

Classes that have been approved to be weighted 5.0: (e.g. ENG 100 Composition I (3); HIST 151 World History to 1500 (3); HIST 152 World History Since 1500 (3); MATH 140 Pre-Calculus: Trigonometry and Analytic Geometry (3); MATH 205 Calculus I (4); MATH 205 [is referred to as MATH 241 at UH West Oahu] MATH 241 Calculus I (4); PSY 100 Survey of Psychology (3) and SOC 100 Survey of General Sociology (3))

UNIVERSITY OF HAWAII CLASSES (Weighted)

Course	Description
BIOL 171 Introduction to Biology I (3) BIOL 171L Introduction to Biology Lab (1)	Introductory biology for all life science majors. Cell structure and chemistry, growth, reproduction, genetics, evolution, viruses, bacteria, and simple eukaryotes. (DB) Prerequisite: CHEM 151 or 151B (or concurrent); or CHEM 161 or CHEM 161 or CHEM 161 and CHEM 161L (or concurrent); or equivalent or consent of the instructor. Co-requisite: BIOL 171L Rec Prep: High school biology course.
BIOL 275 Cell and Molecular Biology (3) BIOL 275L Cell and Molecular Biology Lab (2)	BIOL 275 is an integrated cell and molecular biology course for life science majors. This course is designed to give the student a fundamental understanding of the structure and biochemistry of eukaryotic and prokaryotic cells. The course covers the basic principles of molecular biology and includes uses modern advances in biotechnology, recombinant DNA technology and bioinformatics. (DB) Prerequisite: BIOL 171/171L and CHEM 272/272L or instructor or consent.
CE 270 Applied Mechanics I (Static)(3)	Equilibrium of particles, rigid bodies, frames and machines; vectors, centroids, friction, and moments of inertia. Required for CE and ME majors. Prerequisite: PHYS 170.
CE 271 Applied Mechanics II (Dynamics)(3)	Dynamics of particles and rigid bodies; force, acceleration, impulse-momentum, work- energy Required for CE and ME majors. Prerequisite: CE 270, MATH 206.
CHEM 162 General Chemistry II (3) CHEM 162L General Chemistry II Lab (1)	The second course of a two-course sequence designed to meet the one-year requirement of general college chemistry. Concepts and topics include, thermochemistry kinetics, acid-base equilibrium, solubility equilibrium and electrochemistry with an emphasis on problem solving. (DP) Prerequisite: CHEM 161 161L and MATH 135 with a grade of C or better.

Course	Description
CHEM 272 Organic Chemistry I (3) CHEM 272L Organic Chemistry I Lab (2)	CHEM 272 is the first semester of a comprehensive study of Organic chemistry including: molecular structure, nomenclature, stereochemistry, spectroscopy, reactions, reaction mechanisms, and synthesis of organic compounds. (Formerly lecture part of CHEM 272B.)(DP) Prerequisite: CHEM 621 or CHEM 62B1 with grade of C or better or better equivalent.
CHEM 273 Organic Chemistry II (3) CHEM 273L Organic Chemistry II Lab (2)	CHEM 732 is the second semester of a comprehensive study of organic chemistry including: molecular structure, nomenclature, stereochemistry, spectroscopy, reactions, reaction mechanisms, and synthesis of organic compounds. (Formerly lecture part of CHEM 273B.)(DP) Prerequisite: CHEM 272 or CHEM 272B with grade of C or better or equivalent
EE 150 Introduction to Computer Programming Methods (3)	Introductory course on computer programming methods; emphasis on planning, writing, debugging of programs, together with basic applications. Prerequisite: MATH 140 or equivalent
EE 211 Basic Circuit Analysis (4)	Study of linear circuits, time-domain analysis, transient and steady-state responses, phasors, impedance, and admittance; network or system functions, frequency response and filtering, resonance. Prerequisite: Credit in MATH 206; credit or concurrent registration in PHYS 272, 272L
ENG 204 Introduction to Creative Writing (3) ZLS2004	Students will practice writing poems, scenes, and short stories. The course includes creative writing assignments, discussion of professional works, and discussion of each student's writing. May be repeated for additional credit. Prerequisite: ENG 100 or equivalent with a grade of C or higher; or a approval from the Language Arts Division. Rec Prep: Experience in using computers for writing.

Course	Description
ENG 250 American Literature (3) ZLS250500	An examination of American literature since its inception to the present day giving emphasis to major authors, themes, and genres (DL) Prerequisite: ENG 01 or equivalent with a grade of C or better.
ICS 211 Introduction to Computer Science II (3)	Reinforce and strengthen problem-solving skills using abstract data types and introduce software development practices. Emphasize the use of searching and sorting algorithms and their complexity, recursion, object-oriented programming, and data structures. Prerequisite: ICS 111 with a grade of "B" or higher, or instructor consent.
ICS 212 Program Structure (3)	Program organization paradigms, programming environments implementation of a module from specifications, the C and C++ programming languages. Prerequisite: ICS 211 with a grade of "B" or better, or instructor consent.
ICS 241 Discrete Mathematics for Computer Science I (3) ZMR2410	Includes program correctness, recurrence relations and their solutions, divide and conquer relations, graph theory, trees and their applications, Boolean algebra, introduction to formal languages and automata theory. (FS) Prerequisite: ICS 141 with a grade of "C" or higher, or instructor consent.

