Academic Programs

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 designed to introduce students to the profession of athletic training and other healthcare professions, so students will understand the similarities, differences, and relationship of athletic training to other healthcare professions. 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 FIELD EXPERIENCE 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 (ATCs) and healthcare professionals with whom athletic trainers interact. Students will complete one hundred hours of experience through two or more rotations. This experience will help students understand each professional’s role in caring for injured athletes and physically active individuals. Students will become proficient in injury prevention skills as part of this course.

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

A T 240 CLINICAL EDUCATION I (2) Corequisites or prerequisites: A T 100, A T 225 and permission of instructor. Students will gain experience with athletic trainers in a traditional athletic training setting and/or with physical therapists in a clinical setting. Students will complete one hundred hours of
experience through two or more rotations. The purpose of the rotations is to give students an opportunity to observe ATs and/or PTs in traditional and clinical settings, gain experience observing and treating both male and female athletes, and become proficient in acute care athletic training skills.

**A T 325**  
**ASSESSMENT TECHNIQUES OF LOWER BODY INJURIES (3)** Corequisite or prerequisites: BIOL 214, 215. Students will learn appropriate injury assessment techniques for the lower extremity. The anatomy of the lower extremities will be reviewed, mechanisms of injury analyzed, basic concepts in assessment discussed, and skills necessary to accurately evaluate musculoskeletal injuries of the lower extremities practiced. Documentation in athletic training will be discussed and practiced.

**A T 326**  
**ASSESSMENT TECHNIQUES FOR UPPER BODY INJURIES (3)** Prerequisite: A T 325. Students will learn appropriate injury assessment techniques for the upper extremity. The anatomy of the upper extremities will be reviewed, mechanisms of injury analyzed, basic concepts in assessment discussed, and skills necessary to evaluate musculoskeletal injuries of the upper extremities accurately practiced. Documentation in athletic training will be discussed and practiced.

**A T 340**  
**CLINICAL EDUCATION II (2)** Prerequisite: A T 240. Students will gain experience with the Lynchburg College athletic training staff in a traditional athletic training setting and complete 150 hours of experience through two rotations. The purpose of the rotations is to give students an opportunity to gain experience with athletic teams considered at high and low risk for developing injuries. Students are also given an opportunity to become proficient in athletic training skills.

**A T 342**  
**CLINICAL EDUCATION III (2)** Prerequisite: A T 340. Students will gain experience with the Lynchburg College athletic training staff in a traditional athletic training setting and complete 150 hours of experience through two rotations, the purpose of which is to give students an opportunity to gain experience with athletes who may incur upper-extremity and lower-extremity injuries. This course provides the students with the opportunity to become proficient in athletic training skills.

**A T 344**  
**GENERAL MEDICAL CLINICAL ROTATION IN ATHLETIC TRAINING (1)**  
Prerequisite: A T 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 350**  
**THERAPEUTIC EXERCISE FOR ATHLETIC INJURIES (3)** prerequisites: AT 100, BIOL 214, 215. Therapeutic exercise and how it affects tissue healing and its role in the treatment of athletic injuries will be examined. Basic components, design, and implementation of rehabilitation programs will be discussed and practiced.

**A T 351**  
**THERAPEUTIC MODALITIES FOR ATHLETIC INJURIES (3)** prerequisites: A T 100, BIOL 214, 215. This course provides advanced study of the use 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)** Pre-requisites: 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] Pre-requisite: 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)** Pre-requisites: 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.
Academic Programs

A T 425  ADMINISTRATION OF ATHLETIC TRAINING PROGRAMS (3) Prerequisite: A T 342. This course is designed to cover a wide range of athletic training administrative topics. At the conclusion of the course students should be familiar with the multitude of issues which face the athletic trainer who directs an athletic training program. The student should have a plan for addressing administrative issues.

A T 440  CLINICAL EDUCATION IV (2) Prerequisite: A T 342. Students will gain experience in a traditional athletic training setting and complete 150 hours of experience through a single rotation. The purpose of this course is to give students an opportunity to assume the responsibility of serving as “head” athletic training student, an experience which will help prepare them for the advanced responsibilities they will assume as graduate assistants or as employed certified athletic trainers. This course also allows students an opportunity to become proficient in athletic training skills.

A T 450  CURRENT ISSUES AND RESEARCH IN ATHLETIC TRAINING (3) Prerequisite: A T 342. This capstone course is designed to familiarize students with current issues in athletic training and to acquaint them with athletic training research. Students will be expected to integrate knowledge obtained from prior courses in discussion and writing on many issues and research topics in athletic training.

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 (3) Three hours lecture. 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 (3) 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.

BIOL 214L  HUMAN ANATOMY LABORATORY (1) Corequisite or prerequisite: BIOL 214. Three hours laboratory. The primary goal of the laboratory course is to provide a hands-on opportunity for students to apply the terminology and concepts covered during lecture. Accordingly, physical models, dissection, computer software, and Internet resources are used as part of a problem-solving pedagogy in which collaborative learning is emphasized.