



Integrated Program of Study Course Grid

Health Science and Medical Technology Sector

Biotechnology Pathway*



Grade	CTE Courses	Social Science	English Language Arts	Math		Science	Required Courses	Foreign Language	Early College Credit Options	College Courses	Work-Based Learning
				Non-Integrated	OR Integrated						
8	Exploratory CTE	History	Language Arts	Math 8 or Algebra	Math 8 or Math 1	Physical Science (UC)	PE	World Language HS Credit (optional)	CCC: Biotechnology & Allied Health Programs FC: Biotechnology Programs IVC: Biological Science/ Biotechnology Programs SAC: Biotechnology Programs SCC: Biotechnology Certificate Programs	Fall	Guest Speakers, Workplace Tours
										Spring	
										Summer	
9	Introductory CTE	Human Geography (UC)	English 9 in the Context of Mental and Behavior Health (UC)	Algebra I (UC)	Math 1 or Math 2 (UC)	The Technology of Biology (UCCI)	Health & PE-1	World Language (UC)		Fall	Guest Speakers, Workplace Tours
										Spring	
										Summer	
10	Concentrator CTE	World History: History of Human Consciousness (UC)	English 10 (UC)	Geometry or Algebra II (UC)	Math 2 or Math 3 (UC)	Applied Chemistry and Biotechnology (UCCI)	PE-2	World Language (UC)		Fall	Guest Speakers, Workplace Tours
								Dual Enrollment		Spring	
								Summer			
11	Concentrator CTE	U.S. History and Public Health (UC)	English 11: The Dynamic Literacy of Patient Care	Algebra II or Pre-Calculus (UC)	Math 3 or Pre-Calculus or AP Statistics or Calculus (UC)	Anatomy & Physiology or Physics (UC)		World Language (UC)		Fall	Guest Speakers, Workplace Tours, Job Shadowing
								Dual Enrollment		Spring	
								Summer			
12	Capstone CTE	Government/ Economics (UC)	English 12: Reading and Writing Your Way to a Healthier World (UCCI)	Pre-Calculus or AP Statistics or Calculus (UC)	Advanced Interdisciplinary Math: Discrete Math and Applications in Medical Imaging (UC)	The Science and Ethics of Biotechnology (UCCI)		AP World Language (UC)	Fall	Guest Speakers, Workplace Tours, Job Shadowing, Internships	
								Spring			
								Summer			

	High School Industry Certifications	Community College Programs/Certificates	UC/CSU Degree Programs
Potential Certifications, Certificates, Degrees	CPR and First Aid	Applied Biotechnology	CSU Biotechnology and Bioinformatics
		Biotechnology Assistant	CSU Biomedical Engineering
		Biotechnology	UC Microbial Biotechnology
Potential Employment	Medical Office Receptionist	Bioinformatics Technician	Bioinformational Scientist
	Lab Assistant	Biological Technician	Biomedical Engineers
	Medical Transcriptionist	Medical Equipment Repairer	Physician

*OCDE endorses the use of UCCI courses. All other named courses are for demonstration purposes only.