RUTGERS
School of Nursing

Second Degree BS in Nursing Pre-requisite Course Descriptions

The following Rutgers University course descriptions are meant to serve as a guideline for prospective applicants who wish to take pre-requisite courses at another accredited college or university.

Required Pre-requisites for the Second Degree BS in Nursing Program ***(Prerequisites and other admission requirements are subject to change)***

Anatomy & Physiology I (4 cr. w/lab)*
Anatomy & Physiology II* (4 cr. w/lab)
Microbiology I* (4 cr. w/lab)
Organic Biochemistry* OR General Chemistry II* (3 cr.)

Nutrition^ (3 cr.)
Lifespan: A Holistic Approach^ OR Developmental Psychology^ (3 cr.)
Statistics (3 cr.)
General Psychology (3 cr.)
Introduction to Sociology (3 cr.)

*Courses designed for "science or nursing majors" are highly preferred and must be taken within 10 years of acceptance into the program.
^ A grade of "C+" or higher is required for Nutrition and Lifespan/Developmental Psychology.
All other prerequisites must be completed with a grade of "C" (2.0) or higher.
All prerequisite courses must be undergraduate 100 level or higher.

Course Name/Credits (New Brunswick)	Course Number	Description	Course Name/Credits (Newark)	Course Number	Description
Anatomy & Physiology: Health Sciences I (4 credits)	01:119:127	The structure and function of human organ systems. Some microanatomy and biochemical aspects of physiology included. For nursing, pharmacy, and other professional students. This is a two-semester sequence for nursing, medical technology, physical therapy and other health science students. It is intended as an introduction to the structure and function of human organ systems. A rudimentary treatment of microanatomy and physiology is also included. 119:127 topics include: Chemistry of Life, Cell Biology, Structural Organization, Integumentary System, Bones, Muscles, Nervous System	Anatomy and Physiology I (4 credits)	21:120:141	Examination of the human body in which structure and function are integrated; the major organ systems (circulation, respiration, digestion); microscopic anatomy and biochemical aspects of physiology
Anatomy & Physiology: Health Sciences II (4 credits)	01:119:128	The structure and function of human organ systems. Some microanatomy and biochemical aspects of physiology included. For nursing, pharmacy, and other professional students. This is a two-semester sequence for nursing, medical technology, physical therapy and other health science students. It is intended as an introduction to the structure and function of human organ systems. A rudimentary treatment of microanatomy and physiology is also included. 119:128 topics include: Vision and Audition, Olfaction and Gustation, Somatic Sensation, Endocrinology, Hematopoiesis, Cardiac Function, Blood Vessels, Lymphatic System, Immunity, Respiration, Renal System, Digestion, Reproduction, Development	Anatomy and Physiology II (4 credits)	21:120:142	Examination of the human body in which structure and function are integrated; the major organ systems (circulation, respiration, digestion); microscopic anatomy and biochemical aspects of physiology.

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Course Name/Credits (New Brunswick)	Course Number	Description	Course Name/Credits (Newark)	Course Number	Description
Microbiology for the Health Sciences (3 credits) Microbiology for the Health Sciences Lab (1 credit)	01:119:131 01:119:132	Introduction to microbes with emphasis on the nature and behavior of microorganisms, the interrelationships between microbes and the human host in health and disease, and the principles of prevention and control of infectious disease. Laboratory to accompany 01:119:131.	Microbiology (4 credits)	21:120:235	Examination of the human body in which structure and function are integrated; the major organ systems (circulation, respiration, digestion); microscopic anatomy and biochemical aspects of physiology.
Chemistry of Life (3 credits) **OR** General Chemistry I &II (4 credits each)	01:160:128 01:160:161 and 01:160:162	Topics chosen from fields of organic chemistry and biochemistry including proteins, DNA, RNA, and chemical origins of life. Emphasis given to nature of chemical and biochemical discoveries and the social responsibility of scientists. For science majors. Introduction to chemical principles and their application. Stoichiometry, states of matter, atomic and molecular structure, solutions, thermodynamics, equilibrium, oxidation-reduction, kinetics, nonmetals, metals and coordination compounds, and nuclear chemistry. Lecture 3 hours, recitation 1 hour. 161 prerequisite: 01:640:111 or 115, or appropriate performance on the placement test for mathematics. 162 prerequisite: 01:640:111 or 115, or equivalent. 162 pre- or corequisite: 01:160:171. Credit not given for both these courses and 01:160:159-160 or 163-164.	Organic Biochemistry (3 credits) **OR** General Chemistry I & II (4 credits each)	21:160:108 21:160:115 and 21:160:116	Basic organic chemistry with emphasis on the molecules and reactions encountered in biochemistry; proteins, carbohydrates, lipids, enzymes; some discussion of metabolic cycles. General chemistry laboratory for science majors. Emphasis on some of the principles of quantitative and qualitative chemical analysis. See http://genchem.rutgers.edu for more information. It is recommended that the labs be taken concurrently with the lecture course (21:160:115-116). Lab. 4 hrs. Pre- or corequisites: 21:160:115-116.
Nutrition and Health (3 credits)	11:709:255	An introductory nutrition course. Nutrients and their functions in the human body throughout the life cycle.	Nutrition (3 credits)	25:705:255	Study of essential nutrients and their functions. Application of nutrition principles to food selection for individuals and families, for modified diets, and for public health problems. Recommended: Knowledge of chemistry.

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Course Name/Credits (New Brunswick)	Course Number	Description	Course Name/Credits (Newark)	Course Number	Description
Principles of Developmental Psychology (3 credits)	01:830:271	Survey of life-span human development covering prenatal, infant, child, adolescent, and adult periods. Formerly 01:830:330. Prerequisite: 01:830:101.	Lifespan: A Holistic Approach (3 credits)	25:705:229	Provides a unified approach to the study of humankind. Patterns of growth and development of individuals, starting with conception, are explored. The aging process as a continuous biopsychosocial phenomenon throughout the life span is examined.
Statistics I (3 credits)	01:960:211	Principles and methods of statistics, including probability distributions, sampling, estimation, hypothesis testing, regression and correlation analysis, chi-square analysis, analysis of variance, tests of significance. Application of statistical techniques to the analysis of data, tests of significance, correlation and regression analysis, confidence intervals, analysis of variance and some design of experiments, analysis of cross-classified data, chi-square tests.	Statistics I (3 credits)	21:640:211	Principles, methods, and application of statistical methodology; includes frequency distributions, measures of central tendency and dispersion, simple probability, sampling, regression and correlation analysis, curve fitting, and tests of significance. Applications to natural and social sciences. Prerequisite: Placement by examination or successful completion, with a grade of C or better, of one of the following courses: 21:640:106, 107, 108, 109, or any other higher level mathematics course.
General Psychology (3 credits)	01:830:101	Survey of main areas of contemporary psychology.	Principles of Psychology II (3 credits)	21:830:102	Scientific study of human behavior, including development, personality, social influences, abnormal behavior, and therapy. Note: 21:830:101 and 102 may be taken in either order.
Introduction to Sociology (3 credits)	01:920:101	Introduction to the systematic study of society and social behavior.	Introduction to Sociology (3 credits)	21:920:201	How does society influence us? What about our families, the schools we attend, the economy at large, and the government? How too do religious traditions, the neighborhoods we live in, and our self-identities shape our thoughts and behavior? What does it mean to have a "culture," to witness the impact of social institutions on our lives, to consider oneself as part of a social group, and to identify with organizations? Introduction to Sociology explores these and other issues relating to society and the self.