General Education Designations

Courses that meet the UH Mānoa General Education Core and Graduation requirements are identified with one of the following designations at the end of the course description:

Physical Sciences - DP

Biological Sciences - DB Animal Science (ANSC) (19)* p. 362 Anthropology (ANTH) (5)* p. 363 Biochemistry (BIOC) (3) p. 375 Biology (BIOL) (31)* p. 377 Botany (BOT) (19)* p. 380 Cell & Molecular Biology (CMB) (3) p. 383 Dental Hygiene (DH) (10)* p. 394 Food Science & Human Nutrition (FSHN) (14)* p. 413 Geography (GEOG) (3) p. 416 Honors (HON) (1) p. 428 Kinesiology & Leisure Science (KLS) (7)* p. 439 Medical Technology (MEDT) (2) p. 457 Microbiology (MICR) (10)* p. 459 Molecular Biosciences & Bioengineering (MBBE) (6) p. 461 Natural Resources & Environmental Management (NREM) (3)* p. 464 Nursing (NURS) (3) p. 466 Oceanography (OCN) (2) p. 470 Pharmacology (PHRM) (2)* p. 473 Physiology (PHYL) (11)* p. 477 Plant & Environmental Protection Sciences (PEPS) (12)* p. 478 Psychology (PSY) (4) p. 483 Tropical Medicine & Medical Microbiology (TRMD) (1) p. 507 Tropical Plant & Soil Sciences (TPSS) (23)* p. 508 Women's Studies (WS) (3) p. 511 Zoology (ZOOL) (21)* p. 513

Anthropology (ANTH) (1) p. 363
Apparel Product Design & Merchandising (APDM) (3) p. 365
Architecture (ARCH) (8) p. 367
Astronomy (ASTR) (9)* p. 375
Biochemistry (BIOC) (2)* p. 375
Bioengineering (BE) (8) p. 376
Chemistry (CHEM) (16)* p. 383
Civil & Environmental Engineering (CEE) (19) p. 386
Electrical Engineering (EE) (19)* p. 403
Food Science & Human Nutrition (FSHN) (2) p. 413
Geography (GEOG) (10)* p. 416
Geology & Geophysics (GG) (33)* p. 418
Honors (HON) (1) p. 428
Mechanical Engineering (ME) (26) p. 455
Meteorology (MET) (10)* p. 458
Natural Resources & Environmental Management (NREM) (3) p. 464
Ocean & Earth Science & Technology (OEST) (2)* p. 469
Ocean & Resources Engineering (ORE) (2)* p. 470
Oceanography (OCN) (9)* p. 470
Physics (PHYS) (23)* p. 476
Tropical Plant & Soil Sciences (TPSS) (1) p. 508

Laboratory (science) - DY
Animal Science (ANSC) (1) p. 362
Anthropology (ANTH) (2)* p. 363
Astronomy (ASTR) (1)* p. 375
Biochemistry (BIOC) (1) p. 375
Biology (BIOL) (11)* p. 377
Botany (BOT) (11)* p. 380
Chemistry (CHEM) (11)* p. 383
Civil & Environmental Engineering (CEE) (1) p. 386
Dental Hygiene (DH) (5)* p. 394
Electrical Engineering (EE) (4) p. 403
Food Science & Human Nutrition (FSHN) (3) p. 413
Geography (GEOG) (1)* p. 416
Geology & Geophysics (GG) (4)* p. 418
Mechanical Engineering (ME) (2) p. 455
Meteorology (MET) (2)* p. 458
Microbiology (MICR) (9)* p. 459
Molecular Bioscience & Bioengineering (MBBE) (2) p. 461
Natural Resources & Environmental Management (NREM) (1) p. 464
Ocean & Earth Science & Technology (OEST) (1) p. 469
Oceanography (OCN) (2)* p. 470
Physics (PHYS) (10)* p. 476
Physiology (PHYL) (6)* p. 477
Plant & Environmental Protection Sciences (PEPS) (2) p. 478
Tropical Plant & Soil Sciences (TPSS) (1) p. 508

Zoology (ZOOL) (12)* p. 513

Written CommunicationFW
Symbolic Reasoning FS
Global and Multicultural
Perspectives FG
Diversifi cation Requirements
ArtsDA
Humanities DH
Literatures DL
Social SciencesDS
Biological Sciences DB
Physical Sciences DP
Laboratory (science) DY
<u>UH Mānoa</u>
Graduation Requirements
Hawaiian/Second Language HSL

Foundations Requirements

For more information, see the "Mānoa General Education Core and Graduation Requirements" section of this *Catalog*.

