



# SD Program of Study

## Biotechnology Research & Development Pathway

(Project Lead the Way)

This plan of study should serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

	GRADE	English	Math	Science	Social Studies/ Sciences	SD Required Electives	Career & Technical Education Courses	SAMPLE Career Options Relating to This Pathway	
<b>8th Grade: Interest Inventory Administered and Plan of Study Initiated for all Students</b>									
<b>SECONDARY</b>	9	* English I	* Algebra I	* Physical Science	* World History * Geography	* PE/Health * Fine Art Elective	* Employability/Careers * Foundations of CTE	Occupations Requiring Less than Baccalaureate Degree ► Animal Services Technician ► Animal Services Technologist ► Data Entry Clerk ► Lab Assistant-Genetics ► Lab Technician ► Maintenance and Instrument Technician ► Process Technician ► Quality Assurance Technician ► Quality Control Technician Occupations Requiring Baccalaureate Degree ► Biochemist ► Bioinformatics Associate ► Bioinformatics Scientist ► Bioinformatics Specialist ► Biomedical Chemist ► Biostatistician ► Cell Biologist ► Clinical Trials Research Associate ► Clinical Trials Research Coordinator ► Geneticist ► Microbiologist ► Molecular Biologist ► Pharmaceutical Scientist ► Regulatory Affairs Specialist	
	10	* English II	* Geometry	*♦ Biology I		2 units total - any combination of: * World Language or	Principles of the Biomedical Sciences Human Body Systems Medical Interventions Biomedical Innovation		
	<b>Academic/Career Advisement Provided - College Placement Assessments</b>								
	11	* English III	* Algebra II	*♦ Chemistry	* American History	* Computer Studies or Approved Career & Technical Education			
	12	* English IV	Calculus	<u>AP Biology or AP Chemistry</u> or Anatomy & Physiology or Microbiology or Physics	* U.S. Government * Psychology	* Personal Finance or * Economics	* Capstone Experience		
<b>The general courses identified in this Program of Study are those required as part of SD's Advanced Pathway to Graduation.</b>									
<b>POSTSECONDARY</b>	Year 13	Written and Oral Communications	College Level Math	Natural Sciences	Social Studies/ Sciences	Computer Literacy			
	Year 14	Written Communications	Information Literacy			Wellness for Life Arts & Humanities			
	Year 15								
	Year 16								
<p>◀ <b>Blue Text - College Level - Dual Credit</b> † <b>Red Text - Courses can be articulated to Postsecondary Education</b></p> <p><b>Underlined Text - Industry Certification Available</b> * <b>Classes available through Virtual School</b> ✦ <b>Recommended academic</b></p>									