

# Health Science (HS)

---

## Courses

### **HS A210** Introduction to Environmental Health **3 Credits**

Introduces the field of environmental health, including environmental epidemiology, policy, justice and the health effects of global climate change. Reviews diseases and injuries related to environmental conditions, occupational health and associated public health applications.

### **HS A220** Introduction to Population Health Sciences **3 Credits**

Introduces students to the public health profession and population health approach in the United States and Alaska. Examines principles of population health, the framework for thinking about underlying problems that lead to death or disability and explores public health institutions and health-care systems.

### **HS A230** Introduction to Global Health **3 Credits**

Introduces the field of global health with a focus on exploring the links between health, economic and social factors involved in development. Reviews socioeconomic and environmental determinants of health, along with disparities in the global burden of disease, global health priorities, efforts and initiatives.

### **HS A305** Public Health for an Aging Society **3 Credits**

An overview of issues related to public health and aging, including demography, epidemiology, theories of aging, the implications of chronic illness and disability for public health, health promotion for older adults, and how older adulthood is viewed in society today.

### **HS A320** Death, Dying, and End-of-Life Care **3 Credits**

Surveys the psycho-sociocultural and biomedical aspects of death, dying, and practical implications for end-of-life care planning, including in-depth exploration of grief and preparation for death, end-of-life care options, care and treatment of terminally ill patients, assisted euthanasia, and legal and policy implications for the future healthcare professional.

**Registration Restrictions:** Instructor permission may substitute for listed prerequisites.

**Prerequisites:** PSY A150 with a minimum grade of C or HS A220 with a minimum grade of C.

### **HS A326** Introduction to Epidemiology **3 Credits**

Introduces basic principles and methods of epidemiology, with emphasis on critical thinking, analytic skills, and application to population health practice and research. Includes outcome measures, methods, interpretation of analysis, surveillance, and sources of data. Provides tools for critically evaluating literature and epidemiological applications for science-based health planning and service disciplines.

**Prerequisites:** HS A220 with a minimum grade of C and (PSY A260 with a minimum grade of C or STAT A200 with a minimum grade of C or STAT A253 with a minimum grade of C).

### **HS A345** Planning and Management of Health Programs **3 Credits**

Explores the major components of health promotion program planning, conducting needs assessments, and developing appropriate interventions including an introduction to managing health promotion programs.

**Prerequisites:** HS A220 with a minimum grade of C and (WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C).

### **HS A370** Social and Cultural Determinants of Health **3 Credits**

Provides a historical and contemporary overview of selected social, political, and economic factors that influence the provision of health and healthcare in America. Focuses on the relationship between health care and race, sex, gender, social stratification, and social location. Lays out brief comparisons of international alternatives for-profit and not-for-profit national health care systems.

**Prerequisites:** HS A220 with a minimum grade of C or HS A230 with a minimum grade of C or SOC A101 with a minimum grade of C.

### **HS A420** Program Evaluation **3 Credits**

Describes the theories and practices of program evaluation for applied health and social services settings.

**Registration Restrictions:** Junior or senior standing and department approval.

**Prerequisites:** HS A326 with a minimum grade of C.

### **HS A433** Health Education: Theory and Practice **3 Credits**

Provides the theoretical foundation and methods for health education and health promotion. Develops students' abilities to plan, implement, and facilitate health promotion activities and health education lessons.

**Prerequisites:** HS A345 with a minimum grade of C or NS A333 with a minimum grade of C or KIN A343 with a minimum grade of C.

### **HS A485** Professional Preparation in Health Sciences **3 Credits**

Provides a foundation to help students prepare for practicums and careers including exploring professional competencies and goals, applying practical human relations skills and professional behaviors.

**Special Note:** Students will engage in 8 hours of field work.

**Registration Restrictions:** Admission to the College of Health, admission to the Bachelor of Science in Health Sciences, and junior or senior standing

**Prerequisites:** HS A345 with a minimum grade of C and HS A433 with a minimum grade of C or concurrent enrollment.

### **HS A490** Selected Topics in the Health Sciences **1-4 Credits**

Examines emerging, current, or other special topics in the health sciences.

**Special Note:** May be repeated for a maximum of 9 credits with a change of subtitle.

**Registration Restrictions:** Junior or senior standing

**May Be Stacked With:** HS A690

**Prerequisites:** WRTG A211 with a minimum grade of C or WRTG A212 with a minimum grade of C or WRTG A213 with a minimum grade of C or WRTG A214 with a minimum grade of C or WRTG A2W with a minimum grade of C.

**HS A492 Senior Seminar: Contemporary Health Policy 3 Credits**

Focuses on contemporary health policy issues with an emphasis on population-level public policies and health equity.

**Registration Restrictions:** Senior standing and completion of GER Tier 1 (basic college-level skills) courses

**Prerequisites:** HS A220 with a minimum grade of C.

**Attributes:** UAA Integrative Capstone GER.

**HS A495 Health Sciences Practicum 3 Credits**

Integrates acquired theoretical knowledge with practical application and applies health science competencies in a supervised community health practice setting. Designed to enhance students' professional experience through a minimum of 120 hours of work with a community organization.

