



**Associates of Science
Medical Science Pre-Nursing Option
to
Bachelor of Science
Biology**

**HCCC
Medical Science Pre-Nursing Option - AS**

**NJCU
Biology - BS**

COURSE NUMBER	COURSE NAME	CREDITS		COURSE NUMBER	COURSE NAME	CREDITS
Complete the following Courses for Gen Ed Req's:						
CSS100	College Student Success	1	=	INTD101	Orientation to College	1
ENG101	College Composition I	3	=	ENGL101	English Composition I	3
ENG102	College Composition II	3	=	ENGL102	English Composition II	3
ENG112	Speech	3	=	ENGL147	Effective Speaking	3
PSY101	Introduction to Psychology	3	=	PSYC110	Introduction to Psychology	3
Complete 1 Math Course Below:						
MAT100	College Algebra	3	=	MATH112	Intermediate Algebra	3
MAT114	Intro to Probability and Statistics	3	=	MATH140 *	Statistics I	3 *
CSC100	Intro to Comp and Computing	3	=	CS107	Computers & Information Systems	3
BIO111	Anatomy and Physiology I	4	=	BIOL236	Anatomy and Physiology I	4
PSY260	Lifespan Development	3	=	PSYC152	Development Adol. to Adulthood	3
HUM101	Cultures and Values	3	=	WGST110	Diversity and Difference: Identities, Communities, and Cultures	3
1 Humanities or Social Science Elective	TBD	3	=	TBD		3
Complete the following Courses for Major Req's:						
BIO211	Anatomy and Physiology II	4	=	BIOL237	Anatomy and Physiology II	4
BIO115	Principles of Biology I	4	=	BIOL130	Principles of Biology I	4
BIO116	Principles of Biology II	4	=	BIOL131	Principles of Biology II	4
HLT210	Medical Law and Ethics	3	=	HLTH2XX	Health Sciences Elective Credits	3
BIO250	Microbiology	4	=	BIOL303	Microbiology	4
Complete 3 of the Following Courses:						
MDA106	Medical Terminology	3	=	HLTH1XX	Health Sciences Elective Credits	3
MDA224	Pharmacology	3	=	Not Transferable		
HLT112	Pathophysiology	3	=	BIOL311 *	Pathophysiology	3 *
HLT110	Culture, Diversity, and Health	3	=	HLTH1XX	Health Sciences Elective Credits	3
CHP100	Introduction to Chemistry	3	=	CHEM100	Preparation for General Chemistry	3

Notes:

* Recommended

Total Credits 60

General Education Waived

Remaining NJCU Courses

COURSE NUMBER	COURSE NAME	CREDITS	COURSE NUMBER	COURSE NAME	CREDITS
Required Core Courses:			Electives Biology Courses:		
39-42			0-3		
BIOL304	Genetics	4	BIOL 231	Comparative Anatomy	4
BIOL402 OR 332	Ecology or Field Ecology	4	BIOL232	Invertebrate Zoology	4
BIOL440	Biology Seminar	1	BIOL233	Principles of Botany	4
CHEM105	General Chemistry I Lecture	3	BIOL236 *	Anatomy and Physiology I	0 *
CHEM1105	General Chemistry I Recitation/Lab	2	BIOL237 *	Anatomy and Physiology II	0 *
CHEM106	General Chemistry II Lecture	3	BIOL240	Scientific Reasoning	3
CHEM1106	General Chemistry II Recitation/Lab	2	BIOL250	Biology Research	1
CHEM207	Organic Chemistry I	3	BIOL252	Evolution: A Biol and Geolog Approach	3
CHEM2207	Organic Chemistry I Lab	1	BIOL301	General Physiology	4
CHEM208	Organic Chemistry II	3	BIOL302	Plant Physiology	4
CHEM2208	Organic Chemistry II Lab	1	BIOL303 *	Microbiology	0 *
MATH192	Calculus and Analytical Geometry I	4	BIOL308	Plant Taxonomy	4
Complete one of the following Courses with Lab:			BIOL311 **	Pathophysiology	0-3 **
PHYS130	Physics I	3	BIOL312	Endocrinology	3
PHYS1130	Physics I Recitation and Labratory	1	BIOL335	Essential Concepts in Neuroscience	3
	OR		BIOL350	Biology Research	2
PHYS131	Physics II	3	BIOL354	Professional Assistant	2
PHYS1131	Physics II Labratory and Recitation	1	BIOL401	Developmental Biology	4
	OR		BIOL 403	Radiation Biology	4
PHYS140	Principles of Physics I	3	BIOL404	Immunology	3
PHYS1140	Principles of Physics I Lab and Recitation	1	BIOL406	Molecular Genetics	4
	OR		BIOL 407	Advanced Cell Biology	4
PHYS 141	Physics II	3	BIOL409	Biological Chemistry	3
PHYS1141	Physics II Recitation and Labratory	1	BIOL410	Electron Microscopy	4
Complete one of the following:			BIOL418	Scanning Electron Microscopy	4
0-3 *			BIOL419	Transmission Electron Microscopy	4
INTD180	Computer Tools for Science and Math		BIOL450	Biology Research	3
MATH 140	Statistics I		BIOL454	Professional Assistant	3
PSYC 230	Statistics for Social Sciences		BIOL492	Independent Study in Biology	3
			BIOL1492	Independent Study in Biology	2
			BIOL2492	Independent Study in Biology	1
Free Elective Courses			12-21		
Notes:					
* This course <u>will</u> be a part of the transfer from HCCC					
** This course <u>may</u> be a part of the transfer from HCCC					
<p>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 BA in Biology requirements.</p>					