

Projects may include an exhibition or installation, a written thesis with a public defense, community-based research, web-based publication, and/or other forms of public dissemination. Through both inventive and interpretive participation in visual arts activities, students will demonstrate skills in critical thinking, creative problem-solving, and intra/inter personal communication.

ART 405 ART STUDIO WORKSHOP (1-3) *Prerequisites: Basic art experience and approval of the instructor.* This course is an on- or off-campus activity in studio art workshops under specialized instruction (drawing, painting, printmaking, sculpture, ceramics, crafts, photography). The student will be responsible for related expenses. Satisfactory/Unsatisfactory credit only.

ART 407 PORTFOLIO PREPARATION (2) *Prerequisites: ART 152, 156, and 294.* This course focuses on student development of building a professional portfolio (print and electronic). Students will explore self-promotion and prepare for a career or further study in graphic design.

ART 408 GRAPHIC DESIGN STUDIO I (1) *Prerequisites: ART 152, 156, and 294.* This advanced studio course focuses on independently solving design problems. This course gives students the freedom and responsibility to pursue practical project work and research, to reflect their personal direction. It also prepares students for the capstone Graphic Design Studio II course.

ART 409 GRAPHIC DESIGN STUDIO II (3) *Prerequisites: ART 152, 156, 294, 394, 407, and 408.* This culminating course in graphic design explores issues pertaining to design and society while concentrating on the development of creativity, emphasis on pre-professional training in advanced design problems, research, writing, presentation, and related professional skills. This course gives students the freedom and responsibility to pursue practical project work and research, to reflect their personal direction. Interdisciplinary course work may be appropriate.

ART 411 SUPERVISED PRACTICUM: CAMPUS PUBLICATIONS (1-3) Enrollment in these courses is limited to students holding art offices on the editorial or related staffs of the *Critograph*, *Argonaut*, or *Prism*. Requirements and hour designations are established between instructor and student on an individual basis. Satisfactory/Unsatisfactory credit only.

ART 480 DESIGN PRACTICUM (3) *Prerequisite: a background of working in the discipline and consent of instructor.* This course provides students with professional practice in graphic design. Practical work experience in the course includes client work approved by art faculty. The course functions much like a professional design agency where students maintain clients, and learn about account management, and production. Students will gain an understanding of professionalism and business knowledge while providing a service that would strengthen their portfolio.

ATHLETIC TRAINING COURSES (A T)

A T 100 INTRODUCTION TO ATHLETIC TRAINING (3) This course is an introductory course to the fundamentals of athletic training. This course introduces concepts and practical skills of athletic training, including the prevention, recognition, evaluation, and management of orthopedic injuries and general medical conditions. Course fee required.

A T 175 BASIC ATHLETIC TRAINING SKILLS (3) This course provides students with the skills and knowledge needed to maximize the benefit of athletic training clinical education. Some of the skills included in this course are taping, wrapping, protective padding fabrication, protective equipment fitting and modality application. Course fee required.

A T 200 CLINICAL EDUCATION I (2) *Corequisites or Prerequisites: A T 100, 225 and permission of instructor.* This course is designed to allow students to become familiar with certified athletic trainers (ATs) and healthcare professionals with whom athletic trainers interact. Students will complete assigned clinical hours of experience through one or more rotations. This experience will help students understand each professional's role in caring for patients. Students will become proficient in injury prevention and prophylactic skills as part of this course.

A T 225 SAFETY AND THE MANAGEMENT OF HEALTH EMERGENCIES (2) This course surveys principles and management, accident and injury prevention, professional liability, and appropriate techniques for managing emergencies. Course fee required.

A T 240 **CLINICAL EDUCATION II (2)** *Corequisite or prerequisite: A T 200 and permission of instructor.* Students will gain experience with athletic trainers and other healthcare professionals in the clinical setting. Students will complete assigned clinical hours of experience through one or more rotations. The purpose of the rotations is to give students an opportunity to gain clinical experience observing, treating both male and female patients, and become proficient in acute care athletic training skills.

