

CAMBRIDGE
Institute of Allied Health & Technology



**INSTITUTIONAL CATALOG
ADDENDUM
Atlanta Campus**

Revised July 15, 2014

ADMINISTRATION

CORPORATE ADMINISTRATION

Dr. Terrence W. LaPier, President
Julie Orloff, Vice President of Compliance and Regulatory
Adrian Rorie, Controller
Theresa Cowan, Corporate Director of Financial Aid
Dominique Werner – Corporate Registrar
Cynthia Abromitis, Academic Dean

CAMPUS ADMINISTRATION

Nicole Warren, B.S. SSLP, CMS
Full Time
Associate Campus Director
Bachelor of Science, Clayton State University

Orlando Dumas, Sr., PH.D
Full Time
Director of Admissions
Alpha University Baton Rouge, LA
Business Management

Anika Clark
Full Time
Registrar

William Stripling, B.A.
Full Time
Financial Aid Officer
Bachelor of Arts, Georgia Southern University

Jacquelyne Jefferson
Full Time
Director of Career Services
Bachelor of Science, Strayer University 2014

DIAGNOSTIC MEDICAL SONOGRAPHY

Brian Dillmon, BS, RVT, RDMS (AB)
Full Time
Program Director
Bachelor of Science, Ball State University

Dr. Shahnaz Rajpari, MBBS, MCPS, RDMS (AB)(OB)
Part Time
Instructor, General
Fellowship, Thomas Jefferson University

Bachelor of Medicine & Surgery, Karachi University, Pakistan (Equivalent to MD w/evaluation)

Latina Duckett, B.S., RT(R), RDMS (AB)(OB)

Full Time

Clinical Coordinator

Bachelor of Science, Georgia Southern University, Grady School of DMS and RX

Voncell Johnson, RDCS

Part Time

Clinical Coordinator

Certificate of Completion, Ultrasound Diagnostic School- Cardiac

Paul Braum, B.S., RVT, RDCS

Part Time

Adjunct Instructor

Bachelor of Science, University of Pittsburgh, Santa Fe CC

Nina Madden, B.S., RDMS (AB)

Adjunct Instructor

Bachelor of Science, Valdosta State University

Diploma DMS, Coosa Valley Technical College

Cornelia Stille, BS, RDCS

Adjunct Instructor

BBA, Healthcare Administration, Alameda University

Certificate, Medical Sonography, Pitt Community College

Cheryl Badoo, M.Ed., RDMS (AB) (OB)

Adjunct Instructor

M.Ed, Leadership of Educational Organizations, American InterContinental University

Bachelor of Science, Diagnostic Medical Sonography, Adventist University of Health Sciences

RADIATION THERAPY

Dianna Bolick M.A., CMD, R.T. (R)(T)

Interim Program Director

Master of Arts, Education, University of Iowa

Bachelor of Science, Radiologic Technology, Mars Hill College

Cynthia Hill, RT (T)

Bachelor of Science, Management- Shorter College 2014

Certification, Radiation Therapy- Montefiore School of Radiation Therapy 1986

Tonya Neal-Walker R.T.(T)

Part Time

Instructor

Bachelor of Science, Public Health, Excelsior College Exp. 12/2014

GENERAL EDUCATION

Carita Grimes, DOC

Part Time-Adjunct, Anatomy & Physiology

Doctoral Degree, Bachelor of Science, Life University

Christian DePaul, BS

Adjunct College Algebra, Physics Instructor

Bachelor of Science, Mathematics, University of Cape Coast

RADIOLOGIC TECHNOLOGY

Dr. Mitchell Housenick, PhD, RT (R)

Program Director

Doctoral Degree, Curriculum and Instruction, Virginia Tech

Master of Public Health Degree, Health Imaging, South College

Loretta Edmond MSRA RT (R) CT MR

Clinical Coordinator

Master of Science Degree, Radiography, Midwestern State University

Bachelor of Science Degree, Health Imaging, South College

UPDATED TUITION & FEES

Program	Application Fee	Tuition	Other Fees not in Tuition
Diagnostic Medical Sonography - Certificate	\$50.00	\$31,818.00	\$80.00 Grad Fee
Diagnostic Medical Sonography - AS	\$50.00	\$42,1806.00	\$80.00 Grad Fee
Radiation Therapy – Certificate	\$50.00	\$31,970.00	\$80.00 Grad Fee
Radiation Therapy – AS	\$50.00	\$37,765.00	\$80.00 Grad Fee
Radiologic Technology	\$50.00	\$36,951.00	\$80.00 Grad Fee
Advanced Medical Assistant	\$50.00	\$16,959.00	\$80.00 Grad Fee