**Special Note:** May be repeated once for a total of 6 credits.

**Registration Restrictions:** Senior standing and admission to the College of Health and the Bachelor of Science in Health Sciences

**Prerequisites:** HS A485 with a minimum grade of C.

**HS A498 Senior Project in Health Sciences 3 Credits**

Under the supervision of a faculty member, students will either a) assist with carrying out a research project initiated by a faculty member or b) design and carry out an empirical research project or other approved health sciences project.

**Special Note:** May be repeated once for a total of 6 credits.

**Registration Restrictions:** Senior standing and approval by the faculty member acting as project advisor

**Prerequisites:** HS A220 with a minimum grade of C and HS A345 with a minimum grade of C and (HS A420 with a minimum grade of C or concurrent enrollment or HUMS A420 with a minimum grade of C or concurrent enrollment).

**HS A499 Senior Thesis in Health Sciences 3 Credits**

Under faculty mentorship, students will be guided through the thesis writing process for undergraduate research that meets professional publication standards. Students will orally defend the thesis through a presentation or poster presentation.

**Registration Restrictions:** Senior standing and approval of the faculty member acting as thesis advisor

**Prerequisites:** HS A498 with a minimum grade of C or PSY A261 with a minimum grade of C or SOC A361 with a minimum grade of C.

**HS A605 Public Health and Society 3 Credits**

Incorporates behavioral and social science concepts in analyzing a variety of public health issues nationally, in Alaska and the circumpolar north. Presents how socioeconomic status, culture, race/ethnicity, age, and gender relate to health and disease outcomes and quality of life. Provides knowledge on health promotion and disease prevention interventions.

**Registration Restrictions:** Admission to MPH program or faculty permission.

**HS A610 Environmental and Occupational Health 3 Credits**

Provides an in-depth understanding of environmental factors, including biological, physical, chemical and occupational factors that affect the health of a community. Combines an overall ecological concern with specific elements related to individual and community health, emphasizing the interrelatedness of the two.

**Registration Restrictions:** Admission to MPH program or faculty permission.

**HS A615 Health Services Administration 3 Credits**

Provides students with knowledge and tools to understand the planning, organization, administration, management, evaluation and policies of public health programs in the U.S. and particularly Alaska. Applies an epidemiological model for health services delivery, strategic planning, health care quality management, performance standards, interagency cooperation, human resource management and ethics.

**Registration Restrictions:** Admission to MPH program or faculty permission.

**HS A624 Circumpolar Health Issues 3 Credits**

Provides a critical analysis of key circumpolar health issues, with a particular emphasis on the application of current research to professional practice, programs and policy. Aims to develop and demonstrate, among the students, a level of professionally sophisticated critical analysis skills, problem-solving abilities, and expertise in public health issues most relevant to Alaska and other circumpolar regions. Provides opportunity for students to explore these issues within an Alaskan context in their assignments.

**Registration Restrictions:** Graduate standing and admission to the Master of Public Health, or instructor approval

**HS A625 Biostatistics for Health Professionals 3 Credits**

Reviews principles of statistical reasoning and quantitative skills for analyzing health data. Illustrates descriptive and inferential statistics. Addresses multivariate parametric and non-parametric statistical tests. Compares methodological techniques and the choice of appropriate statistical methods to answer health research questions. Emphasizes interpretation of statistical results in public health research and practice.

**Registration Restrictions:** Graduate standing or instructor approval

**HS A626 Principles of Epidemiology 3 Credits**

Presents the study of patterns of disease and injury in human populations and the application of this study to the control of health problems. Introduces students to the basic principles and study designs of epidemiology. Covers the application of epidemiologic methods to the understanding of the occurrence and control of conditions such as infectious and chronic diseases, psychological and behavioral disorders, community and environmental health hazards, accidents, and genetic conditions.

**Registration Restrictions:** Graduate standing or instructor permission.

**HS A628 Program Evaluation 3 Credits**

Explores the principles and methods of conducting evaluation of health-related programs. Covers conducting community needs assessments, program evaluation development, evaluation types and designs, politics and ethics of conducting program evaluations, and how to effectively communicate the evaluation process and disseminate findings in meaningful and actionable ways.

**Registration Restrictions:** Graduate standing and admission to the Master of Public Health or the Master of Social Work, or instructor approval. Master of Social Work students must have successfully completed the generalist curriculum

**Crosslisted With:** SWK A628

**HS A629 Public Health Research Tools and Methods 4 Credits**

Introduces basic principles and methods of health-related research from its conception to analysis and evaluation. Provides an overview of quantitative and qualitative research methods and issues related to their reliability and validity. Provides hands-on training of quantitative and/or qualitative analytical software and completion of CITI Human Subjects Research Education course in lab.

