



Associates of Science Chemistry to Bachelor of Science Biochemistry

HCCC AS - Chemistry

COURSE NUMBER	COURSE NAME	CREDITS
CSS100	College Student Success	1
ENG101	College Composition I	3
ENG102	College Composition II	3
BIO100	General Biology	3
MAT111	Calculus I	4
MAT112	Calculus II	4
CSC100	Intro to Comp and Computing	3
ENG112	Speech	3
1 Social Science Elective		3
1 Social Science or Humanities Elective		3
1 Humanities Elective		3
CHP111	College Chemistry I	4
CHP211	College Chemistry II	4
CHP225	Organic Chemistry I	4
CHP230	Organic Chemistry II	4
PHY111	Engineering Physics I	4
PHYS211	Engineering Physics II	4
1 Approved Science Elective		
MAT114 *	Intro to Probabilities & Statistics	3
CSC115	Programming in C++ for CS	3
CSC118	Python Programming	3
CSC117	Java Programming	3

Notes:

* Recommended

NJCU BS - Biochemistry

COURSE NUMBER	COURSE NAME	CREDITS
INTD101	Orientation to College	1
ENGL101	English Composition I	3
ENGL102	English Composition II	3
BIOL100	General Biology	4
MATH192	Calculus and Analytic Geometry I	4
MATH193	Calculus and Analytic Geometry II	4
CS107	Computer and Information Systems	3
ENGL147	Effective Speaking	3
TBD		3
TBD		3
TBD		3
CHEM 105 + 1105	General Chemistry I Lecture and Recitation/Lab	5
CHEM 106 + 1106	General Chemistry II Lecture and Recitation/Lab	5
CHEM 207 + 2207	Organic Chemistry I Lecture & Lab	4
CHEM 208 + 2208	Organic Chemistry II Lecture & Lab	4
PHYS140 + 1140	Principles of Physics I Lecture, Lab and Recitation	4
PHYS141 + 1141	Principles of Physics II Lecture, Lab and Recitation	4
MATH140	Statistics I	3 *
CS102	Computer Science II	3
CS252	Programming for All in Python and Computer Science Principles	3
CS101	Computer Science I	3

Total Credits 60

General Education Waived

Remaining NJCU Courses

COURSE NUMBER	COURSE NAME	CREDITS
Math and Physics		0-3
MATH140 *	Statistics I	0-3 *
Chemistry and Biology		37
CHEM 205 **	Analytical Chemistry Lec	3 **
CHEM 2205 **	Analytical Chemistry Laboratory	2 **
CHEM 305 **	Physical Chemistry I	3 **
CHEM 307	Biochemistry I	4
CHEM 308 ***	Biochemistry II	4 ***
CHEM 405	Seminar	1
BIOL 130	Principles Biology I	4
BIOL 131	Principles Biology II	4
BIOL 230	Cell Biology	4
BIOL 303	Microbiology	4
BIOL 304	Genetics	4
Required elective courses: select from the following courses		7
CHEM 220	Environmental Chemistry	4
CHEM 316	Instrumental Analysis, Lecture	3
CHEM 3316	Instrumental Methods of Analysis, Laboratory	2
CHEM 401	Medicinal Chemistry	3
CHEM 420	Food Chemistry	4
BIOL 252	Evolution: A Biological and Geological Approach	3
BIOL 404	Immunology	3
BIOL 406	Molecular Genetics	4
CHEM 492	Chemical Research	2-3
or CHEM 493	Chemical Research	
or BIOL 350	Biology Research	
or BIOL 450	Biology Research	
Free Elective Courses		13-16

Notes:

* This course may transfer in if taken at HCCC

** Fall Only

*** Spring Only