



Biotechnology

Course Overview: Focuses on careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services.

Career Goal (O*NET Code): Biotechnology Technician (19-4021), Plant Breeder (19-1013), Geneticist (19-1029).

Student Name: _____
Grade: _____
School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

Middle School	8th	HS Courses:		<p>Curricular Experiences: Texas FFA Association</p> <p>Career Learning Experiences: Career Preparation Internship Job Shadowing</p>	<p>Extracurricular Experiences: Agriscience Fair Farm Bureau Exchange Programs Language Immersion Programs School Newspaper Student Government UIL Academic Competitions Yearbook</p> <p>Service Learning Experiences: Animal Rescue Animal Shelter Boy/Girl Scouts Campus Service Organizations Community Service Volunteer Peer Mentoring / Peer Tutoring</p>	
	9th	Core Courses:	English I Algebra I Biology			World Geography Physical Education Languages other than English I
Career-Related Electives:		Principles of Agriculture, Food and Natural Resources				
10th	Core Courses:	English II Geometry Chemistry	World History Languages other than English II			
	Career-Related Electives:	Greenhouse Management				
11th	Core Courses:	English III Algebra II Physics	United States History			
	Career-Related Electives:	Biotechnology				
12th	Core Courses:	English IV Precalculus AP Biology	Government/Economics Floral Design (Fine Arts credit)			
	Career-Related Electives:	Agricultural Science Internship/Mentorship or Advanced Plant and Soil Science or Advanced Animal Science				
On-the-Job Training		Laboratory Assistant Insect Scout	Greenhouse Worker	Plant Breeding Technician		
		NOTE: These experiences may be started and/or completed as part of the high school experience.				
Certificates		Private Pesticide Applicator	OSHA CareerSafe			
		NOTE: Students may earn all or part of these certificates as part of the high school experience.				
Postsecondary	Associate Degrees	Applied Science	Biotechnology			
	Bachelor Degrees	Agricultural & Biological Engineering	Biomedical Engineering Biomedical Science	Entomology Plant Science		
	Graduate Degrees	Biological Science	Crop & Soil Science	Plant Genetics		
					<p>Career Options: Veterinary Technician Artificial Insemination Technician</p> <p>Career Options: Biotechnology Technician Biochemical Technician Forensic Science Technician Environmental Technician Animal Health Technician</p> <p>Career Options: Biomedical Engineer Research Associate Animal Research Associate Biotechnology Production Associate</p> <p>Career Options: Epidemiologist Veterinary Scientist Biochemist Forensic Scientist</p>	
					<p>COLLEGE CREDIT OPPORTUNITIES -- High School</p> <p>Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.</p>	

Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.