

ONLINE PREREQUISITES FOR HEALTH PROFESSIONS

These 11-week courses (<https://nursing.jhu.edu/academics/programs/prerequisites/>) are designed for students needing prerequisite courses for healthcare professions. The instructor-led courses are delivered using a facilitated teaching approach to engage students and encourage interaction and participation. All students who enroll in these courses are enrolled as non-degree seeking students with the School of Nursing. Courses are competitively priced and available online in the fall, spring, and summer semesters. First-time students need to submit an online application form found at the Online Prerequisites for Health Professions (<https://nursing.jhu.edu/academics/programs/prerequisites/>) web page.

REGISTRATION

These 11-week courses (<https://nursing.jhu.edu/academics/programs/prerequisites/>) are designed with students' goals in mind. The instructor-led courses are delivered using a facilitated teaching approach to engage students and encourage interaction and participation. All students who enroll in these courses are enrolled as non-degree seeking students with the School of Nursing. Courses are competitively priced and available online in the fall, spring, and summer semesters. First-time students need to submit an online application form found at the Online Prerequisites for Health Professions (<https://nursing.jhu.edu/academics/programs/prerequisites/>) web page.

All students pursuing a health-based education can take the following instructor-led prerequisites completely **online** and get a taste of Hopkins Nursing:

- Nutrition
- Human Growth and Development Through the Lifespan
- Biostatistics
- Microbiology with virtual lab*
- Anatomy with virtual lab*
- Physiology with virtual lab*
- Chemistry with virtual lab§
- Biochemistry with virtual lab§
- Introduction to Biology with virtual lab§
- Advanced Microbiology with virtual lab§

**Virtual labs are accepted at Hopkins Nursing, but not everywhere. Check your university and state licensure requirements for prerequisite courses. For a full list of required courses visit our pre-licensure Master of Science in Nursing: Entry in Nursing (<https://nursing.jhu.edu/academics/programs/pre-licensure/masters-entry/>) program webpage.*

§Offered but not required by Johns Hopkins School of Nursing MSN Entry into Nursing program.

Occasionally new courses are developed. For complete information on all courses offered, please view the Online Prerequisites for Health Professions (<https://nursing.jhu.edu/academics/programs/prerequisites/>) web page.

Registration Questions? Contact jhuson@jhu.edu (jhuson@jhu.edu?subject=Prerequisite%20Registration%20Question) or look in our FAQs (<https://nursing.jhu.edu/academics/programs/prerequisites/>)

faqs.html). Returning students register through the Johns Hopkins University Student Information System. (<https://sis.jhu.edu/sswf/>)

Students may enroll in up to three prerequisite courses per semester but should not enroll in more than two lab courses at the same time. Anatomy is to be taken prior to Physiology and may not be taken in the same semester.

TUITION

Tuition is due at time of registration. More information on cost of tuition can be found on the Prerequisite Information page (<https://nursing.jhu.edu/academics/programs/prerequisites/>).

When students are enrolled in our prerequisite courses, they are enrolled as a non-degree seeking student and therefore are ineligible for federal student aid via the FAFSA at this time. Financial aid for prerequisite courses must come from private sources. Private sources include private student loans or third-party tuition aid such as that from an Americorps benefit or employer tuition assistance. For more information on using Americorps benefits, employer tuition assistance, or other third-party tuition aid, please contact our Financial Aid department by visiting the SEAM's Online Form (<https://support.sis.jhu.edu/case/>) to request support or call 1 877-419-5131.

Students may also fund their courses through military assistance/GI Bill. For more information on using military benefits toward tuition costs for our prerequisite courses, visit the SEAM's Online Form (<https://support.sis.jhu.edu/case/>) to request third-party support.

Note: If you are receiving some sort of financial assistance in paying tuition costs for your course, you must inform SEAM by visiting the SEAM's Online Form (<https://support.sis.jhu.edu/case/>) to request third-party support or calling 1 877-419-5131 after registering for courses so that they can make note of this in your record and ensure that you will not be dropped due to nonpayment.

NR.110.200 Nutrition-3 credits

This course will cover the science and fundamentals of human nutrition. Topics covered include nutritional requirements related to changing individual and family needs, food choices, health behaviors, food safety, prevention of chronic disease, and nutrition-related public health in the United States and globally.

