

MATH 140 – PRECALCULUS: TRIGONOMETRY (3 Credits)

INSTRUCTOR:	Jody-Lynn Storm
OFFICE:	Mana'opono 105A
OFFICE HOURS:	MTRF 12:15 pm – 1:15 pm W 10:15 am – 11:15 am
OFFICE TELEPHONE:	(808) 236 – 9277
EMAIL:	jstorm@hawaii.edu
EFFECTIVE DATE:	Summer 2018

CRN	DAYS	MEETING TIMES	CLASSROOM
63035	MTRF	10:15 am – 12:05 pm	Mana'opono 113

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.

CATALOG DESCRIPTION

Studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence. (3 hours lecture)

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

STUDENT LEARNING OUTCOMES

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

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

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

FOUNDATION HALLMARKS

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

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

LEARNING RESOURCES & MATERIALS

REQUIRED MATERIALS:

- Textbook: *Precalculus, Mathematics for Calculus*, 7th ed., by Stewart, Redlin & Watson
We will not be using the WebAssign online program. The access code is included when you purchase a new textbook. However, if you have taken Math 135 at WCC and would like to use the eBook included with your WebAssign account you may register for course: wcc.cc.hi 5155 7707
- Calculator: TI-83 or TI-84 graphing calculator

LEARNING RESOURCES:

- Math Lab: La'akea (Library Learning Commons) Room 220
http://windward.hawaii.edu/About_WCC/Math_Lab/index.php
- Testing Center: La'akea (Library Learning Commons) Room 228
Phone: 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/>
- TRiO: <http://windward.hawaii.edu/TRIO/index.php>
- Khan Academy Videos: <http://www.khanacademy.org>

COURSE TASKS & GRADING

Grades are posted on the Laulima gradebook and are based on the following course tasks:

3 exams @100 pts each	300 pts	(60% of possible pts)
Final Exam	100 pts	(20% of possible pts)
Homework	<u>100 pts</u>	(20% of possible pts)
Total	500 pts	

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% - 100% of the cumulative points possible
NC	Less than 70% of the cumulative points possible
W	Official Withdrawal
I	Incomplete - given when a student has failed to complete a SMALL part of the course due to circumstances beyond his/her control.

Note: CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline.

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 discretion 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

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. 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 graphing calculator on exams. You may not use higher models, such as the TI-89 or the TI-Nspire on exams.

Note: The library has a few TI-83 calculators available to borrow for the semester.

EXAMS

There are no retests on 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/time.

There are no make-up exams. However, if the percent 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

Homework will be in two parts:

1. Problem sets to be turned in for credit. These problem sets are to be turned in at the start of class. Late submissions are not accepted.
2. Suggested odd problems from the textbook. These problems are provided for additional practice and are not to be turned in.

GRADING

Grades are posted on Lulima. To receive full credit for problems done on exams or graded homework 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 & ACADEMIC HONESTY

Please respect your fellow students and act accordingly.

Graded homework assignments may be discussed with your classmates. However, the

write up of the solution for each problem must be done on your individual effort. You may not consult with 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.

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 140 TENTATIVE SCHEDULE - STORM - SUMMER 2018

IMPORTANT DATES

JUL 3	Last day to register/add/drop and to receive 100% refund of tuition
JUL 9	Last day for 50% refund of tuition and to withdraw without a "W" grade.
JUL 25	Last day to withdraw with a "W" or choose CR/NC grade option.

	MONDAY		TUESDAY		THURSDAY		FRIDAY
JUL 2	Orientation, 5.1, 5.2	JUL 3	5.2, 5.3	JUL 5	5.4, 5.5	JUL 6	5.5, 6.1
JUL 9	6.2, 6.3	JUL 10	6.3, 6.4	JUL 12	Exam 1 Review EXAM 1	JUL 13	6.5, 6.6
JUL 16	6.6, 7.1	JUL 17	7.2, 7.3	JUL 19	7.3, 7.4	JUL 20	7.5, 8.1
JUL 23	Exam 2 Review EXAM 2	JUL 24	8.1, 8.2	JUL 26	8.2, 8.4	JUL 27	8.4, 9.1
JUL 30	9.1, 11.1	JUL 31	11.1, 11.2	AUG 2	11.2, 11.3	AUG 3	Exam 3 Review EXAM 3
AUG 7	11.3, 11.4	AUG 8	Final Exam Review	AUG 10	Final Exam	AUG 11	No Class

STORM - MATH 140 – HOMEWORK ASSIGNMENTS

For the graded problems, please show your work neatly and in a logical order.

DUE	SECTION	GRADED PROBLEMS TO TURN IN	SUGGESTED ODD PROBLEMS (DO NOT TURN IN)
	5.1	# 8, 16, 34, 44, 48, 54	# 3 – 19, 23 – 55
	5.2	# 18, 24, 36, 60, 68, 78	#5 – 23, 29 – 79
	5.3	# 14, 22, 32, 36	# 3 – 57
	5.4	# 12, 22, 30, 50	# 3 – 41
	5.5	# 4, 8, 26, 34, 38, 42, 44 Added: Graph $y = \cos^{-1} x$	# 3 – 43
	6.1	# 30, 42, 48, 58, 66, 74	# 3 – 65, 69, 75, 77, 79
	6.2	# 22, 30, 36, 42, 52, 54	# 3 – 37, 41, 43, 47, 51 – 61
	6.3	# 8, 20, 42, 50	# 3 – 55
	6.4	# 4, 18, 24, 30, 34, 40	# 3 – 41
	6.5	# 6, 16, 26, 34, 38	# 3 – 27, 33 – 39
	6.6	# 10, 18, 26, 42, 44, 46, 48	# 3 – 31, 39 – 49
	7.1	# 22, 40, 60, 62, 78	# 3 – 25, 29 – 89
	7.2	# 20, 26, 38, 44, 50	# 3 – 39, 43 – 49
	7.3	# 14, 26, 32, 74, 80	# 3 – 33, 37 – 53, 73 – 85
	7.4	# 20, 28, 36, 46, 50	# 5 – 55
	7.5	# 12, 24, 26, 32, 42, 46, 60 (sketch the graph)	# 3 – 51, 57 – 61
	8.1	# 24, 34, 40, 56, 64	# 3 – 67
	8.2	# 20, 30, 36	# 3 – 7, 17 – 45
	8.4	# 10, 16, 26, 32, 50	# 3 – 33, 43 – 51
	9.1	# 32, 38, 46, 60, 64	# 3 – 69
	11.1	# 16, 34, 46	# 5 – 21, 29 – 47
	11.2	# 16, 36, 42	# 5 – 27, 33 – 43
	11.3	# 16, 24, 36	# 5 – 25, 31 – 41
	11.4	# 6, 12, 14, 28, 34	# 5 – 33
		eCAFE https://www.hawaii.edu/ecafe/	