



HUDSON COUNTY COMMUNITY COLLEGE

Associate of Science
Medical Science Pre-Professional

NEW JERSEY CITY UNIVERSITY

Bachelor of Science
Biology

AY 2025-2026

Course Number	Course Name	Credits		Course Number	Course Name	Credits	Notes
Complete The Following Courses for Gen Ed Requirements:							
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	
MAT110	Precalculus	4	=	MATH175	Precalculus	4	
CSC100	Intro to Computers and Computing	3	=	CS107	Computers & Information Systems	3	
BIO111	Anatomy and Physiology I	4	=	BIOL236	Anatomy and Physiology I	4	
PSY101	Introduction to Psychology	3	=	PSYC110	Introduction to Psychology	3	
1 Humanities Elect	TBD	3	=	TBD		3	
1 Diversity Elective	TBD	3	=	TBD		3	
1 Humanities or So	TBD	3	=	TBD		3	
Complete The Following Courses for Major Requirements:							
BIO211	Anatomy and Physiology II	4	=	BIOL237	Anatomy and Physiology II	4	
BIO115	Principles of Biology I	4	=	BIOL130	Principles of Biology I	4	
HLT210	Medical Law and Ethics	3	=	HLTH2XX	Health Sciences Elective Credits	3	
BIO116	Principles of Biology II	4	=	BIOL131	Principles of Biology II	4	
Complete 1 of the Following Courses:							
BIO250	Microbiology	4	=	BIOL303	Microbiology	4	
PHY113	Physics I	4	=	PHYS140+1140	Principles of Physics I + Lab	4	
Complete 1 Group of Courses for Electives:							
Pre-Medicine/Pharmacy:							
CHP111	College Chemistry I	4	=	CHEM 105+1105	General Chemistry I Lecture and Recitation/Labratory	4	NJCU Recommends
CHP211	College Chemistry II	4	=	CHEM 106+1106	General Chemistry II Lecture and Recitation/Labratory	4	NJCU Recommends
Pre-Physical Therapy/Pre-Athletic Trainer							
EXS101	Intro to Exercise Science	2	=	FES207	Introduction to Exercise Science	2	
HLT111	Introduction to Healthcare	2	=	HLTH1XX	Health Sciences Elective Credits	2	
EXS203	Exercise Measurement and Prescription	4	=	FES325	Exercise Testing and Prescription	4	
Pre-Health Sciences							
MDA106	Medical Terminology	3	=	HLTH1XX	Health Sciences Elective Credits	3	
HLT112	Pathophysiology	3	=	BIOL311	Pathophysiology	3	
HLT111	Introduction to Healthcare	2	=	HLTH1XX	Health Sciences Elective Credits	2	

Total Credits Transferred

60

General Education Waiver Awarded

Remaining NJCU Courses

Course Number	Course Name	Credits	Notes
Required Biology Courses:		13	
BIOL 130	Principles Biology I	0	Satisfied with Transfer
BIOL 131	Principles Biology II	0	Satisfied with Transfer
BIOL 230	Cell Biology	4	
BIOL 304	Genetics	4	
BIOL 402	Ecology	4	
or BIOL 332	Field Ecology		
BIOL 440	Biology Seminar	1	
Electives Biology Courses: (Select one from the follow at a minimum)		3	
BIOL 217	Life In The Sea	3	
BIOL 231	Comparative Anatomy	4	
BIOL 232	Invertebrate Zoology	4	
BIOL 233	Principles of Botany	4	
BIOL 236	Anatomy & Physiology I	0	Satisfied with Transfer
BIOL 237	Anatomy & Physiology II	0	Satisfied with Transfer
BIOL 252	Evolution: A Biological and Geological Approach	3	
BIOL 301	General Physiology	4	
BIOL 302	Plant Physiology	4	
BIOL 303	Microbiology	0	Satisfied with Transfer
BIOL 305	Histology	4	
BIOL 308	Plant Taxonomy	4	
BIOL 311	Pathophysiology	3	
BIOL 312	Endocrinology	3	
BIOL 332	Field Ecology	4	
BIOL 335	Essential Concepts in Neuroscience	3	
BIOL 350	Biology Research	2	
BIOL 401	Developmental Biology	4	
BIOL 403	Radiation Biology	4	
BIOL 404	Immunology	3	
BIOL 406	Molecular Genetics	4	
BIOL 407	Advanced Cell Biology	4	
BIOL 418	Scanning Electron Microscopy	4	

BIOL 450	Biology Research	3	
Required Chemistry Courses		7-8	
CHEM 105	General Chemistry I Lecture	0	Satisfied with Transfer
CHEM 1105	General Chemistry I Recitation/Laboratory	0	Satisfied with Transfer
CHEM 106	General Chemistry II Lecture	0	Satisfied with Transfer
CHEM 1106	General Chemistry II Recitation/Laboratory	0	Satisfied with Transfer
CHEM 207	Organic Chemistry I	3	
CHEM 2207	Organic Chemistry I Laboratory	1	
CHEM 208	Organic Chemistry II + Lab	3-4	Add CHEM2208 if taking CHEM208 (1 Credit)
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		
Required Physics Courses		4	
PHYS 140	Principles of Physics I - Lecture	0	Satisfied with Transfer
PHYS 1140	Principles of Physics I - Laboratory and recitation	0	Satisfied with Transfer
PHYS 141	Principles of Physics II - Lecture	3	
PHYS 1141	Principles of Physics II - Laboratory and Recitation	1	
Required Math and Computer Science Courses		7	
MATH 192	Calculus and Analytic Geometry I	4	
INTD 180	Computer Tools For Science and Mathematics	3	
or MATH 140	Statistics I		NJCU Recommends MATH140
or PSYC 230	Statistics for Social Sciences		
Free Elective Courses		25-26	
Minimum Total Credits To Graduate		120	