A T 325 **EXAMINATION TECHNIQUES I & LAB (4)** *Prerequisites or corequisites: BIOL 222/222L, 223/223L.* Students will learn appropriate injury examination techniques for the lower extremity. The anatomy of the lower extremities will be reviewed, mechanisms of injury analyzed, basic concepts in examination discussed, and skills necessary to accurately examine musculoskeletal injuries of the lower extremities practiced. Documentation in athletic training will be discussed and practiced. Extensive time will be spent practicing skills in various laboratory activities.

A T 326 **EXAMINATION TECHNIQUES II & LAB (4)** *Prerequisite: A T 325.* Students will learn appropriate injury assessment techniques for the upper extremity, head, neck, and abdomen. The anatomy of the upper extremities will be reviewed, mechanisms of injury analyzed, basic concepts in examination discussed, and skills necessary to examine musculoskeletal injuries of the upper extremities accurately practiced. Documentation in athletic training will be discussed and practiced. Extensive time will be spent practicing skills in various laboratory activities.

A T 340 **CLINICAL EDUCATION III (2)** *Prerequisite: A T 240.* Students will gain experience with preceptors in an athletic training setting and complete assigned clinical hours of experience through one or more rotations. The purpose of the rotation(s) is to give students an opportunity to gain experience practicing skills on patients. Students are also given an opportunity to become proficient in athletic training skills related to the assessment of injuries.

A T 342 **CLINICAL EDUCATION IV(2)** *Prerequisite: A T 340.* Students will gain experience with preceptors in an athletic training setting and complete assigned clinical hours of experience through one or more rotations, the purpose of which is to give students an opportunity to practice athletic training skills on patients. This course provides the students with the opportunity to become proficient in athletic training skills related to therapeutic interventions.

A T 344 **GENERAL MEDICAL CLINICAL ROTATION IN ATHLETIC TRAINING (1)** *Prerequisite: AT 340. Corequisite or prerequisite: EXPH 330.* Students will gain experience through observation and interaction with medical professionals that assess and treat general medical illnesses and injuries. Students will observe physicians, nurse practitioners, and/or physician assistants who work in primary care settings.

A T 350W **THERAPEUTIC INTERVENTIONS I [Writing Enriched] (3)** *Prerequisites: AT 100, BIOL 222/222L, 223/223L, and ENGL 111W-112W or ENGL 223W.* Therapeutic exercise and how it affects tissue healing and its role in the treatment of injuries will be examined. Basic components, design, and implementation of rehabilitation programs will be discussed and practiced. Therapeutic modalities will be introduced.

A T 351 **A T 351** **THERAPEUTIC INTERVENTIONS II (3)** *Prerequisites: A T 100, BIOL 222/222L, 223/223L.* This course will review therapeutic exercise and it will provide an advanced study of therapeutic modalities in the field of athletic training. The indications, contraindications, and effects of physical agents such as ice, heat, electrical stimulation, and ultrasound will be studied. Students will have an opportunity to practice skills necessary to use modalities effectively.

A T 397 **INDEPENDENT STUDY IN ATHLETIC TRAINING (1-3)** *Prerequisites: Approval of faculty sponsor and school dean; junior or senior standing.* This course provides students the opportunity to pursue individual study of topics not covered in other available courses. The area for investigation is developed in consultation with a faculty sponsor and credit is dependent on the nature of the work. May be repeated for no more than six credits.

A T 398 **SPECIAL TOPICS IN ATHLETIC TRAINING (1-3) [credit depends on topic]** *Prerequisite: A background of work in the discipline.* This course will focus on an aspect of the discipline not otherwise covered by the regularly offered courses. The topic will vary according to professor and term; consequently, more than one may be taken by a student during his/her matriculation.

