

# HEALTH SCIENCE (HSCI)

## **HSCI 103 – Seminar in Pre-Nursing 1 credit hour**

This course is for entering pre-nursing students to assist them with their academic, professional and career planning goals.  
Prerequisite: Freshman or Sophomore standing

## **HSCI 125A – Orientation to Physical Therapy 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a physical therapist. The student spends 36-40 clock hours with a working professional physical therapist in an on-the-job setting. Students should complete BIOL 225, BIOL 226, BIOL 325, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125A.

Total Credits Allowed: 2.00

## **HSCI 125B – Orientation to Clinical Lab Sciences 2 credit hours**

This course is an introduction to the profession of medical technology. It includes a historical perspective of the profession, orientation to hospital/laboratory infra-structure, and a description of accrediting agencies and professional organizations. Emphases will be placed on educational requirements, personal attributes and characteristics desirable in a medical technologist, professional ethics, clinical laboratory departments, professional specialties, employment opportunities and the future of medical technology. The course requires a shadowing/observation experience in a clinical laboratory setting.

## **HSCI 125C – Orientation to Medicine 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a physician. The student spends 36-40 clock hours with a working professional physician in an on-the-job setting. Students should complete CHEM 160, CHEM 160L, CHEM 161, CHEM 161L, CHEM 360, CHEM 360L and two lab classes in animal or human biology prior to taking HSCI 125C.

Total Credits Allowed: 2.00

## **HSCI 125D – Orientation to Pharmacy 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a pharmacist. The student spends 36-40 clock hours with a working professional pharmacist in an on-the-job setting. Students should complete CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L and BIOL 211 or BIOL 215 prior to taking HSCI 125D.

Total Credits Allowed: 2.00

## **HSCI 125E – Orientation to Dentistry 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a dentist. The student spends 36-40 clock hours with a working professional dentist in an on-the-job setting. Students should complete CHEM 160, CHEM 160L, CHEM 161, CHEM 161L, CHEM 360, CHEM 360L and two lab classes in animal or human biology prior to taking HSCI 125E.

Total Credits Allowed: 2.00

## **HSCI 125F – Orientation to Radiography 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a radiographer (radiologic technologist). The student spends 36-40 clock hours with a working professional radiographer in an on-the-job setting. Students should complete BIOL 225, BIOL 226 and one lab course in chemistry or physics prior to taking HSCI 125F.

Total Credits Allowed: 2.00

## **HSCI 125G – Orientation to Respiratory Therapy 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a respiratory therapist. The student spends 36-40 clock hours with a working professional respiratory therapist in an on-the-job setting. Students should complete BIOL 225, BIOL 226, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125G.

Total Credits Allowed: 2.00

## **HSCI 125H – Orientation to Occupational Therapy 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as an occupational therapist. The student spends 36-40 clock hours with a working professional occupational therapist in an on-the-job setting. Students should complete BIOL 225, BIOL 226, PSY 203, and PSY 230 or PSY 231 prior to taking HSCI 125H.

Total Credits Allowed: 2.00

## **HSCI 125I – Orientation to Physician Assistant 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a physician assistant. The student spends 36-40 clock hours with a working professional physician assistant in an on-the-job setting. Students should complete BIOL 225, BIOL 226, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125I.

Total Credits Allowed: 2.00

## **HSCI 125J – Orientation to Dental Hygiene 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a dental hygienist. The student spends 36-40 clock hours with a working professional dental hygienist in an on-the-job setting. Students should complete BIOL 225, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125J.

Total Credits Allowed: 2.00

## **HSCI 125K – Orientation to Optometry 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as an optometrist. The student spends 36-40 clock hours with a working professional optometrist in an on-the-job setting. Students should complete 8 hours of BIOL, CHEM 160, CHEM 160L, CHEM 161, CHEM 161L, PHYS 205, and PHYS 205L prior to taking HSCI 125K.

Total Credits Allowed: 2.00

## **HSCI 125L – Orientation to Nuclear Medicine Technology 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a nuclear medicine technologist. The student spends 36-40 clock hours with a working professional nuclear medicine technologist in an on-the-job setting. Students should complete CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125L.

Total Credits Allowed: 2.00

## **HSCI 125M – Orientation to Chiropractic 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a chiropractor. The student spends 36-40 clock hours with a working professional chiropractor in an on-the-job setting. Students should complete 8 hours of BIOL, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125M.

