### **Human Body Systems**

<u>Prerequisites:</u> Students must have taken scored a 75 or better in all courses in the Biomedical Science program.

Medical Interventions (MI) Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Student must have taken either PBS or HBS.

At the end of this course, students will take an end of course assessment. Students who score a 6 on this exam will receive dual credit course weighting.

### Medical Terminology

Prerequisites: Must have passed Principles of Biomedical Science and Human Body Systems with a 75 or higher

Medical terminology is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts.

# Sports Medicine



### Sports Medicine I

This course is an introduction for students interested in career opportunities available as athletic trainers, physical therapists and physicians in the sports medicine field. Students learn basic anatomy and physiology as it relates to principles of conditioning and the treatment of athletic injuries. Instruction also includes CPR/AED, first aid and taping. General principles for the prevention, care and rehabilitation of injuries are emphasized during practicums.

## Sports Medicine II

#### Prerequisite: Sports Medicine I; acceptance to Sports Medicine STEM major

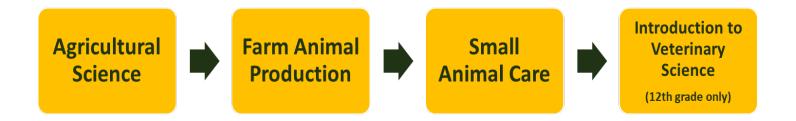
This course is designed as a continuation of Sports Medicine 1 for students interested in career opportunities available as athletic trainers, physical therapists and physicians in the sports medicine field. Students are instructed in basic body anatomy and physiology as it relates to principles of conditioning and the treatment of athletic injuries. Students study both protective and supportive devices used in prevention and care of athletic injuries.

#### Medical Terminology

# <u>Prerequisites:</u> Must have passed Health Science I, Health Science II, Sports Medicine I and/or Sports Medicine II with a 75 or higher

Medical terminology is designed to develop a working knowledge of the language of health professions. Students acquire word-building skills by learning prefixes, suffixes, roots, combining forms, and abbreviations. Utilizing a body systems approach, students will define, interpret, and pronounce medical terms relating to structure and function, pathology, diagnosis, clinical procedures, and pharmacology. Students will use problem-solving techniques to assist in developing an understanding of course concepts.

## Veterinary Science



## Agriculture Science

The Agricultural Science and Technology course is designed to teach essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Emphasis is placed on the role of agriculture in our society and the importance of agriculture to the welfare of the world. Basic personal and community leadership and safety, and agricultural mechanical technology are included as a part of the instructional program. Each student is expected to design and participate in a supervised agricultural experience.

Typical learning activities include hands-on learning experiences including performing basic principles of plant, soil, and animal science; studying and modeling the significance of humankind's interrelationship with soil, water, and air; participating in FFA activities.

### Farm Animal Care

#### **Prerequisites:** Agriculture Science

The Farm Animal Production course is designed to teach technical knowledge and skills for entry-level positions in an animal production enterprise by developing competencies concerning the selection, breeding, physiology, nutrition, health, housing, feeding, and marketing of farm animals.

Typical instructional activities include hands-on experiences with the principles and practices essential in the production and management of farm animals and farm animal products for economic, recreational, and therapeutic uses; participating in personal and community leadership development activities; planning and implementing a relevant school-to-work transition experience; and participating in FFA activities.