

Rowan College of South Jersey
CHEMISTRY
Associate in Science (A.S.) – Transfer
Program Requirements

This curriculum provides two years of concentrated study in science for those who plan to pursue a baccalaureate degree in chemistry. Humanities and social science electives are incorporated to provide a broad educational experience. Students are advised to plan their course selection based on the requirements of the vocation or curriculum of the four-year college of their choice. Students who have completed the program will be able to:

- Students will demonstrate competency in fundamental inorganic and organic chemistry topics by applying critical thinking and problem solving skills to solving chemistry-based problems including utilizing graphical analyses.
- Develop and demonstrate the basic skill set of techniques and procedures, including recording and reporting of scientific information acquired in the laboratory, necessary to perform scientifically sound laboratory work in the chemical sciences.

Required Core and Elective Courses

<u>Communications</u>		<u>Credits</u>
ENG 101	English Composition I	3
ENG 102	English Composition II	3
COM 105	Technical and Scientific Writing	3
 <u>Humanities</u>		
___ ___	Humanities Elective	3
 <u>Social Science</u>		
___ ___	Social Science Elective	3
___ ___	Social Science or Humanities Elective ³	3
 <u>Mathematics</u>		
MAT 108	Calculus I	4
MAT 122	Calculus II	4
 <u>Program Elective</u>		
___ ___	Program Elective ²	3-4
 <u>Science</u>		
BIO 101	General Biology I	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
PHY 201	Physics with Calculus	4
PHY 202	Physics with Calculus II	4
 <u>General Education Elective¹</u>		 3-4

TOTAL MINIMUM CREDITS: 60

Program Notes:

1. It is highly recommended that students planning to transfer as pre-med or to any health science related program take BIO 102 (General Biology II) as their General Education elective in First Year Spring Semester.
2. Program elective courses include: MAT 221 (Calculus III), MAT 202 (Linear Algebra), CSC 101 (Introduction to Programming), or CSC 111 (Intermediate Programming).
3. Students planning to transfer to Rowan University should:
 - a. Take a Social Science elective as social science or humanities elective.
 - b. Take CHEM 09250, Quantitative Analysis on Rowan University's campus in Spring semester of their second year if planning to major in Chemistry.
 - c. Take BMS 01205, Introduction to Biomedical Science I and BMS 01210, Introduction to Biomedical Sciences II during their Fall and Spring semesters of their second year respectively, if planning to major in Translational Biomedical Sciences.

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Four Semester Sequence of Courses

<u>FIRST YEAR - Fall Semester</u>			<u>Credits</u>
_____	ENG 101	English Composition I	3
_____	BIO 101	General Biology I	4
_____	CHM 111	General Chemistry I	4
_____	MAT 108	Calculus I	4
			15
<u>Spring Semester</u>			
_____	ENG 102	English Composition II	3
_____	_____	General Education Elective ¹	3-4
_____	CHM 112	General Chemistry II	4
_____	MAT 122	Calculus II	4
_____	COM 105	Technical and Scientific Writing	3
			17-18
<u>SECOND YEAR - Fall Semester</u>			
_____	CHM 201	Organic Chemistry I	4
_____	PHY 201	Physics with Calculus I	4
_____	_____	Humanities Elective	3
_____	_____	Program Elective ²	3-4
			14-15
<u>Spring Semester</u>			
_____	CHM 202	Organic Chemistry II	4
_____	PHY 202	Physics with Calculus II	4
_____	_____	Social Science or Humanities Elective ³	3
_____	_____	Social Science Elective	3
			14
<u>TOTAL MINIMUM CREDITS:</u>			60

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