Rowan College of South Jersey

BIOLOGY

Associate in Science (A.S.) – Transfer

Program Requirements

For those students interested in a biology-oriented career (pre-med, environmental science, forestry, etc.) this program provides a concentrated study of the first two years towards a baccalaureate degree. Although science and math are stressed, humanities and social science electives aid in providing a broad educational experience. Students are advised to check the requirements of their anticipated vocation or bachelor's degree program at the college to which they intent to transfer.

Students who have completed the program will be able to:

- Demonstrate application of theoretical concepts and fundamental principles in the biological sciences, including use of the scientific method.
- Conduct background research on life science topics to make educated conclusions and demonstrate ability to access and assess information including understanding of basic concepts, processes and keywords necessary to explore topics.
- Communicate with others in written and oral form and present life science information effectively.
- Operate basic laboratory equipment successfully including microscopes, measurement devices, and computer technologies.
- Apply critical thinking and problem solving skills to solving biology-based problems including utilizing statistics and graphical analyses.

Required Core and Elective Courses

			Credits
Communications			
ENG 101	English Composition I		3
ENG 102	English Composition II		3
COM 105	Technical and Scientific Writing		3
Humanities			
___ ___	Humanities Elective		3
Social Science			
___ ___	Social Science Elective		3
___ ___	Social Science or Humanities Elective		3
Mathematics			
MAT 108	Calculus I		4
Computer Science			
CSC 101	Introduction to Programming	**or**	
CSC 111	Intermediate Programming		4
Science			
BIO 101	General Biology I		4
BIO 102	General Biology II		4
BIO 209	Ecology		4
BIO 215	Microbiology	**or**	
BIO 221	Cell and Molecular Biology		4
CHM 111	General Chemistry I		4
CHM 112	General Chemistry II		4
CHM 201	Organic Chemistry I		4
CHM 202	Organic Chemistry II		4
Electives			
____ ____	Free Elective		1-4
HPE ____	Health and Physical Education Elective		1-3

TOTAL MINIMUM CREDITS: 60

BIOLOGY
Associate in Science (A.S.) – Transfer
Program Requirements

Four Semester Sequence of Courses

FIRST YEAR - Fall Semester

			Credits
____	ENG 101	English Composition I	3
____	BIO 101	General Biology I	4
____	CHM 111	General Chemistry I	4
____	MAT 108	Calculus I	4
			15

Spring Semester

____	ENG 102	English Composition II	3
____	BIO 102	General Biology II	4
____	CHM 112	General Chemistry II	4
____	COM 105	Technical and Scientific Writing	3
			14

SECOND YEAR - Fall Semester

____	CHM 201	Organic Chemistry I		4
____	BIO 209	Ecology		4
____	____ ____	Social Science Elective		3
____	____ ____	Free Elective		1-4
____	CSC 101	Introduction to Programming	**or**	
____	CSC 111	Intermediate Programming		4
				16-19

Spring Semester

____	CHM 202	Organic Chemistry II		4
____	BIO 215	Microbiology	**or**	
____	BIO 221	Cell and Molecular Biology		4
____	____ ____	Social Science or Humanities Elective		3
____	HPE ____	Health and Physical Education Elective		1-3
____	____ ____	Humanities Elective		3
				15-17

TOTAL MINIMUM CREDITS: 60