



High School Bridge Program

Associates of Science General Science to Bachelor of Science Biology

HCCC General Science - AS

COURSE NUMBER	COURSE NAME	CREDITS
Freshman Year		
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
Sophomore Year		
ENG102	College Composition II	3
CHP111	College Chemistry I	4
1 Social Science Elective		3
1 Social Science Elective		3
Junior Year		
MAT110	Precalculus	4
CHP211	College Chemistry II	4
PHY111	Engineering Physics I	4
BIO111	Anatomy and Physiology I	4
Senior Year		
PHY211	Engineering Physics II	4
MAT111	Calculus I	4
BIO211	Anatomy and Physiology II	4
1 Humanities Elective		3

NJCU Biology - 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
Sophomore Year		
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
Junior Year		
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
Senior Year		
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
Required Courses		
BIOL 130	Principles Biology I	4
BIOL 131	Principles Biology II	4
BIOL 230	Cell Biology	4
BIOL 304	Genetics	4
Select one of the two following Ecology courses:		
BIOL 402	Ecology	4
or		
BIOL 332	Field Ecology	4
BIOL 440	Biology Seminar	1
Elective Biology Courses (15 credits from below)		
BIOL 231	Comparative Anatomy	4
BIOL232	Invertebrate Zoology	4
BIOL233	Principles of Botany	4
BIOL236	Anatomy and Physiology I	0 *
BIOL237	Anatomy and Physiology II	0 *
BIOL240	Scientific Reasoning	3
BIOL250	Biology Research	1
BIOL252	Evolution: A Biol and Geological Approach	3
BIOL301	General Physiology	4
BIOL302	Plant Physiology	4
BIOL303	Microbiology	4
BIOL308	Plant Taxonomy	4
BIOL311	Pathophysiology	3
BIOL312	Endocrinology	3
BIOL335	Essential Concepts in Neuroscience	3
BIOL350	Biology Research	2
BIOL354	Professional Assistant	2
BIOL401	Developmental Biology	4
BIOL 403	Radiation Biology	4
BIOL404	Immunology	3
BIOL406	Molecular Genetics	4
BIOL 407	Advanced Cell Biology	4
BIOL409	Biological Chemistry	3
BIOL410	Electron Microscopy	4
BIOL418	Scanning Electron Microscopy	4
BIOL419	Transmission Electron Microscopy	4
BIOL450	Biology Research	3
BIOL454	Professional Assistant	3
BIOL492	Independent Study in Biology	3
BIOL1492	Independent Study in Biology	2
BIOL2492	Independent Study in Biology	1
Free Elective Courses		21

COURSE NUMBER	COURSE NAME	CREDITS
Required Chemistry Courses		
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
or CHEM 205	Analytical Chemistry Lec	
or CHEM 307	Biochemistry I	
or BIOL 401	Developmental Biology	
or BIOL 403	Radiation Biology	
or BIOL 404	Immunology	
or BIOL 406	Molecular Genetics	
or BIOL 407	Advanced Cell Biology	
or BIOL 410	Electron Microscopy	
or BIOL 418	Scanning Electron Microscopy	
or BIOL 450	Biology Research	
And CHEM 2208	Organic Chemistry Laboratory	1
Required Math, Physics, and Computer Science Courses		
PHYS 140	Principles of Physics I	0 *
PHYS 1140	Principles of Physics I Lab and Recitation	0 *
PHYS 141	Principles of Physics II	0 *
PHYS 1141	Principles of Physics II Lab and Recitation	0 *
MATH192	Calculus and Analytical Geometry I	0 *
INTD180	Computer Tools for Science and Math	3
or		
MATH 140	Statistics I	3
or		
PSYC 230	Statistics for Social Sciences	3

Notes:

* This will transfer in

Students must successfully complete a minimum of 5 Biology major courses at NJCU.

Credits earned for Biology courses more than 10 years ago may not satisfy department requirements.

Students may apply up to 6 credits of Biology Research or Coop Education toward the BS in Biology requirements.