

## 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.*

Course Name/Credits (New Brunswick)	Course Number	Description	Course Name/Credits (Newark)	Course Number	Description
Anatomy and Physiology for the 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. <b>119:127</b> 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 and Physiology 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. <b>119:128</b> 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.

Course Name/Credits (New Brunswick)	Course Number	Description	Course Name/Credits (Newark)	Course Number	Description
Microbiology for the Health Sciences (3 credits)	01:119:131	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.	Microbiology (4 credits)	21:120:235	Fundamentals of microbiology, including the distinguishing characteristics of the various groups of microbial cells; microbial control, including physical and chemical agents and chemotherapeutic agents; applications in personal and public health and in industry; mechanisms of disease production and host resistance; prevention and control of disease
Microbiology for the Health Sciences Lab (1 credit)	01:119:132	Laboratory to accompany 01:119:131.			
Chemistry of Life (3 credits)	01:160:128	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.	Organic Biochemistry (3 credits)	21:160:108	Basic organic chemistry with emphasis on the molecules and reactions encountered in biochemistry; proteins, carbohydrates, lipids, enzymes; some discussion of metabolic cycles.
Introduction to Experimentation (1 credit)	01:160:171	Laboratory illustrating basic chemical methods. Lab. fee required.	World of Chemistry Laboratory (1 credit)	21:160:110	A basic laboratory in chemistry, which may be elected to accompany 21:160:102 or 108.
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)	25:520:255	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
Principles of Developmental Psychology (3 credits)	01:830:271	Survey of life-span human development covering prenatal, infant, child, adolescent, and adult periods	Life Span: 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.
Mathematical Theory of Statistics (3 credits)	01:640:481	Fundamental principles of mathematical statistics, sampling distributions, estimation, testing hypotheses, correlation analysis, regression, analysis of variance, nonparametric methods. <i>* Descriptive/Inferential Statistics A number of courses are available that satisfy this requirement</i>	Statistics (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. <i>* Descriptive/Inferential Statistics A number of courses are available that satisfy this requirement</i>

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

Anatomy & Physiology I <sup>^</sup> *(4 cr. w/lab)	Anatomy & Physiology II <sup>^</sup> *(4 cr. w/lab)	Microbiology*(4 cr. w/lab)	Organic Biochemistry* OR General Chemistry II* (4 cr. w/lab)
Statistics (3 cr.)	Nutrition (3 cr.)	LifeSpan: Growth & Development (Developmental Psychology) (3 cr.)	

<sup>^</sup> A grade of 3.0 or higher is required in both Anatomy and Physiology courses. Students not meeting this requirement are encouraged to retake the course (s) at a regionally accredited college or university.

\*Courses designed for "science or nursing majors" are highly preferred and must be taken within 5 years of acceptance into the program. An overall grade of (3.0) or higher is required for the science courses

All of the prerequisite courses must be undergraduate 100 level or higher and must be completed with a grade of "C" (2.0) or higher. An overall grade of (3.0) or higher is required for the science courses.