



ASSOCIATE OF SCIENCE, HEALTH SCIENCE

WGU's Associate of Science, Health Science (ASHS) program prepares the learner for entry-level position in a healthcare role, provides a foundation of science-based coursework for enrollment into another professional healthcare program, obtain a baccalaureate degree in Health Science or possible admission into the Prelicensure program at WGU if specific requirements are met. Graduates acquire a range of competencies in communications, planning, health education and, problem solving. Graduates will be prepared to enter non-clinical healthcare roles with the foundational skills and knowledge required for career success. The Leavitt School of Health built the ASHS degree plan of 20 courses including 10 General Education courses totaling 65 competency units. Additional General Education CUs are met through students' technical backgrounds, military training experience, as well as requirements accounted for in the Joint Service Transcript evaluation process conducted by the Office of Admissions & Transfer.

PROGRAM LEARNING OUTCOMES:

1. The graduate will be able to apply a variety of communication skills in planning and problem-solving
2. The graduate will be able to perform basic foundational skills in non-clinical healthcare roles
3. The graduate will be able to apply scientific knowledge in problem-solving

1. CREDITS

- Total Credits for degree: 65 CU
- Gen Ed credits: 49 CU (15 from USNCC, 34 WGU)
- WGU Certificate (Health Science Foundations) credits: 21 CU
- Other Required Credits (16 CU):
- Transfer Credit Allowed: 49 CUs max (including the USNCC 15 CUs)
- Residency Requirement: 25% of the program must be earned at WGU: (16 CUs)
- The five Naval Studies certificate courses satisfy the WGU General Education requirements for:
 - Global Arts and Humanities (3CU)
 - Critical Thinking: Reason and Evidence (3CU)
 - Intro to Communication: Connecting with Others (3CU)
 - World History: Diverse Cultures and Global Connections (3CU)
 - Intro to Sociology (3CU)

2. WGU GENERAL EDUCATION AND OTHER REQUIREMENTS (65 CREDITS)

a. USNCC Naval Studies Courses (15 CREDITS)

USNCC COURSE	CREDITS	WGU EQUIVALENT
NAV 101 Naval Ethics and Leadership	3	D198 Global Arts and Humanities
NAV 102 Modern Naval History	3	D268 Intro to Communication: Connecting with Others
NAV 103 Naval Force Design	3	D265 Critical Thinking: Reason and Evidence
NAV 104 Civil/Military, Organization, and Politics	3	D266 World History: Diverse Cultures and Global Connections
NAV 105 Introduction to Geopolitical Environment	3	C273 Intro to Sociology

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b. WGU General Education Courses (34 CREDITS)

COURSE	CREDITS
D269 Composition: Writing with a Strategy	3
C180 Intro to Psychology	3
C165 Integrated Physical Sciences	3
D425 Introduction to Chemistry	3
C784 Applied Healthcare Statistics	4
D312 Anatomy and Physiology I with Lab	4
D313 Anatomy and Physiology II with Lab	4
C957 Applied Algebra	3
D202 Human Growth and Development	3
D311 Microbiology with Lab: Fundamental Approach	4

c. Other Required Courses for AS Degree (16 CREDITS)

COURSE	CREDITS
D389 Learning Strategies in Higher Education	4
D236 Pathophysiology	3
D575 Health Psychology	3
D583 Foundations of Public Health	3
D568 Health Equity & Social Determinants of Health	3

3. WGU PROFESSIONAL CERTIFICATE (21 CREDITS): Health Science Foundations

The 21 credits below will be tracked towards a stand-alone Professional Certificate Program. For AS degree tracking purposes, the professional certificate program should also be nestled along with the 15 credit Naval Studies requirements plus the General Education requirements noted in the sections above.