NR.110.201 Human Growth and Development through the Lifespan-3 credits

This course provides an overview of major concepts, theories, and research related to human development through the lifespan from the prenatal period to the end of life. Significant factors that influence individual functioning are explored.

NR.110.202 Biostatistics-3 credits

This course provides an introduction to the basic concepts of statistical ideas and methods that aims to equip students to carry out common statistical procedures and to follow statistical reasoning in their fields of study. Principles of measurement, data summarization, and univariate and bivariate statistics are examined. Emphasis is placed on the application of fundamental concepts to real-world situations.

NR.110.203 Microbiology with Lab-4 credits

This course introduces the core concepts and basic principles of microbiology, examining microorganisms and how they interact with humans and the environment. Information regarding classification of microorganisms and characteristics of different cell types and processes critical for cell survival is presented. Topics such as the immune response to microbes, chemical and pharmaceutical control of microbes, and high yield topics in medical microbiology are discussed. The course

includes a virtual laboratory component designed to complement lecture topics. The course content provides the foundation of general microbiology necessary for students who are interested in applying to health profession programs.

NR.110.204 Anatomy with Lab-4 credits

This course will introduce components and structures of the human body at the level of gross and microscopic anatomy. Students will learn organ localization in the body and structural features comprising the different body systems. The body systems covered will include the skin, heart, lungs, and brain, among others. Upon completion, students will have an understanding of normal healthy anatomy that will prepare them for professional health programs. This course includes a virtual laboratory component designed to complement lecture topics.

NR.110.205 Physiology with Lab-4 credits

This course will introduce the functions of several human body systems. Students will learn how each part within a body system works together to seamlessly accomplish tasks. We will also discuss regulation of organ function, a critical component of physiology. After an introduction on electrolytes, the physiologic processes we will cover include cardio vasculature, lymphatics, and digestion, among others. Upon completion, students will have an understanding of normal healthy anatomical function that will prepare them for professional health programs. This course includes a virtual laboratory component designed to complement lecture topics.

NR.110.206 Chemistry with Lab-4 credits

This course introduces the core concepts of matter and energy, atomic structure, the periodic system, chemical bonding, nomenclature, stoichiometry, weight relationships, gases, solutions, chemical reactions, thermodynamics and equilibrium. The course includes a virtual laboratory component designed to enhance lecture topics. The course content provides the foundation of general chemistry necessary for students who are interested in applying to health profession programs.

NR.110.207 Biochemistry with Lab-4 credits

Biochemistry is a natural science that investigates life processes at the molecular level. This course begins with an introduction to the structure and function of the four classes of biomolecules: proteins, nucleic acids, carbohydrates, and lipids. In the second half of the course, glycolysis, the citric acid cycle, and oxidative phosphorylation will provide a context for an introduction to the fundamentals of enzyme catalysis, kinetics, bioenergetics, and metabolic regulation. The virtual lab promotes mastery of the lecture content while exploring lab techniques used in biochemical research. Upon completion, students will have a solid background in the science that provides the foundation of the biomedical sciences.

Prerequisite: NR.110.206 Chemistry with Lab or the equivalent.

NR.110.208 Introduction to Biology with Lab - 4 credits*

Biology with Lab is an introduction to the core concepts of the biological sciences. Over the course of 10 weeks, the learner will develop a foundational understanding of the molecular, cellular, and evolutionary principles that comprise biology and will have the opportunity to apply them in the lab portion of the course. Concepts covered include evolution, genetics, cellular structure and function, plant and animal structure and function, and ecology. This course is aimed at students applying to health professional programs and provides the foundations of biology required for more advanced science pre-requisite courses.

NR.110.209 Advanced Microbiology with Lab - 4 credits*

Advanced Microbiology with lab is a 10-week upper division course that introduces the fundamentals of microbiology and explores more advanced topics in molecular microbiology. Concepts covered include taxonomy, microbial cell structure and function, microbial metabolism, microbial genetics, as well as microbe-host interactions and disease. The virtual laboratory component of the course will provide an introduction to the application of immunological and molecular microbiological techniques for the isolation, identification and characterization of bacteria and viruses. This course is appropriate for students with a background in the biological sciences who require an upper division microbiology course as a prerequisite to health profession programs.

**Courses will be available starting Fall 2025*

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