SCIENCE - Biotechnology Specialization
Associate of Science Degree **MA**

Purpose: The curriculum is designed for persons who plan to transfer to a four-year college or university to complete a baccalaureate degree program in biology, chemistry, biochemistry or biotechnology leading to a career as a laboratory process technician in biotechnology, pharmaceutical and other high-tech production/research facilities.

Recommended Preparation: Satisfactory completion of the following high school units as a minimum: 4 units of English, 4 units of college preparatory mathematics, 2-3 units of laboratory sciences, 3 units of social sciences.

Two Years		**Credits**
1st Semester		
BIO	110 General Botany or	
	BIO 120 Zoology	4
BIO	298 Seminar & Project - Biotechnology I	1
CHM	111 College Chemistry I	4
ENG	111 College Composition I	3
[1]MTH	181 Finite Mathematics I	3
SDV	106 Preparation for Employment	1
	Total	**16**
2nd Semester		
BIO	206 Cell Biology	4
BIO	298 Seminar & Project - Biotechnology II	1
CHM	112 College Chemistry II	4
[2]ENG	112 College Composition II	3
[1]MTH	182 Finite Mathematics II	3
[3]___	Social Science Elective	3
	Total	**18**
3rd Semester		
CHM	241 Organic Chemistry I	3
CHM	245 Organic Chemistry Lab I	2
[4]PED	116 Lifetime Fitness & Wellness	2
SPD	110 Speech Communications	3
[3]___	Social Science Elective	3
	Total	**13**
4th Semester		
BIO	205 General Microbiology	4
CHM	242 Organic Chemistry II	3
CHM	246 Organic Chemistry Lab II	2
HIS	Elective	3
[5]___	Humanities/Fine Arts Elective	3
	Total	**15**

Total credits for the A.S. degree in Science with a Specialization in Biotechnology = 62.

[1] Students may elect to take any of the following MTH 181-182, MTH 271-272, or MTH 241, 295.

[2] ENG 125 may be substituted with the advice of a counselor or faculty advisor according to requirements of transfer institutions.

[3] The social science elective may be selected from the economics, geography, history, political science, psychology, or sociology (includes anthropology) courses listed on page 54. Base selection on requirements of transfer institution.

[4] The PED requirement may be met by one of the following options: PED 116, 2 cr.; PED 116, 1 cr. plus a PED activities course, 1 cr.; or PED 116, 1 cr. plus RPK activities course. PED 116 is offered as both a 1-credit and a 2-credit course.

[5] The humanities/fine arts elective may be selected from list on page 54. Elective should be selected with advice of a counselor or faculty advisor to meet requirements of transfer institution.