HEALTH SCIENCES (HLSC)

Courses

HLSC 100 Student Success Strategies Credit: 1
Topics will include setting goals for academic success, anticipating obstacles, problem solving solutions, and time management. Students will practice improving their listening, note-taking, and reading skills. They will practice communication, public speaking, and writing skills. Students will begin self-evaluation strategies to learn more about their motivation for successfully completing their academic program.

Prerequisites: Admission into the BHS program

HLSC 101 Introduction to Health Sciences Credits: 3
This course introduces students to career options in health sciences. Students will explore basic concepts related to understanding one's role and scope of practice, professional responsibilities, and education and credentialing requirements for various careers in health. The course will explore basic concepts required by any health professional including history, safety, ethics, interpersonal skills, general well-being, as well as special skills and aptitudes required in various health career clusters. Students will explore health career paths in medical, government, business, non-profit, and many other sectors. Additionally, students will explore various campus resources focused on student success strategies.

HLSC 110 Personal Wellness Credits: 3
This course presents an overview of health behaviors and actions needed to achieve a combination of physical, mental, and social well-being through intelligent lifestyle choices. Effective strategies for staying healthy and improving one's health will be explored. Elements of stress management, preservation of physical and mental well-being, personal hygiene and strong social relationships will be discussed.

HLSC 120 Anatomy & Physiology I Credits: 4
This course examines the structure and function of the human body from the molecular to the organism level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

HLSC 125 Medical Terminology Credit: 1
This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

HLSC 158 Public Health Principles Credits: 3
This course will introduce the student to the core functions of public health, the ten essential services, core public health competencies, and the difference between population-based and individual health services. Through case studies and practice-related exercises, students will examine current health trends and issues applying a public health perspective.

HLSC 160 Anatomy and Physiology II Credits: 4
This course is a continuation of HLSC 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.

Prerequisites: HLSC 120 (or NURSE 120).

HLSC 200 First Aid / CPR Credit: 1
This course is designed to certify students with the American Heart Association (AHA) in Basic Life Saving for Healthcare Providers and bloodborne pathogens. Students will be exposed to critical concepts of high quality Cardiopulmonary Resuscitation (CPR), the AHA’s Chain of Survival, and 1 and 2 rescuer CPR and Automatic External Defibrillator (AED) for adult, child and infants. Bag-mask technique, rescue breathing, relief of choking will be covered. Adult and pediatric first aid basics, medical emergencies, injury emergencies, and environmental emergencies will be covered. The course will include information on bloodborne pathogens (protection, action, proper cleaning and reporting).

HLSC 230 Health Issues in Aging Credits: 3
This course focuses on promotion and maintenance of the health and well-being of the older adult population. Current trends and needs of the ever changing and diversifying older adult population are discussed. The physiological and psychological domains, socio-cultural influences, legal and ethical issues, and health care resources pertaining to older adults in relationship to their health and quality of life are explored. Assessments, problems and strengths, interventions, and outcomes specific to the older adult population are discussed. Opportunities are provided for interaction with the older adult population through service learning.

Prerequisites: Admission into the Bachelor of Health Sciences program or admission into the Minor in Gerontology.

HLSC 252 Human Growth and Development Credits: 3
This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

Cross Listings: NURSE 252.
HLSC 255 Spanish for Health Care Pre-Professionals Credits: 3
This course focuses on conversational Spanish, medical terminology in Spanish, and written/read Spanish. This course will provide the student with basic knowledge that will allow communication with clients who speak/read/write Spanish. This is a fast paced course and will require practice of the language outside of the classroom in order to master the material presented.
Prerequisites: SPANISH 110.

HLSC 300 Diversity in Health Credits: 3
This course will explore social determinants of health, i.e. how social, cultural, political, historical, and economic influences shape the individual's own values, beliefs, and behaviors. This course expands students' basic knowledge of cultural diversity to provide special focus on health disparities among marginalized populations. Students will examine diversity by exploring health inequities related to race and ethnicity, immigration status, disabilities, gender, access, poverty, sexual identity, and veteran status. The course includes experiential learning with organizations focused on reducing health disparities.
Prerequisites: HLSC 101 (BHS students and non-BHS students pursuing Minor in Health Sciences), Foreign Language I (BHS students)

HLSC 310 Healthcare Systems Credits: 3
The course is designed to provide a description and overview of the organization, financing, and delivery of healthcare in the United States. The historical background and the impact of socio-political, economic, and cultural influences will be explored. The purpose of the course is to provide a framework of understanding of the healthcare system through examination of public and private sectors, market competition, and government regulation. Major issues currently facing the healthcare system will be examined.
Prerequisite: HLSC 101 (or co-requisite).

