Biomedical Sciences

BIOMEDICAL SCIENCES: THIS PROGRAM OFFERS A SEQUENCE OF COURSES THAT PROVIDES STUDENTS WITH A FOUNDATION OF KNOWLEDGE AND TECHNICALLY ORIENTED EXPERIENCES IN THE STUDY AND APPLICATIONS OF BIOMEDICAL SCIENCES AND THE POSSIBILITIES IN THE BIOMEDICAL FIELD. THESE SEQUENCES OF FOUR COURSES INCLUDE PRINCIPLES OF THE BIOMEDICAL SCIENCES, HUMAN BODY SYSTEMS, MEDICAL INTERVENTIONS, AND BIOMEDICAL INNOVATIONS. THE TEACHING APPROACH IS STUDENT DRIVEN, ACTIVITIES-BASED, AND PROJECT-BASED, WHILE INCORPORATING PROBLEM-BASED LEARNING. THIS PROGRAM IS DESIGNED FOR THE COLLEGE-BOUND STUDENT INTERESTED IN HEALTH CARE. THESE STUDENTS ALSO PARTICIPATE IN THEIR CAREER STUDENT ORGANIZATION, HEALTH OCCUPATIONS STUDENTS OF AMERICA (HOSA).

BIOMEDICAL SCIENCES ACADEMY (PROJECT LEAD THE WAY)

9TH GRADE PRINCIPLES OF BIOMEDICAL SCIENCE: THIS COURSE LAYS THE FOUNDATION FOR THE SUBSEQUENT COURSES. TOPICS INCLUDE: INVESTIGATING CRIME SCENE, DIAGNOSING & PROPOSING TREATMENT TO PATIENTS, TRACK DOWN AND CONTAIN A MEDICAL OUTBREAK, ETC.

10TH GRADE HUMAN BODY SYSTEMS: THIS COURSE EXPLORES IDENTITY, POWER, MOVEMENT, PROTECTION, AND HOMEOSTASIS. THIS IS A GREAT COMPLIMENT TO ANATOMY & PHYSIOLOGY MATERIAL.

11TH GRADE MEDICAL INTERVENTIONS: THIS COURSE INVESTIGATES THE WIDE VARIETY OF PREVENTIVE AND TREATMENT ACTIONS AVAILABLE TO PROLONG AND IMPROVE THE QUALITY OF LIFE.

12TH GRADE BIOMEDICAL INNOVATIONS: THIS COURSE ANSWERS QUESTIONS AND SOLVES PROBLEMS RELATED TO BIOMEDICAL SCIENCES. THIS CLASS COVERS INNOVATIVE SOLUTIONS FOR CHALLENGES IN HEALTHCARE IN THE 21ST CENTURY.

** ALL COURSES IN BIOMEDICAL SCIENCES EARN HONORS CREDIT*

Escambia County Public Schools does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, genetic information, or marital status in its employment practices or in the admission and treatment of students.

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THE WEST FLORIDA WAY

West Florida High School of Advanced Technology is an innovative high school focused on providing a unique, comprehensive, useful education that will lead to lifelong personal, career, and professional accomplishments. WFHS is looking for students who are motivated, ambitious, and eager to succeed in college and/or career fields.

HEALTH SCIENCE ACADEMIES
ESI SHANNON, PRINCIPAL
150 E. Burgess Road
Pensacola, FL 32503

West Florida High School of Advanced Technology

WEST FLORIDA HIGH SCHOOL OF ADVANCED TECHNOLOGY

Academy of Critical Care & Emergency Medicine

Academy of Biomedical Sciences

Academy of Pre-Professional Nursing

Academy of Sports Medicine

HEALTH SCIENCE ACADEMIES

Sports Medicine

Instructor: Jessica Rutherford, JRutherford@ecsdfl.us

This program educates and trains students in the broad field of sports medicine, including skills in the prevention and treatment of injuries, physical therapy, rehabilitation, and occupational therapy. Hands-on labs are instrumental in giving students real-life experiences.

9th Grade: Health Science I - An introduction to Human Anatomy and Physiology.