Total Credits Allowed: 2.00

**HSCI 125N – Orientation to Podiatry 1 credit hour**

Designed to familiarize students with the requirements, opportunities, and obligations associated with careers in the health sciences as a podiatrist. The student spends 36-40 clock hours with a working professional podiatrist in an on-the-job setting. Students should complete 8 hours of BIOL, CHEM 160, CHEM 160L, CHEM 161 and CHEM 161L prior to taking HSCI 125N.

Total Credits Allowed: 2.00

**HSCI 125P – Orientation to Health Sciences 1 credit hour**

To provide health science students with a meaningful experience in a medical setting to help the student gain a better grasp of health care professions and the responsibilities associated with those professions, as well as the practical, legal, and ethical concerns related to these professions.

Total Credits Allowed: 2.00

**HSCI 130 – Opportunities in the Health Sciences 1 credit hour**

A course designed to introduce students to the many diversified opportunities in the health field and the personal as well as the educational requirements for the various careers available in the health sciences.

**HSCI 140 – Introduction to Public Health 3 credit hours**

An introductory course concerning various topics of public health including: history, current issues and future trends; epidemiology, epidemics and data collection; biomedical basis of disease and disease prevention methods (vaccinations, diet and healthy habits); environmental issues (water, air, food and drug safety); role of government, organizations, and law in public health; emergency preparedness for health, natural disasters, and bioterrorism; health dollars and insurance; and health needs of specific populations. The topics listed will be discussed briefly so that students can become familiar with general concepts. In addition to the required text, media including, newspaper articles, television broadcasts, and journal articles (both professional and lay public) will be used to enhance our understanding of the perception of health in the general public.

**HSCI 225 – Introduction to Hematology 2 credit hours**

This course is an introduction to the study of hematology, with an emphasis on the functioning and maintenance of cellular components of the blood including erythrocytes, granulocytes, monocytes, lymphocytes, and platelets. Students will also learn about common hematological disorders such as anemias, leukemias, and clotting disorders, their clinical presentations, and treatments. The course will consist of classroom lectures two days each week.

Prerequisite: 8 hours of BIOL or permission of instructor

Additional Course Fee Required

**HSCI 300 – Seminar in Health Sciences 1 credit hour**

This course is designed to assist students in the Health Sciences with their academic, professional and career planning goals. Some topics and issues to be covered in the course include academic preparation for the health sciences, preparing for the admissions process, professionalism, confidentiality, insurance, managed care and other issues and trends in health care.

Prerequisite: Sophomore standing

**HSCI 310 – Current Issues in Public Health 3 credit hours**

This course examines timely public health issues and their impact locally, nationally, and globally. We will examine these issues through the lens of problem solving and critical thinking. Students will investigate what factors lead to these issues. A systems-level approach will be used to organize these factors and frame what evidence-based practices are available to address these issues.

**HSCI 320 – Global Health 3 credit hours**

This course introduces students to the main concepts of global health which includes concepts pertinent to developing nations and the health of the poor, as well as globalization of the world. Students will study the determinants of health, factors that influence the burden of disease, economics, and political influences on public health. Classical global health issues, as well as current events, will be included in the course.

Prerequisite: HSCI 140 and BIOL 110

**HSCI 400 – Cultural Issues in Medicine 1 credit hour**

To familiarize pre-health professionals with cultural differences in our growing diverse population through a weeklong workshop and volunteer practicum experience in an approved clinic or hospital.

Department Consent Required

**HSCI 410 – Issues in Medicine 1 credit hour**

To familiarize pre-health professionals with issues relating to agri-medicine and rural medical practice through a weeklong workshop and volunteer practicum experience in an approved clinic or hospital.

Department Consent Required

**HSCI 430 – Special Topics in Health Sciences 1-6 credit hours**

The format of this course will vary depending on the specific clinical program into which the student is accepted; the purpose of the course is to provide the student with in-depth experience in the specific health science area.

Total Credits Allowed: 6.00

**HSCI 475 – Internship in Health Sciences 1-5 credit hours**

This internship is designed to provide an opportunity to gain valuable on-the-job experience that will enhance the student's understanding of the healthcare system. Internships will be student initiated but must be approved by the student's health science advisor and the site supervisor.

Total Credits Allowed: 25.00