**Registration Restrictions:** Graduate standing and admission to the Master of Public Health, or instructor approval

**Prerequisites:** HS A625 with a minimum grade of B and HS A626 with a minimum grade of B.

**HS A630 Public Health Emergencies and Disasters 3 Credits**

Explores public health issues concerning natural and human-generated disasters and emergencies that occur in Alaska, the U.S., and different parts of the world. Covers topics on geophysical and weather-related problems, infectious diseases, war, and related concerns. Addresses prevention, mitigation and public health interventions, which include planning, preparedness, response, and recovery strategies, as well as socio-economic, political, legal and ethical challenges.

**Registration Restrictions:** Admission to MPH program or faculty permission.

**HS A635 Geographic Information Systems for One Health 3 Credits**

Develops fundamentals of spatial analysis necessary to address One Health problems. Introduces fundamental concepts, conventions and capabilities of geographic information systems (GIS) from a broad and practical perspective. Imbeds learning how to use GIS software in the context of carrying out projects for mapping, visualizing, and analyzing human, animal and plant health data.

**Special Note:** Students will receive a free software license for GIS software. Students must have access to a computer capable of running ArcGIS software.

**Registration Restrictions:** Graduate standing or instructor permission.

**HS A640 Health Communication in the Popular Media 3 Credits**

Discusses theory, research, and practice related to how popular media influences health and how health professionals can use or influence popular media to make populations who use it healthier. Students apply what they learned by developing a health communication project.

**Registration Restrictions:** Graduate standing

**HS A648 Motivational Interviewing 3 Credits**

Motivational Interviewing (MI) is an empirically-supported, person-centered, goal-oriented approach for facilitating change by exploring & resolving ambivalence. With background lectures on the theoretical and empirical bases of MI, class sessions emphasize demonstration and practice of MI skills and strategies for diverse behavioral applications (e.g., addictions, health promotion, chronic disease management).

**Registration Restrictions:** Graduate standing

**Crosslisted With:** PSY A648 and SWK A648

**HS A655 Global Health and Development 3 Credits**

Overview of global health issues and determinants of health, primarily in lesser developed countries. Covers maternal and child health, reproductive health, nutrition, infectious diseases, and environmental health issues. Explores intervention strategies and the impact of social, cultural, political, and economic factors.

**Registration Restrictions:** Graduate standing and instructor approval

**HS A683 Innovative Practices in Telehealth 3 Credits**

Provides an overview of telehealth with an emphasis on telebehavioral health in Alaska. Includes topics on the history of telehealth and current legal, technical and logistical considerations to prepare leaders in the expanding field of telehealth. Includes hands-on experience with telehealth technology and clinical exercises.

**Registration Restrictions:** Graduate standing or instructor permission

**Crosslisted With:** SWK A683

**HS A690 Selected Topics in the Health Sciences 1-4 Credits**

Examines emerging, current, or other special topics in the health sciences.

**Special Note:** May be repeated for a maximum of 12 credits with a change of subtitle.

**Registration Restrictions:** Graduate standing

**May Be Stacked With:** HS A490

**HS A695 Applied Practice Experience 1-3 Credits**

Focuses on the development and implementation of a student-initiated practicum with a public-health-related community partner. Requires students to demonstrate their advanced scholarship, professional competence, and public health skills in an applied setting.

**Special Note:** May be repeated for a maximum of 3 credits.

**Registration Restrictions:** Graduate standing, admission to the College of Health, admission to the Master of Public Health (MPH) in Public Health Practice or the Graduate Certificate in Public Health, a minimum GPA of 3.00 in 600-level HS courses, completion of at least 28 credits towards the MPH or 12 credits towards the Graduate Certificate in Public Health, and advisor approval

**Prerequisites:** HS A628 with a minimum grade of C or SWK A628 with a minimum grade of C.

**HS A696 Integrative Learning Experience 2 Credits**

Requires students to complete their Master of Public Health program ePortfolio; complete a written capstone project that integrates both foundational public health and generalist track-specific competencies identified by the students, in consultation with their academic advisor; and orally present highlights of their Integrative Learning Experience capstone project in a group setting.

**Registration Restrictions:** Graduate standing, admission to the College of Health, admission to the Master of Public Health (MPH) in Public Health Practice, completion of at least 37 credits towards the MPH, a minimum GPA of 3.00 in the MPH, and advisor approval

**Prerequisites:** HS A605 with a minimum grade of C and HS A610 with a minimum grade of C and HS A615 with a minimum grade of C and HS A624 with a minimum grade of C and (HS A628 with a minimum grade of C or SWK A628 with a minimum grade of C) and HS A629 with a minimum grade of C and HS A630 with a minimum grade of C.

**HS A699 MPH Practicum-Thesis 1-5 Credits**

Focuses on the development and implementation of a student-initiated practicum and thesis with a public-health-related community partner and thesis committee for the culminating experience for the MPH Program. Guides and provides resources as a basis for the thesis. Requires students to demonstrate their advanced scholarship, professional competence and skills through proposal and report writing, subject matter expertise of their thesis, and public presentation.

**Registration Restrictions:** Graduate standing and admission to the Master of Public Health, academic advisor approval and an overall minimum GPA of 3.00 in the MPH program