

HEALTH SCIENCES (HS)

HS 161 Medical Terminology - 1 Hour

The course includes a study of terms relating to medical technology and practice, health sciences fields, and ancillary hospital services, including abbreviations, spelling, and pronunciation. Some individual computer work required. Offered fall semester Quad B for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 162 Introduction to Interprofessional Health Sciences - 1 Hour

This course serves as an introduction to the allied health care disciplines such as: Athletic Training, Occupational Therapy, Physical Therapy, and Physician Assistant, including the education prerequisite, curriculum, credentialing, licensing, and work conditions. Emphasis on students learning with, from, and about other professionals to enable effective collaboration among professionals to improve health outcomes and understanding of evidence-based practice. Discussion on planning and securing discipline specific clinical experiences during the student's undergraduate experience. Offered fall semester Quad A for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 165 Responding to Emergencies and Sport Safety Training - 3 Hours

Collegiate-level American Red Cross course that certifies participants in Community CPR, RTE First Aid, and Sport Safety Training. Includes the importance of a safe and healthy lifestyle, basic prevention and care of acute trauma injuries, sudden and chronic illnesses. Laboratory skills, practicum, and observation are included. Laboratory fee. Offered fall semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 168 Prevention and Care of Athletic Injury - 3 Hours

A lecture/laboratory approach providing foundation for pursuing a career in health sciences. A systematic approach to conditioning principles, emergency preparation, protective taping/wrapping skills, injury mechanism, resulting pathology, and care of injuries by participation of the physically active in sport/recreation. Emphasis on the application of evidence-based practice in recognizing and caring for injuries. Prerequisites: HS 165 or consent of instructor. Laboratory fee. Offered spring semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 201X Physiology of Exercise - 4 Hours

A systematic approach to the study of the function of the human body during physical activity and recovery. Emphasis is placed on how the physiology of the sedentary body responds and adapts to both acute and chronic workloads. The application of these principles to exercise prescription for the achievement of optimal fitness and athletic performance will be applied. Laboratory is included. Prerequisites: HS 165 and either BIO 140 or BIO 340-341, or consent of instructor. Laboratory fee. Offered spring semester for Deerfield traditional undergraduate. Cross-listed with BIO 201X. Delivery mode: Deerfield traditional undergraduate.

HS 202 Nutrition - 3 Hours

Effects of nutrition on performance and health emphasizing various methods of nutritional analysis, effects of current dietary practices, basic behavior modification techniques, nutritional needs of competitive and special populations, ergogenic aids and referral resources. Offered each semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate and Waupun Initiative.

HS 251 Kinesiology - 3 Hours

The purpose of this course is to study the human body from both the functional anatomy and biochemical perspectives. It will discuss the anatomical components of human movement, including bones, joints, nerves, and muscles, and move into the basic analysis of human motion through the use of biomechanical principles. An application of proper technique, with an emphasis of proper analysis and training techniques for movement effectiveness, efficiency, and injury prevention will introduce students to the kinesiology analysis method of movement, analyzing a broad range of movements throughout the course of the semester. Prerequisites: BIO 140 or BIO 340. Offered Spring semester for Deerfield traditional undergraduate. Instructional fee. Delivery mode: Deerfield traditional undergraduate.

HS 305 Health Science Applications - 1-4 Hours

In-depth instructional, teaching, or laboratory experience designed to enhance the student's expertise, critical thinking, laboratory and communication skills in any of several areas. May be repeated for credit. Prerequisite: invitation of instructor. Instructor's consent by signature required. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 350 Topics in Health Sciences - 3-4 Hours

Utilizing the current literature, this course examines an advanced topic in a field of health sciences. Prerequisites: BIO 111, and either CH 157 or CH 111-CH 112, or consent of the instructor. Course may be repeated with different topic. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 351 Biomechanics - 4 Hours

Theory and application of the interrelationships of the anatomical and mechanical principles governing human movement. Emphasis is placed on activities of sport and daily living. Laboratory is included. Prerequisites: HS 165 and HS 251 or consent of instructor. Laboratory fee. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 360 General Medical Conditions in the Physically Active - 3 Hours

The course covers the knowledge, skills, and values that an allied health professional will use to recognize, treat, and refer when appropriate the general medical conditions of physically active individuals. Major areas of study include various body systems, common illnesses and ailments, and athletic implications for common medical conditions, such as diabetes, asthma, and weather-related illnesses. Prerequisite: HS 168. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 365 Motor Learning and Lifespan Development - 3 Hours

A study of basic principles of motor learning and motor development as they relate to human voluntary movement across lifespan. This course is designed to provide theory and application related to the process of acquiring functional motor skills, the performance enhancement of learned or highly experienced motor skills, or the re-acquisition of skills that are difficult to perform or cannot be performed because of injury or disease. Additional emphasis on how to create and implement developmentally appropriate movement programs. Delivery mode: Deerfield traditional undergraduate.

