

LEEWARD COMMUNITY COLLEGE
Mathematics and Natural Sciences Division
Course Syllabus – Spring 2012

MATH 140-PRE-CALCULUS:TRIGONOMETRY & ANALYTIC GEOMETRY (3.0 credits)

INSTRUCTOR: Mrs. Jennie Thompson, Professor of Mathematics

OFFICE HOURS: MWF 10:00-11:00am,12:30-1:00pm; TTH 8:30-9:00am,12:00-1:00pm

OFFICE LOCATION: MS-205 **CONTACT INFORMATION:** 455-0400, jenniet@hawaii.edu

Class information: Math 140(55193) MWF 11:00-11:50am MS-201

CATALOG COURSE DESCRIPTION:

A study of the properties and graphs of trigonometric, circular, and inverse functions; solution of triangles; identities; solution of trigonometric equations; conic sections; polar coordinates; parametric equations.

PREREQUISITES: C or better in Math 135 or equivalent(within the past two years)

CO-REQUISITES: None

RECOMMENDED PREPARATIONS: None

TEXTBOOKS AND OTHER RESOURCES:

1. TEXT: Precalculus With Wiley Plus Binder Set by Cynthia Young, 2010, John Wiley and Sons, Inc. A WileyPlus Access code is needed for this course. For those who enrolled in Math 135 with this text, the same access code will be used.
2. A scientific calculator or graphics calculator--note that certain graphics and/or programmable calculators may not be allowed on quizzes and exams. (More information will be given in class.)

STUDENT WITH DISABILITIES STATEMENT:

Leeward Community College abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, which stipulate that no student shall be denied the benefits of an education "solely by reason of a handicap." Students with documented disabilities who believe that they may need accommodations in this class are encouraged to contact the Coordinator of the KAKO'O 'IKE (KI) program as soon as possible to ensure that such accommodations are implemented in a timely fashion. The KI office is located in L-208, across from the elevator in the library building or call for information at 455-0421.

STUDENT ASSESSMENT NOTIFICATION

With the goal of continuing to improve the quality of educational services offered to students, Leeward CC conducts assessments of student achievement of course program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

STUDENT LEARNING OUTCOMES:

Upon successful completion of Math 140, a student should:

- understand and be able to calculate and apply the trigonometric ratios of acute angles.
- understand and be able to evaluate the trigonometric functions of variables expressed in general angle and radian units.
- be able to analyze and graph trigonometric functions.
- be able to solve application problems involving trigonometric concepts, including right triangles, arc length, area, and angular speed, understand the derivation of, and be able to apply, the essential trigonometric identities.
- be able to use the essential trigonometric identities to simplify expressions and prove further identities.
- understand and be able to analyze, graph, and use the inverse trigonometric functions.
- understand the derivation of, and be able to apply, the Law of Sines and Law of Cosines.
- understand and be able to use further trigonometric topics, including vectors in the plane, parametric equations, and polar coordinates. understand the properties of parabolas, ellipses, and hyperbolas.
- be able to solve various application problems related to trigonometry and the conic sections.

ATTENDANCE

Students are expected to be in attendance regularly and on time for class. Anticipated as well as unexpected absences should be discussed with me. It will be your responsibility for arranging any make-up work. Note that if you are not able to reach me, leave a message on the office phone at 455-0400. This phone has the capability of recording messages 24 hours a day.

ERASE/WITHDRAWAL PERIOD:

Classes dropped during the erase period will not appear on the student's permanent academic record. Deadline to withdraw from Classes without "W" grade is Monday, January 30, 2012.

Classes from which students withdraw after the erase period will appear on the student's permanent academic record with a "W" notation. Deadline for such a withdrawal is Friday, March 23, 2012. Contact the Admissions and Records Office for more information.

NOTE ON GETTING INSTRUCTIONAL ASSISTANCE:

Please take advantage of seeing me during my office hours. If you are not able to see me during office hours, make an appointment at a time that is convenient for you. In addition, visit the Math Lab (Mathematics Learning Resource Center) in MS-204 for walk-in tutoring on a no appointment basis. Many students find that working with a tutor helps them to succeed in class. Free tutoring is available in the Math Lab. For more information, ask at the Math Lab.

GRADING POLICY:

Quizzes: Quizzes will be given after a sufficient number of concepts have been covered. Quizzes will be worth approximately 25% of the course grade. Quizzes are worth 10 points each. Access code will be needed for any quizzes that are given on WileyPlus.

Examinations: There will be three exams worth approximately 50% of the course grade. Each examination will be worth 100 points.

Final Examination: The final examination will be worth approximately 25% of the course grade. The 150-point final examination will be a comprehensive exam that covers all materials from the beginning to the end of the semester.

Students are expected to take quizzes and exams on the scheduled day. A grade of zero (0) will be given for any missed quiz or examination. A special note on takehome quizzes: Takehome quizzes are due at the start of the class period. Failure to turn in a takehome quiz at the start of the class period will result in a grade of zero. In addition, a grade of zero for the takehome quiz will be given to the student who is not present in class or without an excused absence on the day the takehome quiz is given and on the day the takehome quiz is due.

To avoid problems, please let me know in advance about any problems or situations that may prevent you from taking any quiz or exam on the scheduled day. An exam cannot be made up unless a written note from a doctor or an authorized person with reasons for the excused absence. NOTE: notification of absences is to be made before the start of the class. Additional information about the quizzes, takehome quizzes, and examinations will be given in class.

The letter grade for this course will be determined by the total number of points the student accumulates. Letter grades and corresponding levels of achievement in percents are listed below.

A: 100% - 90% of the total points possible

B: 89% - 80% of the total points possible

C: 79% - 70% of the total points possible

D: 69% - 55% of the total points possible

F: 54% and below of the total points possible

Please refer to the current L.C.C. catalog for more information on letter grades.