# GE COURSE DESCRIPTION

## GE 101- Human Anatomy and Physiology

This course emphasizes the principles of human anatomy and includes an overview of all body systems, organs, tissues, and cells with focus on major biochemical, mechanical and cellular biology theories. Topics dealing with the nature of science, human genetics and development are included. The course offers a comprehensive study of human physiology. Included is an overview of structure and functions of all body systems, organs, tissues, and cells. This course focuses on the function of the integumentary, skeletal, muscular, respiratory, cardio-vascular, immune systems, as well as endocrine, nervous, urinary, digestive, and reproductive systems.

## **GE 102 – College Math**

This course is designed primarily for students who know the fundamentals of arithmetic and have had little or no background in algebra. The course strengthens the student's arithmetic and informal geometry skills, provides an introduction to the abstractions of algebra using fundamental principles of rational numbers, order of operations, and solution of linear equations. Upon course completion, the student will be able to solve mathematical problems applicable to theory and practice of diagnostic medical sonography.

#### GE 103 – General Physics

This is an introductory course designed to provide students with a comprehensive understanding of the fundamental principles and concepts of physics. Through a combination of lectures, demonstrations, and laboratory experiments, students will explore various topics in classical mechanics, electromagnetism, thermodynamics, optics, and modern physics.

The course begins with an overview of basic concepts such as motion, forces, energy, and momentum, laying the foundation for more advanced topics. Students will learn to apply mathematical tools and problem-solving techniques to analyze and solve problems related to motion, forces, and energy conservation.

As the course progresses, students will delve into more complex topics such as electricity and magnetism, wave phenomena, and the behavior of light. By the end of the course, students will have gained a solid understanding of the principles of physics and their applications in various scientific and engineering disciplines. This course serves as a prerequisite for more advanced US205 course, physics and related fields, preparing students for further study and careers in Medical Imaging.

#### **GE 104 – Oral Communication**

This introductory course is designed to provide students with greater skills in all aspects of oral presentation. The course enables students to prepare effective speeches, emphasizing the relevant elements of public speaking. The process of preparing a presentation is covered, including topic selection, development, research, organization, language, and delivery of speeches for many types of audiences and occasions. The course will focus on building self-confidence of the students by presenting them the appropriate techniques to deliver informative and persuasive oral presentations. Upon course completion, the student will be able to prepare and deliver job related oral communications.

## GE 105 – Medical Terminology

This is a foundational course designed to provide students with a comprehensive understanding of the language used in various healthcare settings. Through a combination of lectures, interactive activities, and practical exercises, students will learn to decipher and interpret medical terms commonly encountered in medical records, diagnoses, and procedures.

The course covers the fundamental components of medical terminology, including of prefixes, suffixes, and root words, and explores their meanings and applications in the context of anatomy, physiology, pathology, and medical procedures. Students will also learn about the structure and organization of medical terms, enabling them to construct and analyze complex medical vocabulary.

By the end of the course, students will be proficient in deciphering medical terms, understanding their meanings, and effectively communicating within healthcare environments. This course serves as a solid foundation for students pursuing careers in various healthcare professions, including nursing, diagnostic Medical Sonography, and allied health fields.

