



## Institute of Ultrasound Diagnostics

### Prerequisite Courses



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#### Prerequisite Courses Offered By IUD

Prerequisite courses begin the start of each calendar quarter (Jan, April, July, Oct.) and run 12 weeks. Important note regarding IUD pre req classes. These pre req course will meet the IUD One year program requirements, however, they may not be accepted by other institutions for credit. It will be up to those other institutions as to whether or not they will accept our pre req course. There is no financial aid available for pre req course.

#### Medical Ethics

Course Description: This course discusses current issues and concepts to help prepare students for many common ethical issues related to health care professions. Students will develop essential vocabulary to understand and evaluate legal, political, and ethical challenges facing health care professionals.

Course Objectives: Upon completion of this course, the student will be able to:

1. Describe the main ethical principles relevant to healthcare
2. Demonstrate through understanding of ethics through evaluation of the Code of Ethics for the Profession of Diagnostic Medical Sonography
3. Apply the principles of ethics to practical cases to work towards a resolution of dilemmas encountered in the medical profession

#### Introduction to Patient Care

Course Description: This course is designed to provide the student with an overview of health care agencies and treatment centers and the skills required to assist patients in the medical environment.

Course Objectives: Upon completion of this course, the student will be able to:

1. Discuss the various healthcare agencies and the services they provide.
2. Demonstrate how to properly wash and glove hands for the purpose of assisting with a sterile procedure.
3. Explain the components of good body mechanics with special attention to assisting & transporting patients.
4. Discuss the health care provider's role in infection control and patient safety.
5. Describe one's role in emergency situations.
6. Explain how to assist patients with IV's, oxygen and catheter bags.

7. Discuss various methods of patient assessment and how findings correlate with pathologic states.

### Medical Terminology

Course Description: Medical Terminology is a study of the basic structure of medical words, including prefixes, suffixes, word roots, combining forms, singulars and plurals. The student will be able to recognize, spell, pronounce and define medical words by combining prefixes, suffixes, and roots.

Course Objectives: Upon completion of this course, the student will be able to:

1. Identify normal and abnormal functions and structures of the human body
2. Understand what medical terms mean in specific contexts
3. Define medical terms
4. Spell and pronounce medical terms
5. Assimilate a working knowledge of the elements and definition of medical terms
6. Read and use the language of health care
7. Correctly apply and use medical terminology

### Physics Fundamentals

Course Description: A study of the basic concepts of physics using only elementary principals. Topics include the concepts behind mechanics, heat, electricity, magnetism, sound, light, atomic and nuclear physics.

Course Objectives: Upon completion of this course, the student will be able to:

1. Understand basic Physics that will better prepare them for more rigorous Ultrasound Physics once accepted into the program.
2. Define exactly what is Physics is and how it is applied in life
3. Recognize why it is detrimental to study Physics
4. Develop critical thinking and problem solving skills
5. Nurture symbolic thought using basic algebra
6. Think in terms of direct and inverse proportion

### Anatomy & Physiology for Sonography

Covers part I and II

Course Description: This course provides a detailed study of the structure and function of the body with special concentration on organs important to the ultrasound field.

Course Objectives: Upon completion of this course, the student will be able to:

1. The student will be able to explain how life is maintained by integrating the body's structural design with its function.
2. The student will be able to apply the information provided by this course to analyze and explain new situations involving the human body.
3. The student will be able to identify all assigned body parts and explain their physiological mechanisms.
4. Students will be able to apply the knowledge learned to develop needed skills to be a productive sonographer of the futur