Professional Certificate Required Courses (21 CREDITS)

COURSE	CREDITS
D269 Composition: Writing with a Strategy	3
C180 Intro to Psychology	3
C165 Integrated Physical Sciences	3
D425 Introduction to Chemistry	3
D575 Health Psychology	3
D583 Foundations of Public Health	3
D568 Health Equity & Social Determinants of Health	3

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WGU COURSE DESCRIPTIONS & LEARNING OUTCOMES (Minus Naval Studies Articulated GenEd courses)

D269 Composition: Writing with a Strategy Welcome to Composition: Writing with a Strategy! In this course, you will focus on three main topics: understanding purpose, context, and audience, writing strategies and techniques, and editing and revising. In addition, the first section, will offer review on core elements of the writing process, cross-cultural communication, as well as working with words and common standards and practices. Each section includes learning opportunities through readings, videos, audio, and other relevant resources. Assessment activities with feedback also provide opportunities to check your learning, practice, and show how well you understand course content. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to gain proficiency in the seven competencies that will be covered in the final assessment. If you have no prior knowledge or experience, you can expect to spend 30-40 hours on the course content.

This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner writes with purpose for a given context and target audience.
- The learner incorporates writing strategies and techniques for written communication.
- The learner constructs a written document with correct format, style, structure, and grammar.
- The learner formulates a strategy for editing and revising written text.
- The learner composes constructive feedback of written texts.

C165 Integrated Physical Sciences This course provides students with an overview of the basic principles and unifying ideas of the physical sciences: physics, chemistry, and earth sciences. Course materials focus on scientific reasoning and practical, everyday applications of physical science concepts to help students integrate conceptual knowledge with practical skills.

This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner describes the nature and process of science.
- The learner examines applications of physics including fundamental concepts such as forces, motion, energy, and waves.
- The learner examines applications of key chemistry concepts including the structure of matter and the behavior and conservation of matter in chemical reactions.
- The learner describes the underlying organization, interactions, and processes within the Earth system including the Earth's structure and atmosphere, and Earth's interactions within the solar system

D425 Introduction to Chemistry Introduction to Chemistry, learners will discover the impact of chemistry on everyday life. They'll learn about the structure of the atom, study periodic trends, analyze the structure of molecules and their properties, and describe the importance of common functional groups within the periodic table. They'll identify balanced chemical equations, describe types of chemical reactions and predict their products, and examine intermolecular forces and describe their impact on the properties of substances. Finally, they'll study the properties of acids, bases, and buffer systems, and properties unique to liquids and gases.

This course covers the following competencies:

Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.

- The learner records measured numbers following scientific standards.
- The learner describes the arrangement of the periodic table and the electronic structure of atoms.
- The learner explains how chemical bonds are formed.
- The learner calculates quantities associated with a balanced chemical equation.
- The learner estimates the quantitative properties of solutions and gases.
- The learner describes the behavior of acids, bases, and gases.

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C180 Intro to Psychology Introduction to Chemistry provides students with opportunities to examine the structure of the atom, study periodic trends, analyze the structure of molecules and their properties, describe the importance of common functional groups, use balanced chemical equations, identify types of chemical reactions and predict products, examine intermolecular forces and describe their impact on the properties of substances, study the properties of acids, bases, and buffer systems, and understand the relevance of chemistry in the world around us. This course covers:

- The graduate explains the biological perspectives of psychology.
- The graduate explains the theories of learning and memory.
- The graduate explains the concepts of personality development and social psychology.
- The graduate identifies psychological disorders and treatment methods.
- The graduate explains the foundations of psychology.

D575 Health Psychology Health Psychology provides a basic overview of the biopsychosocial model of health and other holistic models of wellness. The course draws from diverse cultural perspectives as well as the theory and practice of human health behavior change to explore the relationship between psychosocial experiences and health. Topics include the impact of social and cultural factors on health, the relationship between stress and physical health and disease, the psychological experience of illness, and how lifestyle patterns and behavior influence chronic disease. There are no prerequisites for this course.

