

# HEALTH SCIENCE (HS)

---

## HS S101 Introduction to Health Sciences

3 credits (3+0)

Provides a description of health care professions and the interdisciplinary team, job responsibilities, educational and licensing requirements, employment trends, and salary ranges for health related careers. Students will have an exposure to the history and development of health care in Alaska and the United States. Health care issues will be examined with an emphasis on ethics and cultural diversity. The principles of critical thinking will be introduced and communication skills will be promoted through collaborative discussion, presentation, and projects.

## HS S102 Fundamentals of CPR and First Aid

1 credit (1+0)

Basic CPR techniques and First Aid for controlling bleeding, shock, seizures, obstructed airway/choking, hot and cold-related emergencies, and diabetic crisis. Signs and symptoms of stroke and heart attack are reviewed, as is use of A.E.D. Safety and prevention practices are discussed. The course meets certification requirements for child care providers, outdoor guides, lifeguards, home health aides, group homes, and certified nurse aids. Course materials are derived from American Safety and Health Institute and American Heart Association guidelines.

## HS S105 Certified Nurse Aide Training

9 credits (6+6)

Provides education and training to students in both theory and basic nursing skills necessary to become efficient and productive members of a healthcare team. Students must successfully pass the didactic portion of the coursework with 75% or higher, and pass the skills/clinical training program with 100% in order to be eligible to qualify to sit for the State of Alaska Nurse Aide certification exam. A minimum of 60 hours of didactic and 80 hours of skills/clinical training are required.

**Prerequisite:** Instructor approval and completed application with criminal background check, health examination, current TB test and immunizations.

## HS S114 Fundamentals of Anatomy and Physiology

4 credits (4+0)

Non-laboratory overview to the anatomical structures and functions of the human body. Includes integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, special senses, immune, respiratory, urinary, digestive and reproductive systems. Introduces signs and symptoms, diagnostic measures and treatments of common human disease processes.

**Prerequisite:** HS S135 or HIM S135 (C- or higher) or concurrent enrollment.

## HS S116 Mathematics in Health Care

3 credits (3+0)

Cross-listed as HIM S116. Practical application of mathematics in health care, including arithmetic review, percentages, interest, ratio, proportion, dimensional analysis, metric system, medication calculation, graphs, charts and measurement instruments.

**Prerequisite:** MATH S054 with a C (2.00) or better, or placement into MATH S055 or higher.

## HS S118 Emergency Trauma Technician - First Responder

3 credits (2+2)

Designed specifically for Alaskan conditions and needs, addressing environmental problems such as hypothermia as well as first aid. Prepares students to deal with emergencies: ensure scene safety, provide patient care and transport, document incident. For non-medical workers in construction, logging, mining, law enforcement, ski patrol and other occupations where emergency care may be needed.

## HS S119 Emergency Medical Technician I

6 credits (6+2)

Training to provide assessment of and basic care for persons with medical emergency in pre-hospital settings. Conditions include acute trauma, pulmonary arrest, wounds, cardiac arrest, shock, fractures, and childbirth. Techniques are presented for lifting and moving the sick and injured. Course provides for State of Alaska EMS requirement of 120 contact hours, minimum.

## HS S135 Medical Terminology

3 credits (3+0)

Cross-listed as HIM S135. An introduction to root forms, prefixes and suffixes, and medical abbreviations. Focus is on terminology of body systems related to symptomatology, diseases and treatment.

## HS S194 Practicum:

### HS S203 Science of Nutrition

3 credits (3+0)

Introduction to nutrition as a health science. Students examine the basic principles of nutrition as they relate to human needs and behaviors throughout the life cycle. Some elements of clinical nutrition are explored. Meets the nutrition requirement for nursing and other health science majors.

**Prerequisite:** CHEM S103, BIOL S111, BIOL S112, BIOL S240, or HS S114, or concurrent enrollment in any of these courses.

### HS S206 Introduction to Environmental Health

3 credits (3+0)

An overview of the relationship of people to their environment, how it affects their physical well-being and what they can do to influence environmental quality and to enhance public health protection. Examines health problems associated with chemical, physical and biological agents, how they impact food safety, infectious disease, air quality, water quality and land resources in community and occupational settings. Policies intended to improve public health through mitigation of environmental impacts are also discussed.

**Prerequisite:** WRTG S110.

### HS S291 Health Sciences Internship

3-6 credits (0+0+12-24)

Students are employed (paid or unpaid) in either a facility or community-based healthcare setting. Students work in an approved agency, under supervision of both a qualified professional at work and a faculty sponsor. Requires 50 clock hours per credit.

**Prerequisite:** Admission to HS program and faculty permission via approval form.