Health Science Pattern Descriptions

To provide the opportunity for students to explore and develop more specialized interests, the Health Science curriculum allows the selection of one career pattern ranging from 17-18 hours. Courses comprising the program patterns are based upon the recommendations of faculty members whose expertise is identified with these specialties. Individualized patterns may also be designed to meet personal goals. A list of specific courses required for each pattern may be obtained from the Health and Exercise Sciences program office or online at [http://hes.truman.edu](http://hes.truman.edu).

* Community Health/Public Health/Worksite Health (18 hours)

**Community Health** The Community Health Educator may be employed as a disease prevention/health promotion specialist in voluntary agencies (American Red Cross, American Heart Association, American Cancer Society, women’s health clinics, etc.), local agencies (private companies, HMO’s, PPO’s, hospitals, etc.), county or state agencies (health departments), or federal agencies (Centers for Disease Control and Prevention, U.S. Department of Health, etc.) The specific job may be a one-on-one approach (HIV/AIDS Educator) or it may involve an entire state, as in the case of coalition building. Leadership, ability to work independently, health knowledge, and access to a health resource library are the principle ingredients that make up the Community Health Educator. It is likely that a person in this position would be responsible for writing grant proposals or pursuing alternative sources of funding, especially when employed with voluntary agencies. In addition, the community health educator may have some research and writing responsibilities. Therefore, this individual should have excellent written and oral communication skills. The expectation of most employers is to minimize or prevent illness and injury through the assessment, planning, implementation, and evaluation of quality health education/health promotion programs.

**Public Health** The Public Health Specialist is interested in research and an epidemiological approach to controlling and educating communities about chronic and communicable diseases. It is expected that most students who desire to work in a public health setting will continue their education and earn a Masters in Public Health (MPH) program. However, there are several positions that might be considered by an individual with a Public Health emphasis at the Bachelors level. Local, state and federal agencies interested in collecting and compiling health data are continually looking for qualified individuals to function in entry-level positions. With the completion of an MPH, the graduate will be qualified for many upper-level research and management positions in Public Health. The U.S. Department of Health, Centers for Disease Control and Prevention, state and local health departments, and universities all seek candidates with this credential. Specific employment opportunities include teaching, research, data collection, and data analysis. Public Health requires a strong background in the sciences, statistics, health sciences, and social sciences. Employer expectations of graduates are to educate, identify, recommend, and promote quality health care in the defined area of employment.

**Worksite Health** The Worksite Health Educator/Health Promotion Specialist may be employed by a contractor, business, company, corporation, or federal agency. The environment for the Worksite Health Educator/Health Promotion Specialist is, to a large extent, contained within the facility of hire. However, this may involve many community outreach programs and collaboration with health personnel outside of the facility. The job of the Worksite Health Educator/Health Promotion Specialist is to reduce the cost of company health expenses, absenteeism, and overtime through assessment, planning, implementation and evaluation of illness and injury prevention programs for employees. With these expectations, the graduate must have a wide background in the sciences, health content areas, social sciences, and exercise programming. Therefore, the Worksite Health Educator/Health Promotion Specialist must have expertise in health content, exercise science, and program planning. They are expected to work independently and in a professional manner. The opportunities in this field have been steadily growing over the past decade and vary significantly from business to business. For example, some companies expect the health educator to emphasize fitness programs while others expect a total commitment to health content and employees’ skill development. However, there are many opportunities found in-between these two extremes.

* Health Administration (18 hours) The individual interested in Health Administration must be able to effectively serve as a supervisor or leader, while also answering to the organization or governing body of the particular health facility or voluntary health agency. Managers and supervisors in health administration positions may be called upon any time of the day to solve problems. Therefore the individual must be willing to be responsible for a facility that remains open 24 hours per day/7 days per week. This graduate will be prepared to manage a facility/organization/agency that employs a number of the community members from the higher socioeconomic groups (physicians, nurse managers, pharmacists, etc.) working as a team to provide care for the sick, injured, and debilitated. A variety of legal concerns come with the management of these facilities, rivaling any other form of management with regards to liability. The individual should be a highly motivated self-starter, able to resolve the daily management concerns associated with the health care industry. Additional qualities include an individual who stays in control under stress, one who possesses excellent communication skills, and has a good general knowledge of health facilities. Some of these qualities can be developed with time and education. Employment opportunities are found in voluntary agencies, long term care facilities, hospitals, non-for-profit organizations and state and federal agencies. Entry-level positions are typically found in personnel management, human resources or as an assistant administrator. To be successful, the graduate must have a solid background in human resources, legal aspects of health care, marketing, and
health services. Expectations of the employer are to hire an individual who can lead a health care organization in a competent and professional manner. Students must be accepted into the Business Administration minor before enrolling in any BSAD or ACCT course. A minor in Business Administration will be awarded to students who complete this pattern and satisfy all other requirements for the minor. Students must maintain a minimum cumulative GPA of 2.5 to remain in this pattern.

* Pre-Medical Sciences (17-18 Hours) The Pre-Medical Sciences pattern is designed for students preparing for a variety of careers in health-related fields. These pattern courses form a common core of classes for student interested in concentrations such as Pre-medicine, Pre-dental, Pre-optometry, Pre-Physician Assistant and Pre-nutrition. However, each student should understand the specific prerequisite courses for his or her desired field of study and specific graduate program upon graduation. The solid disease prevention and health promotion background provided by the Health Science major is excellent preparation for graduate or professional work in many health fields.

Students interested in attending allopathic or osteopathic medical schools must prepare for the Medical College Admission Test (MCAT), an admission requirement for medical school. Students will need to take additional courses beyond the pattern in chemistry and physics to prepare for the MCAT. The same is true of students seeking admission to dental school, who must take the Dental Admission Test (DAT) or optometry school, who must take the Optometry Admissions Test (OAT). Students interested in an advanced degree program leading to certification as a Physician Assistant should plan to gain experience in a clinical setting throughout their college experience. Physician Assistant graduate programs vary in requirements for patient contact hours (ranging between 750 to 2000 hours) prior to admission.

* Pre-Occupational Therapy (17-18 Hours) This pattern is designed to prepare a student for admission into a graduate program in Occupational Therapy. Through the required Health Science summer internship experience, students are required to complete a 200-hour clinical experience practicum. Course work includes human anatomy, courses in manual manipulation, kinesiology, and psychology. To be a viable candidate for admission to a graduate program in occupational therapy, a student should maintain a cumulative GPA of 3.25 or higher. Graduate admission is generally granted to students with a 3.5 GPA or higher. Students following this pattern are specifically prepared for coursework necessary to fulfill the prerequisites of an articulation agreement currently in place with a top occupational therapy graduate program. More information can be obtained on-line at http://hes.truman.edu/articulation.asp. (SOAN 190 Sociological Inquiry must also be completed to fulfill Intercultural Perspective/Required Support. MATH 198 Analytic Geometry & Calculus I is strongly recommended to fulfill the Mathematical Mode of Inquiry/Required Support.)

* Individualized (18 hours) The individualized pattern is designed to support the development of special health science areas not available from the normal selection (such as music or art therapy, or health psychology). This pattern must be relevant to the career goals of the student and must be one that would logically follow from the courses included with the major. This pattern is not a “catch-all” for courses taken that do not fit the published degree requirements. Individualized patterns must be submitted to the Program Director by the academic advisor for approval. The individualized pattern should be agreed upon early to facilitate course sequence planning.