Course	Description
MATH 206 Calculus II (4) ZMR260	<p>Second course in the calculus sequence. The course extends differentiation and integration to single-variable inverse trigonometric, logarithmic, and exponential functions. Topics include techniques of integration, convergence of improper integrals, sequences and series, Power and Taylor series representations of functions, and an introduction to differential equations.</p> <p>Prerequisite: C or better in MATH 205 (numbered MATH 241 at UH Manoa and UH–West O‘ahu), or articulated equivalent, within the past two years. NOTES: The admissions and records office maintains a database of articulated equivalent courses. The two-year time limit on recognition of math course prerequisites is a UHCC system-wide agreement formulated</p>
MATH 231 Calculus III (3) ZMR2310	<p>MATH 231 covers vector algebra, vector-valued functions, differentiation of functions of several variables, and optimization.</p> <p>Prerequisite: C or better in MATH 206 (numbered MATH 42 at 242 at UH Manoa and UH–West O‘ahu), or articulated equivalent, within the past two years. This course carries the Community College system-wide agreement of two-year limit on prerequisites for Math courses. This agreement is set by a policy formulated by the Math Program Coordinators Council (Math PCC).</p>
MATH 32 Calculus IV (3) ZMR320	<p>Math 32 is the fourth course in the calculus sequence. Topics include multiple integrals, line integrals, Green’s Theorem, surface integrals, Stokes’ Theorem, and Gauss’s Theorem. Prerequisite: C or better in MATH 231 or equivalent (within the past two years)</p>
Course	Description

<p>PHYS 151 College Physics I (3) PHYS 151L College Physics Laboratory (1) ZSP510 ZSP51</p>	<p>The first course in a two-semester sequence in introductory physics intended for science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. The course includes mechanics, kinetic theory and thermodynamics. Required: scientific calculator. (DP) Offered Fall Semester only. Prerequisite: C or better in MATH 140 or MATH 140X or by consent of instructor</p>
<p>PHYS 152 College Physics II (3) PHYS 152L College Physics Laboratory II (1)</p>	<p>The second course in a two-semester sequence in introductory physics intended for science majors. Emphasis is split between concepts and mathematical applications. Algebra, trigonometry and geometry are used; calculus is not. Course includes electricity and magnetism, wave motion, optics, and atomic and nuclear physics. Required: Pocket trig-type calculator. (DP) Prerequisite: PHYS 151</p>
<p>PHYS 170 General Physics I (4) PHYS 170L General Physics I Laboratory (1) ZSP170 ZSP710</p>	<p>A rigorous introductory course in classical mechanics and thermodynamics for physical science and engineering majors emphasizing the mathematical techniques used in the explanation of physical phenomena. (DP) Prerequisite: MATH 205 and PHYS 100 or high school physics.</p>
<p>PHYS 272 General Physics II (3) PHYS 272L General Physics II Laboratory (1)</p>	<p>Experimental analysis in electricity, magnetism and optics. (DY) Prerequisite: credit or concurrent registration in PHYS 272.</p>
<p>PHYS 274 General Physics III (3)</p>	<p>Modern physics, consisting of relativity, introduction to quantum mechanics, atomic and nuclear physics, and physical optics; the last of the rigorous three-semester introductory physics sequence. Required of physical science and engineering majors (except CE). Class meets for 3 hours of lecture per week. Prerequisite: PHYS 152 or PHYS 272.</p>

Course	Description
SP 251 Principles of Effective Public Speaking (3)	Adaptation of rhetorical theory to particular speakers, audiences, occasions. Extensive practice. (OR) Prerequisite: This course is frequently taught as a Writing Intensive course, for which students must have completed ENG 100 or equivalent with a C or better. Rec Prep: If SP 251 is not designated Writing Intensive, completion of ENG 100 with a C or better is still highly recommended, as students without ENG 100 will find it difficult to complete the course.
ED 100 Introduction to Education and Teaching	ED 100 is an introductory course where students will learn about the teaching profession, the professional teacher, and the learner. The roles and responsibilities of the educator and the educational system in Hawai'i will be examined. Students will also learn about diverse learners and learning styles and theories. Creating a positive learning environment, managing classrooms effectively, and developing and conducting standards-based lesson plans will be covered. Students will also explore various careers in education. Rec Prep: ENG 22 with grade of C or better or placement in ENG 100, or equivalent, or consent of instructor.