

Bachelor of Science in Clinical Science: Cytotechnology Option

The purpose of the Degree Roadmap is to serve as a guide for planning one's academic coursework required to complete a specific major semester by semester. Before enrolling, you can use the Degree Roadmap to get a feel for the courses you'll take in this major. After enrolling, refer to the University Catalog, Class Schedule and consult with your academic advisor each semester for advisement to specify which courses you will take to fulfill each graduation

requirement and are progressing toward graduation in a timely manner as possible. **The Degree Roadmap is subject to change and is NOT to be considered a replacement for advisement with an academic advisor.** See *University Catalog* for information on the Graduate Writing Assessment Requirement (GWAR). **See reverse side for General Education (GE) course requirements. **A minimum of 120 units are required for completion of degree.*

Entry Level Skills Tests

English

EPT Waiver:	SAT I 500, ACT 22, AP 3 or EAP Exempted
Course Placement	120-140 ENG 88
Total Scores:	141-146 ENG 99
	143-146 ENG 195: satisfies ENG 99 & ENG 110
	147 ENG 110

Math

ELM Waiver:	SAT I & II 550, ACT 23, AP 3 or EAP
Course Placement	00-40 MAT 3
Total Scores:	42-48 MAT 9
	50 G.E. Math

First Semester

Course		Units
BIO 120	Principles of Biology I (meets GE B2*)	3
BIO 121	Principles of Biology I Lab (meets GE B3*)	1
CHE 110	General Chemistry I (meets GE B1*)	5
MAT 131	Elem. Statistics & Probability (meets GE B4*)	3
GE A1*	Freshman Composition I	3

Third Semester

Course		Units
BIO 250	Elements of Human Anatomy & Physiology	3
CHE 230	Quantitative Analysis	4
CLS 301	Intro to Clinical Laboratory Procedures	2
GE A2*	Logic/Critical Reasoning area	3
GE D2*	Global & Historical Perspectives area	3

Fifth Semester

Course		Units
BIO 320	Cell Biology	3
CLS 307	Clinical Hematology (fall only)	3
HSC 308	Pathophysiology for Health Professions	3
GE A3*	Oral Communication area	3
GE C3*	Humanities - Letters Courses area	3
GE F1*	Studies in the Humanities area	3
GWAR	ENG 350 or GWE	0-3

Seventh Semester

Course		Units
CLS 450	Microscopy: Female Genital Tract	4
CLS 451	Microscopy: Respiratory & Gastrointestinal Tract	2
CLS 452	Microscopy: Genitourinary Tract & Body Cavity Fluids	2
CLS 460	General Cytology, Cytogenetics, Cytology of the Female Genital Tract	3
HSC 492	Research Methods in Health Sciences	3

Second Semester

Course		Units
BIO 122	Principles of Biology II	3
BIO 123	Principles of Biology II Laboratory	1
CHE 112	General Chemistry II	5
HSC 201	The Whole Person area (meets GE E*)	3
GE A1*	Freshman Composition II	3

Fourth Semester

Course		Units
BIO 324	Microbiology (Fall only)	3
BIO 325	Microbiology Laboratory (Fall only)	1
CHE 316	Survey of Organic Chemistry (Spring only)	3
CHE 317	Survey of Organic Chemistry Lab (Spring only)	1
GE C2*	Humanities - Art Courses area	3
GE D1*	Perspectives on Individuals, Groups, & Society area	3

Sixth Semester

Course		Units
BIO 422	Histology (spring only)	4
CLS 306	Clinical Immunology & Immunohematology (spring only)	4
GE C1*	Humanities area	3
GE D4*	Perspectives on U.S. & California Government area	3
GE F2*	Studies in the Natural Sciences area	3
GE F3/G*	Studies in Social Sciences area/Cultural Pluralism area	3

Eighth Semester

Course		Units
CLS 453	Microscopy: Fine Needle Aspirations	2
CLS 454	Microscopy: Systems Overview	4
CLS 455	Cytologic Preparation	2
CLS 461	Cytology of the Respiratory & Gastrointestinal Tracts	2
CLS 462	Cytology of the Genitourinary System & Body Cavity Fluids	2
CLS 463	Fine Needle Aspiration Cytology	1
CLS 491	Management Skills in the Health Sciences	3

Total Units: 127-130**

NOTE: Clinical year begins summer prior to the 7th semester. Upper division elective courses cannot double count for upper division GE courses. This is a single field major. No minor required.

