Course Syllabus

COURSE TITLE: **Introduction to College Algebra**

COURSE IDENTIFICATION: **Mathematics 103**

CREDIT HOURS: 4

STUDENT LEARNING OUTCOMES:
Upon successful completion of Math 103, the student shall be able to...
- Demonstrate the algebraic skills needed to solve multiple types of one-variable equations and inequalities;
- Demonstrate the algebraic skills needed to graph multiple types of two-variable equations and inequalities;
- Demonstrate an ability to solve applications appropriate to algebraic modeling.

DIVISION: Liberal Arts / General Education

DEPARTMENT: Math & Natural Sciences

INSTRUCTOR: James A. Schumaker

OFFICE LOCATION: EKH-225

OFFICE PHONE: (808) 934-2626

OFFICE HOURS: see current semester information

DATE: January 2019

COURSE DESCRIPTION:

For students who need to improve algebraic skills prior to taking College Algebra, Statistics, or STEM-related courses. Topics include exponents and radicals, factoring, systems of equations, linear equations, quadratic equations, general properties of functions, graphing, polynomial and rational functions, exponential and logarithmic functions.

Prerequisites: "C" or better in Math 25 or "C" or better in Math 26 or placement into Math 103; and Eng 20R or ESL 20R or Eng 20W or (ESL 20G and ESL 20W) or placement into Eng 21 or placement in ESL 21 or placement in Eng 22, or placement in (ESL 22G and ESL 22W)

COURSE OBJECTIVES:

- Proficiency in writing algebraic/mathematical expressions.

- Proficiency in algebraic techniques to find solutions to equations and inequalities, including complex number solutions where appropriate.

- Proficiency in introductory function concepts and constructing the graphs of functions which are linear, quadratic, rational, logarithmic or exponential in nature.

- Proficiency in using geometrical/graphical information to obtain the equations for functions which are linear, quadratic, logarithmic or exponential in nature.

- Proficiency in using the definition and properties of exponents/logarithms to simplify exponential/logarithmic expressions and solve exponential/logarithmic equations.

- Proficiency in solving systems of equations and inequalities involving linear, quadratic, rational, logarithmic, and exponential equations/functions.

- Proficiency in using mathematical terminology and symbols to effectively communicate quantitative information/relationships in written form.

- Proficiency in algebraic techniques to analyze and solve applied problems.

- In addition, as in most mathematical courses, *students will be presented with the challenge of utilizing critical thinking along with the development of communicating analyses (results) in a **legible/neat, ordered and cogent** fashion.*

INSTRUCTIONAL MATERIALS:

Textbook(s):   Intermediate Algebra for College Students – 7th Edition
                 by Robert F. Blitzer / ISBN 978-0-13-4178943

Calculator(s):   Scientific calculator (any brand/model).

Recommended: Student Solutions Manual
                 Graph paper or engineering pad;
                 A loose-leaf notebook for storing HomeWork, exams, and notes.

MISCELLANEOUS:

Grading Policies (regarding class grades throughout the semester)

Course Calendar (regarding the class schedule throughout the semester)

Student Conduct Code (Policy: Haw 7.101)

Academic Grievances (Policy: Haw 5.101)

Discrimination & Harrassment Complaints/Grievances (Title IX Rights)

Disability Services (Americans with Disabilities Act)
● Haʻawi Kōkua Program (HawCC's PDF Brochure)

Family Educational Rights and Privacy Act