HLSC 315 Health Literacy Credit: 1
In this course participants will explore the fundamentals of health literacy and demonstrate the impact on health outcomes. Students will be introduced to tools that health care professionals can use to assess the health literacy of their patients/clients. Tools and resources to provide health information at the correct health literacy level will be presented. Students will explore interventions that can increase an individual's health literacy.
Cross Listings: NURSE 315.

HLSC 325 Human Sexuality Credits: 3
This course is designed to introduce students to the field of human sexuality. Course content will include sexual anatomy and physiology, sexuality across a life-span, sexually transmitted infections, contraception, pregnancy and childbirth, sexual orientation, love and relationships, sexual therapy, sex education, gender identity and gender roles and social and legal issues related to sex. Recommended preparation: HLSC 110.

HLSC 345 Quantitative Analysis in the Health Sciences Credits: 3
This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.
Prerequisites: MATH 110 or MATH 116 or higher level math course.

HLSC 358 Environmental Public Health Credits: 3
In this course, students will explore environmental factors affecting public health. Students will be introduced to public health and the food industry, vector control and disease, chemical and biological hazards found in the environment, and their impact on population health. During the course, students will learn how environmental health policy decisions have the potential to impact the health of the population.
Prerequisites: HLSC 158

HLSC 403A Comparative Weight Loss I Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour if didactic work with one module per week for four weeks.

HLSC 403B Comparative Weight Loss II Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour if didactic education with one module per week for four weeks.
Co-requisites: HLSC 403A.
HLSC 403C Comparative Weight Loss 3 Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options ad their efficacy/risks; non-prescription medications/nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.
Co-requisites: HLSC 403A.

HLSC 404 Introduction to Social Justice Credit: 1
This course is designed to increase a student's knowledge regarding personal and social biases based on race, ethnicity, culture, religion, age, sex, sexual orientation, social and economic status, political ideology, disability and how these entities contribute to social injustice. The focus of the course will center on issues involving diversity, prejudice and oppression that impacts social justice. During the course, students will be introduced to tools for developing social justice literacy in order to take action towards establishing a more just society.

HLSC 408 Gender, Health and Development in Senegal Credits: 3
This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.
Prerequisites: Junior or Senior Level standing - must meet requirements established by study abroad office.
Cross Listings: HISTORY 408, WGS 408.

HLSC 410 Epidemiology Credits: 3
This course is an introduction to epidemiology with an emphasis on applications in public health. Students will learn basic principles of epidemiology, including the relationship of simple statistics to epidemiology and public health, methods of disease investigation, epidemiological study designs and their uses and measures of effects. Through the course, students will be able to apply measures of disease incidence and prevalence, and explain the uses of screening tests and criteria for their evaluation, including measures of validity. The class will explore epidemiology in environmental health and social sciences.
Prerequisites: HLSC 101 and HLSC 345 (BHS students); HLSC 101, HLSC 345 and HLSC 158 (BHS students pursuing Minor in Public Health); HLSC 158 and HLSC 345 (non-BHS students pursuing the Minor in Public Health).

HLSC 417 Information Systems and Technology for Improved Health Care Credits: 3
This course provides a basic introduction to health information technology across health care settings. Students will acquire an understanding of key concepts associated with health informatics and network models, systems and management strategies, health information strategic planning, clinical and public health application, data retrieval and analytics, public policy, research, and one's professional responsibility to protect electronic health care records.
Cross Listings: NURSE 417.

HLSC 430 Health Program Management Credits: 3
This course is designed to acquaint students with assessment, planning, implementation, and evaluation of health programs. Issues of health financing, health policy, health delivery, and population health will be explored. The course provides a broad introduction to key concepts in health program management, common issues, evidence-based tools, and usable strategies, regardless of the health settings. Vocabulary relevant to policy makers, managers, administrators, and consumers will be studied. Students will develop mock health programs using provided outlines and budgetary restrictions, while considering human resource restraints, climate, relevance of health issue, and readiness for change.
Prerequisites: HLSC 101, HLSC 310 (BHS Students).

