MATH 135 – PRECALCULUS: ELEMENTARY FUNCTIONS (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:	www.jodystorm.com
EFFECTIVE DATE:	Fall 2016

CRN	Days	Time	Classroom
63246	MW	1:00 pm – 2:15 pm	Mana'opono 114

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

An analysis of elementary functions. A study of polynomial, rational, exponential, and logarithmic functions. Topics also include graphing techniques, transformations, applications, and related topics. Emphasis is placed on topics that will prove useful to students planning to take Calculus and also to those who are interested in pursuing math related careers. (3 hrs. lecture)

PREREQUISITES: Grade of "C" or better in Math 103 or equivalent, or satisfactory placement test score, or consent of instructor.

FOUNDATION HALLMARKS

Math 135 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 hallmarks of the symbolic reasoning requirement.

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.

Instructors will build a bridge from theory to practice and show students how to traverse this bridge.

STUDENT LEARNING OUTCOMES

1. Demonstrate proficiency in writing math expressions into different forms and finding the solutions to an equation and inequality using complex numbers where appropriate, by applying formal rules or algorithms.
2. Use appropriate symbolic techniques (such as algebraic techniques) to analyze and solve applied problems, and in the critical evaluation of evidence.
3. Interpret equations geometrically and use geometrical information to obtain the equation of lines and circles.
4. Utilize function concepts.
5. Draw the graphs of functions utilizing behavior information and/or transformations.
6. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form and in the presentation of evidence.
7. Traverse the bridge from theory to practice by using theorems related to polynomial functions and demonstrate proficiency in working with polynomial functions.
8. Apply concepts and properties of the logarithm functions.
9. Understand the concept of proof as a chain of inferences by doing some proofs.

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

LEARNING RESOURCES & MATERIALS

REQUIRED MATERIALS:
- Textbook: Precalculus, Mathematics for Calculus, 6th ed., by Stewart, Redlin & Watson
  - If you have a WebAssign access code and would like to use the eBook provided on WebAssign you may register at https://www.webassign.net/v4cgi/selfenroll/classkey.html with class key: **wcc.cc.hi 8143 9248**
- Calculator: TI-83 or TI-84 (any model)

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
- WolframAlpha: http://www.wolframalpha.com
- Kahn Academy Videos: http://www.khanacademy.org

COURSE TASKS & GRADING

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

3 exams @100 pts	300 pts	(50% of possible pts)
Homework	168 pts	(28% of possible pts)
Final Exam	<u>132 pts</u>	(22% of possible pts)
Total	600 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	See below

Note: CR/NC grades require written instructor consent. <u>Students must apply</u> 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 <u>student officially withdraws</u> 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 <u>student request</u> and must be approved by the instructor.

ADDITIONAL INFORMATION

<u>ABSENCES</u>
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. It is your responsibility to meet with me to review any missed lecture material. You may drop in during posted office hours or make an appointment to meet one-on-one. 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-84 (any model) or lower 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 on exams. The final exam is cumulative. If you are unable to attend class on an exam day, you may take the exam earlier than the specified day/time. If you unexpectedly must be absent on an exam day, a make-up exam will be scheduled. No more than one make-up exam may be taken. Make-up exams are given at the end of the semester.

HOMEWORK

Assigned homework problems are worth 6 points each. Homework is due at the beginning or end of class. Do not turn in assignments during the lecture portion of class. I do not accept homework submitted via email. There is a 3-point penalty for late homework. 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.

GRADING

To receive full credit for problems done on exams and homework, you must show sufficient work in a clear and organized manner.

CELL PHONES & OTHER DEVICES

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

DISRUPTIVE BEHAVIOR & ACADEMIC HONESTY

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. Examples are activated cell phones, texting, prolonged chattering, etc.

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

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.

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/

STORM – FALL 2016
MATH 135 – TENTATIVE SCHEDULE
MW 1:00 PM – 2:15 PM

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, 1.1	AUG 24	1.2, 1.3
AUG 29	1.3, 1.4	AUG 31	1.4, 1.5
SEP 5	**No Class** Labor Day	SEP 7	1.5, 1.6
SEP 12	1.6, 1.7	SEP 14	1.7, 1.8
SEP 19	1.10, 1.11	SEP 21	Exam 1 Review
SEP 26	**EXAM 1** (Ch1)	SEP 28	2.1, 2.2
OCT 3	2.2, 2.3	OCT 5	2.4, 2.5
OCT 10	2.5, 2.6	OCT 12	2.7, 3.1
OCT 17	3.1, 3.2	OCT 19	Exam 2 Review
OCT 24	**EXAM 2** (Ch2, 3.1)	OCT 26	3.2, 3.3
OCT 31	3.3, 3.4	NOV 2	3.4, 3.7
NOV 7	3.7, 4.1	NOV 9	4.1, 4.2
NOV 14	4.3, 4.4	NOV 16	4.4, 4.5
NOV 21	Exam 3 Review	NOV 23	**EXAM 3** (3.2-3.4, 3.7, 4.1-4.4)
NOV 28	4.5 4.6	NOV 30	4.6
DEC 5	Final Exam Review	DEC 7	Final Exam Review
DEC 12	**FINAL EXAM** 1:00 pm - 3:00 pm	DEC 14	