & and drop with 100% refund of tuition		
Feb 1	Last day to withdraw without a "W" grade and to receive 50% refund of tuition		
Mar 24 Last day to withdraw with a "W" grade or to choose CR/NC grade option. Last day to make up "I" grade from previous semester			

	MONDAY		WEDNESDAY
Jan 9	Orientation	Jan 11	9.1
Jan 16	No Class - Holiday	Jan 18	9.2
Jan 23	9.3	Jan 25	9.4
Jan 30	9.5	Feb 1	9.6
Feb 6	9.7	Feb 8	10.1
Feb 13	Exam 1 Review	Feb 15	EXAM 1 (Ch 9)
Feb 20	No Class - Holiday	Feb 22	10.2
Feb 27	10.3	Mar 1	10.4
Mar 6	10.5	Mar 8	10.6
Mar 13	No Class - Spring Break	Mar 15	No Class - Spring Break
Mar 20	11.1	Mar 22	Exam 2 Review
Mar 27	No Class - Holiday	Mar 29	EXAM 2 (Ch 10)
Apr 3	11.2	Apr 5	11.3
Apr 10	11.6	Apr 12	8.1
Apr 17	8.2	Apr 19	8.3
Apr 24	8.4	Apr 26	8.4
May 1	Final Exam Review	May 3	Final Exam Review
May 8		May 10	FINAL EXAM (Cumulative)