HLSC 440 Policy and Ethics in Health Credits: 3
This course distinguishes biomedical ethics from public health ethics, highlighting the driving principle of justice in public health policy. Historical and present ethical issues will be explored within a variety of health based organizations and settings. The relationship of how ethics drives policy decisions and improves health outcomes will be discussed. The course will also examine how health policy is created in relationship to core ethical theories and public health justifications.
Prerequisites: HLSC 101 and HLSC 300 (BHS Students and non-BHS students pursuing Minor in Health Sciences); HLSC 158 (non-BHS students pursuing Minor in Public Health).

HLSC 445 Core Competencies in Health Education Credits: 3
This course is designed to enforce the core areas of responsibility required to become a professional health educator. Course content will include the skills required to assess needs, assets and capacity for health education; plan, implement and evaluate health programs; administer and manage health education programs; serve as a resource person and communicate and advocate for health and health education. Students will begin preparing for the certification exam offered through the National Commission for Health Education.
Prerequisites: HLSC 101 and HLSC 430 (BHS students); HLSC 158 (non-BHS students pursuing the Minor in Public Health)
HLSC 450 Urban Health Credits: 3
This course focuses on the unique health needs and outcomes of individuals and communities located within an urban core. Included in the course, are the specific ways in which health interventions can be delivered to urban populations to promote better health outcomes and quality of life. The course provides information on urban characteristics including crowding, poverty and crime in exacerbating the health and wellness needs of this historically underserved community.

Prerequisites: HLSC 101, HLSC 300.

HLSC 458 Communicable Disease Investigation Credits: 3
This course will introduce students to communicable disease control and investigation. Throughout the course, students will learn how to identify outbreaks, explore disease investigation tools, and identify disease causes. Students will investigate the spread of disease among humans, animals, and the environment. The history of disease containment, evolution of disease control, and specific interventions developed to protect the public will be explored.

Prerequisites: HLSC 410, HLSC 158.

HLSC 460 Global Health Credits: 3
This course discusses the complexity of health in a global context. It is designed as an overview of the biological, social and environmental contributors to health and diseases in populations around the world. Course content will include case studies of various global organizational structures and systems relative to population health, selected infectious diseases, nutritional deficiencies and health effects of environmental change.

Prerequisites: HLSC 101 and HLSC 300.

HLSC 470 Technology, Marketing and Media in Health Credits: 3
This course will focus on past, present, and future trends in health marketing and messaging. Technology’s role in marketing health will be explored. Marketing principles will be used to evaluate strategies to promote health behavior change and social policy. Course content will link current trends in consumer health and how these trends are marketed to the public. Examples include mobile apps and devices, personal health data collection, health data storage, and health risk assessment tools. Students will discuss the philosophical, social and legal issues in the use and abuse of health technology, health marketing, and health in the media.

Prerequisites: HLSC 101, HLSC 440 (or co-requisite).

HLSC 476 Scientific Inquiry Credits: 3
This course focuses upon the development of inquiry skills necessary to identify relevant research-based literature and apply findings from research to practice. Students will develop an understanding of basic research concepts and evidence based practice in addition to skills in finding, appraising, and using health related literature.

Prerequisites: NURSE 345 or HLSC 345, or equivalent upper-level statistics course.

Cross Listings: NURSE 476.

HLSC 480 Leadership and Management in Health Professions Credits: 3
This course will provide the student with a theoretical foundation of leadership and management in health professions. The principles of authority, power, politics, decision making, and influence will be explored. Organizational philosophies will be examined within the context of current health issues. The leadership skills of negotiation, delegation, conflict resolution, coaching and mentoring will be discussed, as related to health professions. The role of communication will be examined across organization systems. The effect on gender and cultural diversity on communication will be discussed.

Prerequisites: HLSC 101 and HLSC 300.

HLSC 490 Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490CD Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490EH Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490HL Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490HP Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490PH Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490SJ Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.
HLSC 492 Health Sciences Specialty Course Credits: 3
This course provides students an opportunity to develop advanced knowledge and skills in health sciences. Concepts and topics covered throughout the course of the Bachelor of Health Sciences program will be revisited and practiced through a variety of applied assignments and experiences. Students will integrate examples and case studies from their Health Sciences Internship settings into the course.
Prerequisites: All required HLSC courses, student in final semester of senior year.

Co-requisites: HLSC 494.

HLSC 494 Health Science Internship Credits: 6
This course provides an experience-based internship for the senior student. Depending upon the health professions career selected, the student will complete a service learning, research, or problem-based experience under the guidance of a site supervisor within the agency or organization that is mutually agreed upon.
Prerequisites: All required HLSC courses, student in final semester of senior year.

Co-requisites: HLSC 492.