

Biotechnology

A Program of Study within the Edmonds School District



This Program of Study is connected to the following field(s):

- Arts and Communications
- Business and Marketing
- Engineering and Technology
- Health and Human Services
- Science and Natural Resources

This Program of Study reinforces the following Academic Skills:

- Reading
- Writing
- Mathematics
- Science
- Visual Arts
- Health/Fitness

Description

The Biotechnology program of study introduces students to the highly technical and emerging field of Biotechnology. Using state of the art equipment and research labs, students will gain valuable experience through meaningful projects which combine academic learning and real-world laboratory skills. Topics covered include DNA Fingerprinting, Cloning, Human DNA Sequencing, and Forensics. This program provides students strong preparation for careers within medical and scientific fields, and is supported by a number of research institutions including the University of Washington Genome Project, Fred Hutchison Cancer Research Institute, Geospiza, and Amgen.

Program of Study Courses (2.0 credits from the following)

Courses within this Program of Study and the schools where they are available are listed below. Courses with an (ID) designation are Intradistrict Course available to all district Juniors and Seniors. Courses with two or more subject areas listed are Equivalency Courses which can satisfy more than one subject requirement. [For information about Equivalency Courses, click here.](#)

<u>Course(s)</u>	<u>Credits</u>	<u>Subject Area(s)</u>	<u>EW</u>	<u>LH</u>	<u>MD</u>	<u>MT</u>	<u>SL</u>
VOC424 Biotechnology (ID-LHS)	1.0	CTE, Science	■	■	■	■	■
SCI301 Chemistry 1.0		Science	■	■	■	■	
SCI302 Chemistry Honors	1.0	Science	■	■	■		
SCI351 Chemistry, AP	1.0	Science			■	■	
SCI374 Genetics .5		Science			■		
VOC433 Horticulture (ID-LHS)	1.0	CTE, Art, Science	■	■	■	■	■
VOC301 Horticulture, Advanced (ID-LHS)	1-2	CTE, Art, Science	■	■	■	■	■

Post-High School Training Connections

The following courses within this program of study are articulated for college credit with the Horticulture program at Edmonds Community College (EdCC). College credits and courses which may be earned are listed below.

<u>HS Course</u>	<u>Credits</u>	<u>College</u>	<u>College Courses Earned</u>
VOC433 Horticulture (ID-LHS)	10.5	EdCC	Hort102, 103, 192, 196

Occupational Information

The following represent occupations within this field and their average annual earnings and openings based on data from the Washington State Employment Security Department. For more information about these and other occupations within this field, go to www.wois.org.

<u>Occupations</u>	<u>Openings</u>	<u>Earnings</u>
Medical Scientists, Except Epidemiologists	160	\$63,886 yr.
Pharmacy Technicians	141	\$35,310 yr.
Biological Technicians	128	\$38,188 yr.
Medical and Clinical Laboratory Technicians	119	\$35,929 yr.
Chemists 9	3	\$70,063 yr.
Biochemists and Biophysicists	30	\$58,148 yr.
Microbiologists 2	2	\$56,798 yr.
Biomedical Engineers	21	\$76,890 yr.

For more information about this Program of Study, contact the Instructor or your School Counselor or Career Center Specialist