This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner creates a personalized statement of health drawn from community and empirical sources.
- The learner applies a framework to assess factors impacting individual well-being.
- The learner applies principles of health psychology to a behavior change project

D583 Foundations in Public Health Foundations of Public Health introduces learners to the nation's public health systems including an overview of the core functions of Public Health and the 10 essential public health services. Learners examine a variety of strategies to promote health, prevent disease, and prolong life among populations and communities, including behavioral, population, and policy change, mass media approaches, and community-based interventions. This course also provides learners with a foundational and historical orientation to the field of public health by examining the philosophy, history, purpose, organization, terminology, and function.

This course covers the following competencies:

- The learner identifies the history and role of public health.
- The learner identifies the basic principles of public health.
- The learner identifies general strategies public health specialists recommend to promote health, longevity, and disease prevention

D568 Health Equity and Social Determinants of Health Health Equity and Social Determinants of Health examines the social determinants of health (SDOH) as underlying factors that contribute to health inequity in populations and communities and their effect on health outcomes. This course will help students understand the evidence-based strategies and approaches that promote health equity. D581 Introduction to Research Methods is a prerequisite to this course.

This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner explains the social determinants of health that contribute to health disparities.
- The learner analyzes how social determinants of health impact health outcomes of a population.
- The learner analyzes strategies to improve health equity for a population

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D389 Learning Strategies in Higher Education Learning Strategies in Higher Education provides students with a toolbox of skills that will support student academic growth as they advance in their academic journey. Students will be introduced to the WGU Library; how to use it and best practices for research strategies. Students will learn how to be professional in written communication and how to correctly use current APA format. In this course, students also will learn about setting goals, time-management, study strategies, making and keeping appointments, professional decorum, and test-taking skills. Learning these skills, strategies, and methods will establish an academic foundation for students to be successful in higher education. There are no prerequisites for this course. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner applies self-directed strategies to advance organizational skills and lifelong learning.
- The learner applies research strategies and technology literacy for gathering information from reliable sources.
- The learner applies critical thinking and cultural awareness in writing.
- The learner applies professionalism to problem-solving strategies in a given context

D312 Anatomy and Physiology I with Lab This is Anatomy and Physiology I, a six-section, 4 CU course that enables students to develop an understanding of the relationships between the structures and function of the integumentary, skeletal, muscular, nervous and endocrine systems in the human body. This course will involve laboratory activities, simulated dissections, textbook material, models, and diagrams. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to, with the goal of demonstrating proficiency in the four competencies covered in the final assessment. If you have no prior knowledge of this material, you can expect to spend 40–60 hours on the course content. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner describes the structural and basic functional organization of the human body and the terminology used to describe the orientation of bodily structures.
- The learner describes the structures and physiological functions of the integumentary system and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the skeletal system and the connections to complex systems in the human body.
- The learner analyzes the structures and physiological functions of the muscular system and the connections to complex systems in the human body.
- The learner analyzes the structures and physiological functions of the nervous system and sensory organs and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the endocrine system and its regulation of complex systems in the human body.

C784 Applied Healthcare Statistics Applied Healthcare Probability and Statistics is designed to help develop competence in the fundamental concepts of basic mathematics, introductory algebra, and statistics and probability. These concepts include basic arithmetic with fractions and signed numbers; introductory algebra and graphing; descriptive statistics; regression and correlation; and probability. Statistical data and probability are now commonplace in the healthcare field. This course will help candidates make informed decisions about which studies and results are valid, which are not, and how those results affect your decisions. This course will give candidates background in what constitutes sound research design and how to appropriately model phenomena using statistical data. Additionally, this course guides candidates in calculating simple probabilities based on events which occur in the healthcare profession. This course will prepare candidates for studies at WGU, as well as in the healthcare profession. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.

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- The graduate applies the operations, processes, and procedures of basic arithmetic to solve expressions.
- The graduate applies the operations, processes, and procedures of fractions, decimals, and percentages to evaluate quantitative expressions.
- The graduate applies the operations, processes, and procedures of basic algebra to evaluate quantitative expressions, and to solve equations and inequalities.
- The graduate evaluates categorical and quantitative data pertaining to a single variable using appropriate graphical displays and numerical measures.
- The graduate evaluates the relationship between two variables through interpretation of visual displays and numerical measures.
- The graduate evaluates the relationship between two quantitative variables through correlation and regression.
- The graduate applies principles and methods of probability-based mathematics to explain and solve problems.

