



## High School Bridge Program

# Associates of Science General Science to Bachelor of Science Chemistry

### HCCC General Science - AS

COURSE NUMBER	COURSE NAME	CREDITS
<b>Freshman Year</b>		
CSS100	College Student Success	1
ENG101	College Composition I	3
MAT100	Intermediate Algebra	3
CSC100	Intro to Computers & Computing	3
ENG112	Speech	3
BIO100	General Biology	3
<b>Sophomore Year</b>		
ENG102	College Composition II	3
CHP111	College Chemistry I	4
1 Social Science Elective		3
1 Social Science Elective		3
<b>Junior Year</b>		
MAT110	Precalculus	4
CHP211	College Chemistry II	4
PHY111	Engineering Physics I	4
BIO111	Anatomy and Physiology I	4
<b>Senior Year</b>		
PHY211	Engineering Physics II	4
MAT111	Calculus I	4
BIO211	Anatomy and Physiology II	4
1 Humanities Elective		3

### NJCU Chemistry - BS

COURSE NUMBER	COURSE NAME	CREDITS
INTD101	Orientation to College	1 HCCC (online)
ENGL101	English Composition I	3 INHS
MATH112	Intermediate Algebra	3 INHS
CS107	Computer & Information Systems	3 HCCC
ENGL147	Effective Speech	3 INHS
BIOL100	General Biology	3 INHS
<b>Sophomore Year</b>		
ENGL102	English Composition II	3 HCCC
CHEM 105+1105	General Chemistry I Lecture and Recitation/Lab	4 INHS
TBD		3 HCCC/NJCU
TBD		3 HCCC/NJCU
<b>Junior Year</b>		
MATH175	Enhanced Precalculus	4 INHS
CHEM 106+1106	General Chemistry II Lecture and Recitation/Lab	4 INHS
PHYS140+1140	Principles of Physics I + Lab	4 INHS
BIOL236	Anatomy and Physiology I	4 INHS
<b>Senior Year</b>		
PHYS141+1141	Principles of Physics II + Lab	4 HCCC
MATH192	Calculus and Analytical Geometry I	4 HCCC
BIOL237	Anatomy and Physiology II	4 HCCC
TBD		3 HCCC

# Remaining NJCU Courses

COURSE NUMBER	COURSE NAME	CREDITS
<b>Required Courses</b>		<b>34</b>
CHEM 105	General Chemistry I Lecture	0 *
CHEM 1105	General Chemistry I Recitation/Laboratory	0 *
CHEM 106	General Chemistry II Lecture	0 *
CHEM 1106	General Chemistry II Recitation/Laboratory	0 *
CHEM 207	Organic Chemistry I	3
CHEM 2207	Organic Chemistry I Laboratory	1
CHEM 208	Organic Chemistry II	3
CHEM 2208	Organic Chemistry II Laboratory	1
CHEM 205	Analytical Chemistry Lec	3 Fall only
CHEM 2205	Analytical Chemistry Laboratory	2 Fall only
CHEM 316	Instrumental Analysis, Lecture	3 Spring only
CHEM 3316	Instrumental Methods of Analysis, Laboratory	2 Spring only
CHEM 305	Physical Chemistry I	3 Fall only
CHEM 306	Physical Chemistry II, Lecture	3 Spring only
CHEM 3306	Physical Chemistry II Recitation/Laboratory	2 Spring only
CHEM 307	Biochemistry I	4
CHEM 405	Seminar	1 Fall only
CHEM 416	Inorganic Chemistry	3 Spring only
<b>Select a minium of two additional Chemistry elective courses from below:</b>		<b>7</b>
CHEM 220	Environmental Chemistry	4
CHEM 308	Biochemistry II	4 Spring only
CHEM 430	Spectroscopic Identification of Organic Compounds	3
CHEM 401	Medicinal Chemistry	3
CHEM 420	Food Chemistry	4
CHEM 412	Inorganic Chemistry Laboratory	2
CHEM 414	Advanced Organic Chemistry	3
CHEM 425	Nanomaterial and Microelectronic Fabrication	3
CHEM 435	Materials Chemistry	3
<b>Required Math, Physics, and Computer Science Courses</b>		<b>7</b>
PHYS 140	Principles of Physics I	0 *
PHYS 1140	Principles of Physics I Labratory and Recitation	0 *
PHYS 141	Principles of Physics II	0 *
PHYS 1141	Principles of Physics II Labratory and Recitation	0 *
MATH192	Calculus and Analytical Geometry I	0 *
MATH193	Calculus and Analytical Geometry II	4
INTD180	Computer Tools for Science	3
<b>Free Elective Courses</b>		<b>12</b>

## Notes:

\* This will transfer in