

Health Science (HSC) Courses

HSC1010 Introduction to Health Professions

This course is designed to survey different types of health professions for those in pursuit of a healthcare career. Students are provided with information about all training, educational and certification requirements for the professions discussed in class. Students learn how each of the professions plays a role in providing care in the healthcare system and how the professions interact with one another. Case studies introduce students to different scenarios in which various healthcare professions interact to solve complex patient problems. (OL)

Offered at Charlotte, Online, Providence

1 Semester Credit

HSC1020 Medical Terminology

This course provides an overview of medical terminology, the basis of the language used in healthcare. Students are introduced to the principles of medical word building, analysis and pronunciation, and define and interpret medical word parts and terms associated with the body using a systems approach. Common medical abbreviations applicable to each system are also defined.

Offered at Providence

1 Semester Credit

HSC1100 Determinants of Health

This course provides students with an overview of the determinants of health as described by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). The determinants of health are critical for understanding the impact of factors outside of genetics/biology on a population's health. A variety of topics are examined including a population-based overview of the determinants of health using the framework of social, physical, ecological and behavioral causation. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC1230 Introduction to Public Health

This course explores what public health means and how it impacts our lives through environment, policy, communication and personal relationships. Students are introduced to the basics of the public health system, covering the basic definition of public health, how we analyze public health problems, defining the biomedical basis of public health, and describing social and behavioral factors related to health interaction and medical care issues. This course uses case studies and real-life scenarios of challenges faced and the strategies implemented for working with communities on specific health issues that have the potential to impact a population. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC2100 Epidemiology

This course provides a systematic approach for acquiring and evaluating information on the distribution and causes of disease and other health outcomes in populations. Topics include epidemiologic methodologies utilized in health-related areas other than public health, such as clinical medicine, health administration, dentistry, occupational health and nursing. The link between epidemiology and the traditional liberal arts, such as social justice and health disparities, is discussed.

Prerequisite(s): HSC1230, MATH2001 or MATH2010. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC2230 Introduction to Global Health

This course introduces students to the major global health challenges, programs and policies that countries throughout the world make decisions about on a day-to-day basis. Students are introduced to the differences in global health status and disease prevalence and many of the factors that play a role in the reasons why some countries are able to eradicate disease more easily than others. Political, monetary and ideological values, as well as environmental factors, all play a role in creating health disparities globally. Discussion includes why people in some countries are healthier than those in others and why there are differences in resource allocation among these countries. Students are introduced to principal global health concepts such as the burden of disease, epidemiology, policy analysis and comparative health systems. Students learn to differentiate problems across countries and use learned skills to problem solve and communicate policy goals.

Prerequisite(s): HSC1230. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC2400 Research Methods for Health Science

This course introduces students to ecological, experimental and observational research methods that are necessary to conduct research in the health sciences and public health. Students discover the differentiating contributions of qualitative and quantitative research methods to the understanding of health and the disease process, as well as explore the role of innovative research designs, such as community-based participatory research, ecological momentary assessment, and mixed-methods designs. Students explore the relationship between methodological decisions and the strength of research findings. As part of the course, students develop a working knowledge of measurement theory; the validity and reliability of health-based measures; and population sampling techniques. Research ethics, including research funding and dissemination, are emphasized through historical and modern lenses, and past ethical errors relevant to the development of modern bioethical principles are discussed. Ethical codes created and supported by the American Medical Association and the American Public Health Association are prioritized. Students demonstrate their knowledge through the development of a research plan on a health or public health topic of their choice.

Prerequisite(s): (ESS2010/ESS2015 or HSC2100) and MATH2001 or MATH2010, sophomore status. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC3200 Health Education and Program Planning

This course is a study of the processes involved in planning health education and health promotion programs. Emphasis is on community analysis, including social assessment, epidemiological assessment, behavioral assessment and environmental/ecological assessment. Program implementation and assessment are also examined. Additionally, behavior theory is discussed to reflect the symbiotic nature between the target population and the service provider(s).

Prerequisite(s): HSC2100, MATH2001 or MATH2010. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC3300 Comparative Healthcare Systems

This course is designed to provide an in-depth survey of the structure, function and comparative performance of a variety of healthcare delivery and financing systems in the U.S. and other countries, and explores contemporary issues affecting the institutions that provide healthcare and the people who seek health services. The course also covers the historical development of international healthcare systems, the organization and financing of systems of care, and the policy process and priority setting. Finally, the course covers current efforts at healthcare reform.

Prerequisite(s): HSC1010, HSC1230. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC3500 Current Issues in Health

This course allows students to examine the etiology and outcomes of recent or novel health events. Emphasis is put on developments within the health, public health, and healthcare fields within the previous 12 months, and topics may be nationally or globally relevant. Potential topics include emerging infectious disease outbreaks, changes in chronic disease trends, health care reform, and program or policy implementation. The course requires students to apply practical and theoretical knowledge towards the discovery of the causes of disease and the identification of effective disease prevention or treatment plans.

Prerequisite(s): HSC2100.

Offered at Charlotte, Providence

3 Semester Credits

HSC4100 Health Policy, Ethics and the Law

This course is designed to introduce students to topics that involve ethical issues in decision-making for public health issues that society faces every day. Students are exposed to a variety of issues in public health and provided examples of the process used to determine ethical trade-offs before decisions are made in the world of public health and healthcare. Topics include issues of conflict with values held by some stakeholders or members of the public; political and social circumstances; and when to impose restrictions on the freedom of individuals to protect the health of the community and the duties and obligations owed by citizens to the wider community.

Prerequisite(s): HSC1230, HSC2100. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC4900 Data and Evidence in Health: Research Capstone

This course is designed to provide students with a context for performing research using different types of health data and to understand the differences across data types. Data as a decision-making tool is discussed as it pertains to issues in health, including making public health policy decisions, implementing new legislation, or deciding whether or not a drug is effective. Students perform an independent research study, beginning with the conceptualization of the research question, to selecting the appropriate data to create an analysis to be shared with colleagues. This is a capstone course that teaches students to transform their fundamental knowledge of public health research and methods in order to complete a research project using methods appropriate for public health research questions.

Prerequisite(s): (ESS2010/ESS2015 or HSC2100), HSC2400 and MATH2001 or MATH2010, junior status. (OL)

Offered at Charlotte, Online, Providence

3 Semester Credits

HSC6110 Epidemiology and Food Safety

This course provides students with an introduction to epidemiologic methods used in foodborne disease outbreak investigation. Emphasis is put on the importance of surveillance in detecting various types of foodborne disease (e.g. bacteria, virus, parasite, etc.). In particular, students learn systematic approaches for collecting and analyzing data on the distribution of foodborne illness to identify the points of contamination and causes of foodborne disease. Both epidemiologic methods and molecular methods are presented to identify the causes of foodborne disease outbreaks. Finally, students evaluate the effectiveness of foodborne disease outbreak investigations using various case studies. (OL)

Offered at Online, Providence

3 Semester Credits