D313 Anatomy and Physiology II with Lab This is Anatomy and Physiology II, a six section, four CEU course that enables students to develop an understanding of the relationships between the structures and functions of the cardiovascular, respiratory, digestive, urinary, reproductive, and lymphatic systems in the human body. This course will involve laboratory activities, simulated dissections, textbook material, models, and diagrams. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to, with the goal of demonstrating proficiency in the four competencies covered in the final assessment. If you have no prior knowledge of this material, you can expect to spend 40–60 hours on the course content. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner describes the structures and physiological functions of the cardiovascular system and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the respiratory system and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the digestive system and the connections to metabolism and complex systems in the human body.
- The learner describes the structures and physiological functions of the urinary system and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the reproductive system and the connections to complex systems in the human body.
- The learner describes the structures and physiological functions of the lymphatic system, immune response, and the connections to complex systems in the human body.

D311 Microbiology with Lab: Fundamental Approach Microbiology with Lab: A Fundamental Approach explores the science that microorganisms are everywhere, and they have positive and negative effects on the community. The course examines the structure and function of microorganisms, disease transmission and progression, and immune responses and other interventions, and it identifies key global diseases. The course consists of an introduction and four major sections. Each section includes learning opportunities through readings, videos, and other relevant resources. Assessment activities with feedback also provide opportunities for students to check their learning, practice, and show how well they understand course content. To assist students in developing an applied, evidence-based understanding of microbiology, this course integrates several lab experiments to help determine the specific characteristic of an unknown microbial sample and a treatment plan. Because the course is self-paced, students may move through the material as quickly or as slowly as needed to gain proficiency in the four competencies that will be covered in the final assessment. Students who have no prior knowledge of or experience with this topic can expect to spend 48–60 hours on the course content. There are no prerequisites for this course. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.

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- The learner analyzes structures and characteristics of microorganisms that inform etiologies of symptoms and diseases.
- The learner analyzes microbial transmission and progression and the care needed based on symptoms and environment.
- The learner analyzes methods to prevent and treat infectious diseases and influence positive community outcomes.
- The learner analyzes disease characteristics to inform individuals about etiologies and treatments.

C957 Applied Algebra Applied Algebra is designed to help you develop competence in working with functions, the algebra of functions, and using some applied properties of functions. You will start learning about how we can apply different kinds of functions to relevant, real-life examples. From there, the algebra of several families of functions will be explored, including linear, polynomial, exponential, and logistic functions. You will also learn about relevant, applicable mathematical properties of each family of functions, including rate of change, concavity, maximizing/minimizing, and asymptotes. These properties will be used to solve problems related to your major and make sense of everyday living problems. Students should complete Applied Probability and Statistics or its equivalent prior to engaging in Applied Algebra. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner interprets the real-world meaning of various functions based on notation, graphical representations, and data representations.
- The learner applies linear functions and their properties to real-world problems.
- The learner applies polynomial functions and their properties to real-world problems.
- The learner applies exponential functions and their properties to real-world problems.
- The learner applies logistic functions and their properties to real-world problems.
- The learner analyzes graphical depictions of real-world situations using functional properties.
- The learner verifies the validity of a given model.