HS 370 Introduction to Therapeutic Modalities and Rehabilitation - 3 Hours

A lecture/laboratory course designed to introduce the basic theory and application of therapeutic modalities and rehabilitation. Emphasis on tissue healing, functional progression, pain control, indications, contraindications, protocols, and the body's response to therapeutic agents and exercise. Prerequisites: HS 168 or consent of instructor. Laboratory fee. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 380 Advanced Functional Anatomy - 3 Hours

This course provides an advanced study of the functional anatomy of the human body through the interrelationship of structure and function. An emphasis on how injury, illness, and disease impact the ability of the human body to perform activities of daily living. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 402 Sport Nutrition - 3 Hours

This course will examine the different physiological relationships between nutrition and exercise. Emphasis is placed on the body's metabolic response to a wide range of stresses that occur in different sports and activities, at different intensities, and within different environments. Macro and micronutrients and their respective roles in energy production and the development of improved athletic performance are discussed in detail. In addition, this course will study those methods of assessing an athlete's nutritional needs and status. Prerequisites: HS 201X; HS 202. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 446 Field Internship - 1-12 Hours

Professional internship experience in an applied field under the dual supervision of a Trinity College faculty member in the Division of Science Technology and Health and a practicing on-site professional. May be repeated for credit. Prerequisites: departmental approval and current Community First Aid and CPR certification (or acceptable equivalent). Planning placement options with the instructor one semester prior to enrollment is required. Satisfies the Professional Experience Requirement. Offered each semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 450 Independent Study - 1-4 Hours

Research and specialized studies designed to meet the needs of individual students. Prerequisite: consent of instructor. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 454 Measurement, Research, Statistics and Technology - 3 Hours

A lecture/laboratory approach to the measurement techniques, instruments, research methodology, and technology used in the fields of human performance and wellness/health sciences. The course focuses on test selection/construction criteria, standardized tests, and techniques employed in the measurement of the cognitive, affective, and psychomotor domains. Common statistical models will be used to evaluate the measurement results and to apply them in the processes of exercise prescription and wellness counseling. Includes hands on activities and personal application experiences. Prerequisites: HS 201X and MA 285X. Instructional fee. Offered fall semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 455 Advanced Strength Training and Program Design - 3 Hours

This course explores the scientific foundations of strength training and conditioning and allows students to develop their skills in program development in applied physical training for specific performance populations. It prepares students for the Certified Strength and Conditioning Specialist (CSCS) exam. The CSCS credential identifies those individuals who have knowledge in scientific foundations of strength and conditioning as well as the skills to apply that knowledge in a practical format. Prerequisites: HS 351, or consent of instructor. Offered fall semester in even numbered years for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 456 Administration in Health Sciences - 3 Hours

A capstone course covering theories, procedures, and decision-making skills for management of various institutions and agencies in the fields of human performance and wellness/health sciences. Topics include organization, personnel, facilities and equipment, legal issues, budget and accounting, ethics, and meeting the needs of the consumer. Prerequisites: BIO 140 or BIO 340-341, HS 201X or consent of instructor. Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 470 Undergraduate Research - 1-4 Hours

A course involving clinical, laboratory or library investigation of a research problem under faculty supervision. Course requirements include a literature survey, research, a written formal report, and oral presentation of results in either the Health Sciences (HS 490), Biology (BIO 410), or Chemistry (CH 410) Seminar courses. Prerequisites: HS 168 and at least one of the following: BIO 340-BIO 341, HS 261-HS 262. Instructor's consent required. May be repeated for credit. (A laboratory fee may be required, depending on the nature of the project.) Offered on demand for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.

HS 480 Professional Rotation in Health Sciences - 1-6 Hours

This course is a supervised experience in one or more professional environment(s) which demonstrates the student's ability to relate knowledge and skills developed in the major to practical tasks in the workplace or clinical setting. Open to majors in the Health Sciences department or by consent of instructor. Planning placement options with the instructor one semester prior to enrollment is required. Satisfies the Professional Experience Requirement. Prerequisites: HS 168, current Community First Aid, and CPR certification (or acceptable equivalent). Offered each semester for Deerfield traditional undergraduate. Laboratory fee. Delivery mode: Deerfield traditional undergraduate.

HS 490 Seminar in Interprofessional Health Sciences - 1 Hour

This course includes presentations and discussions of selected papers, topics of current interest in health sciences, student research projects, and invited guest speakers representing the variety of professions within the department. Emphasis on interprofessional practice, ethical decision-making processes, and preparation to enter the discipline-specific workforce to enable effective collaboration and improve health outcomes. Prerequisite: major in the discipline or consent of the department chair. This course fulfills the IDS 499X Integrative Thought Capstone requirement for students in the Exercise Science major. Offered spring semester for Deerfield traditional undergraduate. Delivery mode: Deerfield traditional undergraduate.