Please Note: 1) Consult your college adviser for a list of updated General Education courses. Additional courses may have been approved after the publication of this Catalog. 2) Some programs specify which courses their students must take to fulfill the Core requirements or to fulfill lower division school or college requirements. For these programs, students should consult an adviser from their intended college, school, or department prior to selecting courses.

IMPORTANT REMINDER

Your Diversification courses must be from different departments than your Foundations-Global & Multicultural Perspectives (FG) courses. For example, if you took HIST 151 and GEOG 102 for FG, you cannot use any HIST or GEOG courses to fulfill your Diversification requirement.

This listing describes the large range of courses available. Please note that this list of courses changes due to the dynamic nature of academic disciplines.

Each semester, the courses available are listed in the *Schedule of Classes*/UH Mānoa Registration Homepage. Summer classes are listed in the *Summer Session Catalog/MyUH Portal*.

The course headings are abbreviated and include a two-to four-letter department code, course number (including alpha suffix, if applicable), title, level, credits, description, cross-listings, repeatability, prerequisites, co-requisites, grade option, frequency, and core designation. For further clarification, please refer to sample course description.

Sample Course Description

ABCD 123 Introduction to Courses (3) (2 Lec, 1 3-hr Lab) This sample describes an introductory course. Open to nonmajors if space available. Repeatable once. CR/NC only. Pre: 122, HIST 101 or GEOG 101, and SP 188 (or concurrent); or consent. Co-requisite: 123L. (Cross-listed as DCBA 123) DA

Course number (ie. 123) reflects course level (see "Course Numbering System" below). An "A" following the number designates a Selected Studies (honors) section. An "L" following the number designates a laboratory course that is companion to a lecture course bearing the same number. All other suffixes ("B–K," "M–U," and "W–Z") mark separate sections of an "alpha" course, each having a distinctive content such that a student may earn credit toward the degree for each section taken.

Roman numerals (I, II) indicate the level of a course in a sequence, e.g., Calculus II is a more advanced course following an introductory-level course.

Credit hours (ie. **(3)**) are shown in parentheses following the course title. Variable credit courses are designated "(V)." Some classes break down the time spent in lecture and laboratory.

Description includes class size/format (e.g., lecture, discussion, seminar, lab, workshop, studio) and major subjects covered. Other features may include learning experiences (e.g., two term papers, guest lecturers).

Repeatable indicates that a course may be taken again for additional credit toward a degree.

CR/NC only indicates that the course is offered only for credit (CR) or no credit (NC). Credit is given if a student achieves a passing grade. If CR/NC only is not indicated, the course uses the A-F grading system.

Pre: indicates the prerequisites necessary to register for a course, which may include courses, class standing, or consent of the instructor, faculty advisor, or department chair. Some

prerequisites may be taken concurrently. When a department has a prerequisite common to a large group of courses, that fact is noted in italics preceding these course listings.

Co-requisite indicates that the course must be taken in conjunction with another course.

Alt. years means that the course is offered only every other year.

Cross-listed indicates a course that fulfills a requirement in more than one department and specifies the alternate departmental course listing.

General Education designation (ie. DA) indicates that the course meets a General Education Core or Graduation requirement. See the key in the right column for designations. Courses that meet the Focus requirement are not designated in the *Catalog*. Focus-designations are in the *Schedule of Classes*/ UH Mānoa Registration Homepage.

Course Numbering System

Undergraduate Courses (1–499)

1–99 Courses not applicable for credit toward a bachelor's degree

100–199 Initial or introductory courses

200–299 Second-year courses in a sequence or development in a field of study. 200-level courses that have an explicit college-level course prerequisite count toward the non-introductory credit requirement.

300–499 Third- and fourth-year courses in a sequence of courses or first courses in professional curricula. May be accepted by Graduate Division to fulfill graduate degree requirements (petition may be required). Courses numbered 300 or above are upper-division and count toward the non-introductory credit requirement.

Post-Baccalaureate Courses (500-800)

500 Directed Study (master's Plan B)

500–599 Courses applicable toward first professional degrees (law and medicine) and in-service training programs in education

600-699 Graduate courses

700 Thesis Research (master's Plan A)

700-798 Advanced graduate courses

800 Dissertation Research

Special Numbers: Courses ending in –99 are directed research or directed study. Experimental courses ending in –97 or –98 and single offerings are not listed in the *Catalog*.