D202 Human Growth and Development This is Human Growth and Development, a three-module course that examines the entire human lifetime, from conception to death. Presented chronologically, the course focuses on three key areas: physical, cognitive, and psychosocial growth, along with other important issues such as cultural influences, emotions, and resilience. Because the course is self-paced, you may move through the material as quickly or as slowly as you need to, with the goal of demonstrating proficiency in the four competencies covered in the final assessment. If you have no prior knowledge of this material, you can expect to spend 30-40 hours on the course content. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner explains physical, cognitive, and psychosocial development from conception through early childhood.
- The learner explains the influence of emotions and cultural perspectives and practices on psychosocial development and behavior from birth through early childhood.
- The learner explains physical, cognitive, and psychosocial development from middle childhood through adolescence.
- The learner explains the influence of emotions on psychosocial development and behavior from middle childhood through adolescence.
- The learner explains physical, cognitive, and psychosocial development from early adulthood to the end of life.
- The learner explains the influence of emotions on psychosocial development and behavior from early adulthood to the end of life.

D236 Pathophysiology Pathophysiology is an overview of the pathology and treatment of diseases in the human body, tissues, glands and membranes, the integumentary system, the sensory system, skeletal and muscular

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systems, the digestive system, blood, vessels and circulation, lymphatic system, immunity and disease, heart and respiratory system, nervous, urinary and endocrine systems, and male and female reproductive systems.

Prerequisites include all prior courses in this programmatic sequence. This course covers the following competencies:

- Begin your course by discussing your course planning tool report with your instructor and creating your personalized course plan together.
- The learner describes basic cellular responses and adaptation related to genetics, injury, aging and congenital anomalies.
- The learner describes pathogenesis, manifestations, complications and variations of the muscular, skeletal, and integumentary systems.
- The learner describes pathogenesis, manifestations, complications and variations of the neurologic systems.
- The learner describes pathogenesis, manifestations, complications and variations of the cardiovascular and lymphatic systems.
- The learner describes pathogenesis, manifestations, complications and variations of the respiratory systems.

4. WGU COURSE SEQUENCE

TERM	COURSE
1	D269 Composition: Writing with a Strategy
1	D389 Learning Strategies in Higher Education
1	C180 Intro to Psychology
1	C165 Integrated Physical Sciences
2	D425 Introduction to Chemistry
2	C784 Applied Healthcare Statistics
2	D312 Anatomy and Physiology I with Lab
3	D313 Anatomy and Physiology II with Lab
3	C957 Applied Algebra
3	D202 Human Growth and Development
3	D236 Pathophysiology
4	D311 Microbiology with Lab: Fundamental Approach
4	D575 Health Psychology
4	D583 Foundations of Public Health
4	D568 Health Equity & Social Determinants of Health
TB	D198 Global Arts and Humanities - NAV101 Equivalent
TB	D268 Intro to Communication: Connecting with Others - NAV102 Equivalent
TB	D265 Critical Thinking: Reason and Evidence - NAV103 Equivalent
TB	D266 World History: Diverse Cultures and Global Connections - NAV104 Equivalent
TB	C273 Intro to Sociology - NAV105 Equivalent

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Note: USNCC courses will be assigned by USNCC student success to ensure continuity of coursework whether that means back-to-back USNCC courses or the addition of another WGU term.

In sum, the specific courses you will take in subsequent years will depend on:

- The number of prior credits (from coursework, certifications, or training) that were applied to your program plan during your admissions process
- The number of USNCC NAV courses you completed or were directed to take in your first and subsequent years (you are required to take all five NAV courses within 3 years of program start and at least one course every 12-month cycle)
- The number of courses you complete during each WGU 6-month term. Students must take at least 12 credits in each 6-month term. However, once the 12-credit requirement has been met, students may take additional courses in that term, if desired.
- Please consult with your USNCC student success team to determine the best possible start date given your course progression - To access the most up-to-date possible start dates, please refer to the USNCC academic calendar via: <https://www.usncc.edu/s/academics/academic-calendars-and-catalogs>.
- Please consult your WGU Program mentor regarding the sequence of courses at WGU. Please consult the USNCC student success team with any questions you might have related to your program plan and which course will be next in your USNCC NAV course sequence, or any questions you might have related to making progress towards your certificates, certifications, and overall degree requirements.
- To connect with your USNCC student success team, submit a support center request <https://www.usncc.edu/s/support>. All submitted requests will be followed up within a business day of submission.