

MATH 140 – COLLEGE ALGEBRA (3 Credits)

INSTRUCTOR: Michael Joyce
OFFICE: Mana'opono 110A
OFFICE HOURS: See website
TELEPHONE: To be announced
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WEBSITE: www.math.hawaii.edu/~mikejoyc
EFFECTIVE DATE: Spring 2013

CRN	DAYS	MEETING TIMES	CLASSROOM
62187	TR	10:00 am – 11:15 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 135, or equivalent, or satisfactory placement test score, or consent of instructor.

WCC: FS

LEARNING RESOURCES & MATERIALS

REQUIRED TEXT: Precalculus, Mathematics for Calculus, 6th ed., by Stewart, Redlin & Watson

PLEASE NOTE: I highly suggest that you buy the Student Solutions Manual for this book. The library has it on sale. It will definitely improve your grade.

REQUIRED CALCULATOR: TI-83, TI-83+, TI-84, or TI-84+ calculator. You may not use a TI-89 or TI-Nspire calculator for exams.

MATH LAB (for extra help): La`akea 226

THE TESTING CENTER (TTC): La`akea 228

STUDENT LEARNING OUTCOMES

1. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form and in the presentation of evidence.
2. Traverse the bridge from theory to practice by applying concepts and properties of trigonometry, vectors, and complex numbers to solve problems.
3. Analyze and graph trigonometric functions, inverse trigonometric functions, conics, polar equations, and parametric equations.
4. Apply formal rules or algorithms by demonstrating proficiency in performing operations with trigonometric expressions and equations.
5. Use appropriate symbolic techniques to analyze and solve application problems requiring the use of trigonometry and analytical geometry and in the critical evaluation of evidence.
6. Understand the concept of proof as a chain of inferences by demonstrating proficiency at proving trigonometric identities and other types of proofs.

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

COURSE TASKS & GRADING

Grades for this course are based on the following:

4 exams @100 pts	400 pts	(Approximately 50% of possible pts)
Course activities	200 pts	(Approximately 25% of possible pts)
Final Exam	<u>200 pts</u>	(Approximately 25% of possible pts)
Total	800 pts	

Course activities include, but are not limited to, homework problems and in-class activities.

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. 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) will be assigned for the course.

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

Email and Laulima Website

Students are responsible for checking their UH email regularly for important announcements. Students are also expected to check the Math 140 Laulima site for announcements and occasionally additional resources. Students will also be referred to my website frequently (as it is often easier to navigate in my estimation):

<http://www.math.hawaii.edu/~mikejoyc/>

ADDITIONAL INFORMATION

1. ABSENCES:

It is your responsibility to attend class. If you are absent, borrow a classmate's notes and copy them for the day you were absent. You are responsible for those topics, examples, and important announcements on the day of your absence. If you are absent frequently or for an extended period of time, contact the instructor as soon as you can to discuss your situation. Frequent absences can negatively affect your grade.

2. MAKE-UP POLICY:

If you are unable to attend class on an exam day, discuss your situation with the instructor as soon as possible **before** the exam day. It may be possible for you to take the exam earlier than the specified day/time.

IF YOU UNEXPECTEDLY MUST BE ABSENT ON AN EXAM DAY, NOTIFY THE INSTRUCTOR BY 4 p.m. ON THAT EXAM DAY BY EMAIL. BE SURE TO STATE THE REASON FOR THE ABSENCE. **If no notification is received by 4 p.m. on the exam day or if the reason is not justified, then you will receive a 0 for the exam.** If notification is received and the reason is justified then that exam will be removed from the student's grading scheme (except for the final which must be taken). The instructor has the right to determine if the reason for the absence is justified and to request documentation of the student's absence.

There are no make-up opportunities for missed homework, graded in-class activities, or other graded course activities.

3. CALCULATORS:

The TI-83, TI-83+, TI-84, or TI-84+ calculator may be allowed on some exams. You may use a lower model TI graphing calculator, however you may not use higher models such as the TI-89 or the Nspire as they have added features which are not allowed on exams.

4. FINAL EXAM:

The final exam is cumulative.

5. HOMEWORK:

Read the sections to be covered in a class session prior to that class session. Those problems and concepts that you do not understand or need further clarification should be asked about on the day the section is discussed in class. Seek further assistance from the instructor if you are still having difficulties even after the class discussion of the topic.

Complete, review, and analyze all of the homework problems to get a better understanding of the material. **You may need to do more than the assigned homework problems to become comfortable with the concepts and skills.** To succeed in mathematics, you must do problems and become comfortable at using the skills and properties.

Assigned homework problems and due dates are given on my website and/or on Lulima and the points earned count toward the course activities portion of your grade. Homework must be turned in **on time and at the beginning of the class**, unless otherwise specified. You may turn in your homework before the due date and/or time without losing points. Late homework will not be accepted as the answer keys will be posted on my website as soon as the homework is due.

Course activities may also include other activities such as in class problems, quizzes, etc.

6. GRADING:

To receive full credit for problems done on exams, quizzes or graded homework, you must show sufficient work in a clear and organized manner. It helps me determine where your errors are (hence, you might be able to obtain partial credit) and if you are logically applying the mathematical tools learned to solve the given problem. Your work must be neat and organized. "Messy" and/or disorganized work will not receive full credit.

7. RETESTS: There are NO RETESTS for this course.

8. CELL PHONES: Please silence your phone before class begins.

9. HELP:

Your instructor is your primary human resource for help when you are lost or having trouble. Seek help immediately if you are encountering problems even after reading and re-reading the text section(s) and listening to/thinking about the discussion in class on that section(s). See the instructor during office hours, make an appointment, email or call. Don't wait too long to get help!! The Math Lab tutor is also available for drop-in assistance on the course material.

If a crisis comes up that interferes with the class, communicate with your instructor in a timely manner. Too many students wait until it is too late to inform their instructor about their crisis and that reduces the options that students may have to complete the course with a grade of C or better or to receive a CR grade.

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.

IMPORTANT DATES	
Jan 7	Late registration and add/drop period begins
Jan 11	Late registration and in-person add/drop ends Last day for 100% refund of tuition/student fees
Jan 28	Last day for 50% refund of tuition/student fees Last day for erase period
Mar 21	Last day to withdraw with a "W" or choose CR/NC grade option Last day to make up "I" grade from fall semester

	TUESDAY		THURSDAY
JAN 8	Orientation	JAN 10	5.1
JAN 15	5.2	JAN 17	5.3
JAN 22	5.4	JAN 24	5.5
JAN 29	6.1	JAN 31	6.2
FEB 5	6.3, 6.4	FEB 7	Exam 1 Review
FEB 12	EXAM 1 CH 5	FEB 14	6.5, 6.6
FEB 19	6.6, 7.1	FEB 21	7.2, 7.3
FEB 26	7.4	FEB 28	7.5
MAR 5	Exam 2 Review	MAR 7	EXAM 2 CH 6
MAR 12	8.1	MAR 14	8.1, 8.2
MAR 19	8.4	MAR 21	9.1
MAR 26	No Class SPRING BREAK	MAR 28	No Class SPRING BREAK
APR 2	11.1, 11.2	APR 4	Exam 3 Review
APR 9	EXAM 3 CH 7, 8.1, 8.2	APR 11	11.2, 11.3
APR 16	11.4	APR 18	Exam 4 Review
APR 23	Exam 4 8.4, 9.1, CH 11	APR 30	Final Exam Review

APR 30	Final Exam Review		
MAY 7	FINAL EXAM 10:00 AM - 12:00 PM		