A T 415 **INTERNSHIP IN ATHLETIC TRAINING (1-12)** *Prerequisites: AT 342 and approval of faculty sponsor.* This course offers a professional internship within an appropriate athletic training/healthcare setting. The student and the faculty sponsor will agree on the location and the responsibilities of the intern.

A T 425 **ADMINISTRATION OF ATHLETIC TRAINING PROGRAMS (3)** *Prerequisite: A T 342.* This course is designed to cover a wide range of administrative topics in the health care professions. At the conclusion of the course students will be familiar with the multitude of management and administrative techniques that are required by the athletic trainer. The student will have a plan for addressing administrative issues at the completion of this course.

A T 440 **CLINICAL EDUCATION V (2)** *Prerequisite: A T 342.* Students will gain experience in a clinical setting and complete assigned clinical hours of experience through a single rotation. The purpose of this course is to give students an experience which will help prepare them for the professional responsibilities they will assume as graduate assistants or as employed certified athletic trainers.

A T 450W **EVIDENCE BASED RESEARCH METHODS IN ATHLETIC TRAINING [Writing Enriched] (3)** *Prerequisites: A T 342, and ENGL 111W-112W or ENGL 223W.* This capstone course is designed to give students a background in the research process and in evidence-based medicine. Students will be expected to integrate knowledge and skills obtained from prior courses to develop a research question. The students will then conduct research which includes an IRB proposal, data collection, data analysis, and writing a research manuscript.

BIOLOGY COURSES (BIOL)

BIOL 101 **BIOLOGICAL INQUIRY (4)** In this course, students will explore a topic in biology as impetus to learning about scientific discovery. The primary emphases in this course include scientific ways of knowing, causal and correlational relationships, reasoning, and interpreting data from either personal or published data.

BIOL 113 **EVOLUTION, ECOLOGY, AND ORGANISMS (4)** Three hours of lecture and three hours of laboratory. The emphasis of this course is on the fundamentals of the relationships among organisms and their environment. This course serves primarily as the first part of a two-semester introduction for those students planning to major in biology or biomedical sciences.

BIOL 114 **CELLS: GENETIC AND MOLECULAR PERSPECTIVES (4)** Three hours of lecture and three hours of laboratory. Understanding of organismal structure and function is based on knowledge of the underlying cellular and molecular structure and function. These in turn are controlled by the genetic mechanisms that determine cellular structure and behavior. The relationships among cells, molecules, and their genetic controls are the focus of this course. This course serves primarily as the second part of a two semester introduction for those students planning to major in biology or biomedical sciences.

BIOL 205 **PLANT BIOLOGY (4)** *Prerequisites: BIOL 113-114 or ENVS 101/101L-102/102L.* Three hours lecture and three hours laboratory. This course examines the evolution, structure, function, physiology, basic ecology, and life histories of organisms traditionally studied in the context of botany, including photosynthetic bacteria, protists, plants, and fungi. Labs complement lecture content, providing opportunities to gain skills in microscopy, morphology, ecology, and classification.

BIOL 210 **ANIMAL BIOLOGY (4)** *Prerequisites: BIOL 113-114 or ENVS 101/101L-102/102L.* Three hours lecture and three hours laboratory. Introduction to the structure, function, and ecology of the major groups of protozoans and animals within the context of a modern phylogenetic perspective. Special emphasis is placed on the modification of structure and function by natural selection within different animal groups as adaptations to specific physiological and ecological constraints.

BIOL 214 **HUMAN ANATOMY (3)** Three hours lecture. This course is a study of the structures of the body with emphasis on the organ systems involved in movement. Introductory material focuses on terminology, examining the hierarchical organization of the body and study of the four major tissues of the body. Subsequently, the interrelationships among the bones, joints, muscles, nerves, and blood supply of each body region are examined using a regional approach. This course is designed to meet the outcomes expected for pursuing upper-level courses in the HMSR majors.