10th Grade: Health Science 2 – Foundations of Healthcare - This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of health care systems and associated occupations.

11th Grade: Exercise Science - This course introduces students to the scientific principles behind human movement, physical fitness, and performance. It explores foundational topics including anatomy and physiology, kinesiology, biomechanics, exercise physiology, nutrition, and injury prevention. Emphasis will be placed on critical thinking, wellness, and evidence-based practices in sports and fitness. This course is ideal for students interested in careers in athletic training, physical therapy, sports medicine, personal training, and related health fields.

12th Grade: Allied Health/Directed Study - Prepares students for employment as an allied health aide, athletic training student aide, medical assistant, occupational therapy aide, physical therapy aide, respiratory therapy aide, or radiologic aide. Students will perform skills representative of at least, but not limited to, three areas of allied health care in the laboratory and clinical settings.

Academy of Critical Care and Emergency Medicine

Instructor: Kelly Derbes, KDerbes@ecsdfl.us

This program is designed to prepare students to respond to and evaluate medical and trauma emergencies in adults and children. Students learn to assess, stabilize, package, and transport critically ill and injured patients to appropriate emergency facilities, and to assist in the transition from out-of-hospital environments to in-hospital care. Clinical experience includes rotations in intensive care units, emergency rooms, and recovery rooms, as well as ride-alongs with Escambia County Emergency Medical Services. This will also include direct patient care experience in multiple critical care settings. Students will have the opportunity to take the following certifications: NHA Certified EKG Technician and Emergency Medical Responder, Florida Certified Nursing Assistant, Certified Patient Care Technician, Certified Medical Administrative Assistant, Certified Medical Assistant, and Certified Pharmacy Technician exams.These students also participate in their Career Student Organization: Health Occupations Students of America (HOSA).

9th Grade: Health Science I - An introduction to Human Anatomy and Physiology.

10th Grade: Health Science 2 – Foundations of Healthcare - This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of health care systems and associated occupations.

11th Grade: EKG Aide - This course provides technical skill proficiency and includes competency-based applied learning that contributes to academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of Electrocardiograph testing. Medical Terminology and Medical Math are also an integral part of the course.

12th Grade: Critical Care Senior Class – Emergency Medical Responder 3 - The culmination class in the Academy of Critical Care and Emergency Medicine. Seniors learn to care for seriously injured victims and Ride with Escambia County EMS for clinical experience. Seniors may be certified as EMT's, EMR's, CCMA's, and EKG Technicians.

Pre-Professional Nursing

Instructor: Gail Ewing, GEwing@ecsdfl.us

This program is designed to prepare students to take the Florida Certified Nursing Assistant, Certified Patient Care Technician, Certified Home Health Care Aide, Certified Medical Administrative Assistant, Certified Medical Assistant, and Certified Pharmacy Technician exams. Students are then prepared for employment in long-term or acute care facilities, as well as continuation in post-secondary education. Nurse assistant skills are taught in the classroom by a registered nurse. In the second semester of the pre-nursing students' senior year, students practice these skills in a health care facility under the guidance of registered nurses. Students spend 40 hours providing direct patient care in the clinical setting under the supervision of a registered nurse. In addition, the Florida State Board of Nursing certifies the Pre-Professional Nursing career program.

9th Grade: Health Science I - An introduction to Human Anatomy and Physiology.

10th Grade: Health Science 2 – Foundations of Healthcare - This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of health care systems and associated occupations.

11th Grade: EKG Aide - This course provides technical skill proficiency and includes competency-based applied learning that contributes to academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, occupation-specific skills, and knowledge of all aspects of Electrocardiograph testing. Medical Terminology and Medical Math are also an integral part of the course.

12th Grade: Pre-Nursing (Senior Class) – Nursing Assisting 3/HSE Directed Study - This is a course designed to prepare the student to provide/assist with all aspects of activities of daily living for the adult patient in both hospital and nursing home settings. This course, which is taught by a registered nurse, includes didactic instruction, skills practice in the laboratory, and clinical experience. Emphasis is also placed on the development of communication, interpersonal, problem solving, and critical thinking skills.