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Learn More

- To learn more about the B.S. in Clinical Science at CSUDH, call the Department of Health Sciences at (310) 243-3748, visit WH A-330, or visit CSUDH.EDU/CHHSN.
- For more information on applying to CSUDH, visit CSUDH.EDU/FutureStudents.
- Apply online at CSUMENTOR.EDU.
- Career information, visit CSUDH.EDU/CareerCenter.

Faculty

Cheryl Jackson-Harris
Program Coordinator, Professor
M.S., CSU, Dominguez Hills

Ellen Hope-Kearns
Professor and Professor Emeritus
Ph.D., University of Central Lancashire

Paula D'Amore, Associate Professor
Ph.D., University of California, Los Angeles

Amer El Ahraf, Professor Emeritus
DPH, University of California, Los Angeles

Pamela Krochalk, Professor
Ph.D., University of California, Los Angeles

Scott Hornbeak, Program Coordinator
Lecturer, Orthotics & Prosthetics
MBA, CPO, University of California, Los Angeles

Career Options

Students should consider professional health care specialization. They find positions in a variety of settings including university medical centers, acute care facilities, private clinics, hospitals, doctor's offices, research facilities, colleges and universities, government and in industry, both in the United States and abroad.

*General Education (GE) Requirements

A. **Basic Skills:**

Courses must be passed with a grade of "C" or higher.

GE A1: ENG 110, ENG 111 (both required)

GE A2: PHI 120 or PSY 110

GE A3: THE 120

GE A4: CSC 101 or LIB 150 (optional category)

B. **Area of the Natural Sciences and Quantitative Reasoning:**

Select one course from each category below. Category 4 courses must be passed with a grade of "C" or higher.

GE B1: CHE 102, EAR 100, GEO 200, PHY 100

GE B2: ANT 101, BIO 102

GE B3: BIO 103, EAR 101, CHE 103

GE B4: MAT 105, 131, 153, 171, 191, 193

C. **Area of the Humanities:**

Select one course from each category below.

In categories 2 and 3, select courses from different departments.

GE C1: HUM 200

GE C2: ART 100, ART 101, CHS 125, COM 130, DAN 130, MUS 101, MUS 110, THE 100, THE 160

GE C3: AFS 200, AFS 231, APP 101, CHS 100, CHS 205, ENG 230, FRE 220, HUM 212, PHI 101, PHI 102, SPA 151, SPA 221

D. **Area of the Social Sciences:**

Select one course from each category below.

In categories 1 and 2, select courses from different departments.

GE D1: AFS 212, AFS 220, ANT 100, APP 212, CHS 212, PSY 101, SOC 101, SOC 102, WMS 250

GE D2: AFS 201, ANT 102, CHS 200, GEO 100, HIS 120, HIS 121, POL 100

GE D3: HIS 101

GE D4: POL 101

E. **Objectives for Lifelong Learning and Self-Development:**

Select one course from the following.

GE E: HEA 100, HSC 201, KIN 235, REC 100, UNV 101

F. **Upper Division Integrative Studies:**

Select one course from each category. Courses in this category are to be taken after 60 semester units and ALL lower division General Education courses have been completed.

GE F1: HUM 310, 312, 314

GE F2: SMT 310, 312, 314, 416

GE F3: SBS 318¹

G. **Cultural Pluralism Requirement:**

Within their General Education selections or within other requirements, all students must take one course which addresses cultural pluralism (i.e. the impact of the integration of cultures).

GE G: ANT 312, 336, 337, 338, 339, 340, 342, 389, CHS 300, HIS 305, MUS 401, PHI 383, SBS 318, SOC 322, SOC 331, SOC 383

¹ SBS 318 satisfies both F3 and G areas. Students will receive only three units credit, but will have met both requirements.