Electronic Medical Records Management	\$50.00	\$14,300.00	\$80.00 Grad Fee
Phlebotomy Technician	\$50.00	\$1,825.00	N/A

RETAKE COURSE POLICY AND FEES:

- Each Course failed will have a \$50 Retake Fee assessed to the student's ledger card
- If a failed course is not offered to retake in the next semester the student will be dropped and re-entered at the appropriate time to retake the course
- Retake fee is assessed when the student is scheduled and starts repeating the failed course
- For the semester credit programs the repeat course can be counted in the credits attempted in the semester for one repeat only (i.e.... the student has two attempts to pass a course)
- For clock hour programs the hours in the repeated course can only be counted for one repeat (i.e.... the student has two attempts to pass a course)

ACADEMIC SCHEDULE

The following dates are potential start dates for each program of study and the expected completion date. These dates are subject to change, according to enrollment numbers and changes in a student's progression through the program.

Start Calendar			
		Start	Anticipated End Date
Diagnostic Medical Sonography	Day	5/13/13	9/20/14 General
		5/13/13	9//20/14 Cardiac
		8/12/13	12/19/14 General
		8/12/13	12/19/14 Cardiac
		12/2/13	8/02/14 General
		12/2/13	8/02/14 Cardiac
Radiologic Technology	Day	9/2/2014	8/26/2016
Radiation Therapy	Day	7/22/13	3/13/15
EMR	Day/ Evening	8/11/2014 proj.	5/25/215
EMR	Day/ Evening	10/13/2014 proj.	1/5/2015

SCHEDULED BREAKS

Scheduled Breaks:	
Spring 2014:	04/7/2014 - 04/11/2014
Summer 2014:	06/30/2014 – 07/04/2013
Winter 2014:	12/22/2014 – 01/02/2015
Spring 2015:	04/06/2015 - 04/10/2015
Summer 2015:	06/29/2015 – 07/03/2015
Winter 2015:	12/21/2015 – 01/01/2016

SCHOOL CLOSINGS

Cambridge Institute does not offer classes on specific holidays. Administrative Offices are open on specific holidays. All hours of classes are scheduled around the holidays and vacation breaks. Holiday observances include:

New Year's Day
Martin Luther King, Jr.'s Birthday
Presidents Day
Memorial Day
Independence Day
Labor Day
Veterans Day
Columbus Day
Thanksgiving Day and day after
Christmas Day

Classes will not be scheduled on holidays that are observed by the hospitals or clinics where the student has class or clinical training.

Students of Radiation Therapy are not permitted to attend clinic during school closings.

INCLEMENT WEATHER POLICY

For the didactic and clinical course of your program, Cambridge Institute of Allied Health & Technology follows the Atlanta Public School System closings. Students should refer to local radio or television stations for report of school closings. If the school is closed students assigned to clinical rotation will not report to their site. Student is expected to extend professional courtesy of communicating their absence to their clinical site.

Page 9 of the Catalog – Accreditation Radiation Therapy Program

Effective May 5, 2014, the Radiation Therapy program voluntarily withdrew their programmatic accreditation with the Joint Review Committee on Education in Radiologic Technology (JRCERT). The program will now fall under the institutional accreditation grant with the Accrediting Bureau of Health Education Schools (ABHES).

*The Computed Tomography Review does not fall under the grant of accreditation for the Accrediting Bureau of Health Education Schools (ABHES).

Page 11 of the Catalog – Admissions Requirements

Proof of High School Graduation

The requirements of High School Graduation (POG) consist of *one* of the following:

- Diploma from high school
- GED
- Official college transcript confirming associate, bachelors or master's degree
- Evaluated and translated Foreign High School

Page 15 of the Catalog – New Programs

Diagnostic Medical Sonography – Associate of Science

98 Semester Credits

2378 Clock Hours

96 Weeks

Method of Delivery: Residential

Program Objectives

The mission of the Diagnostic Medical Sonography program is to provide a comprehensive education that will prepare students to become sonographers. The program is structured to provide intellectual stimulation and learning in the didactic and clinical settings using psychomotor, affective and cognitive domains. It is necessary to prepare students to assume the responsibilities of a sonographer, provide quality patient care and to contribute to their profession by a commitment to professional organizations and lifelong learning. These beliefs are the foundation of the sonography profession and are realized through commitment to the education of sonographers in the community. At the completion of the Diagnostic Medical Sonography program, a student is prepared to enter the sonography work force as an entry level sonographer in any or all modalities including Abdomen, OBGYN, and Cardiovascular Sonography. Upon graduation, clinical employment opportunities can range from hospital settings, out-patient clinics, private practice and specialty centers, mobile and agency services all throughout the domestic United States and International markets.

Program Description

The Associate of Applied Science Degree in Diagnostic Medical Sonography is an educationally broad based postsecondary full time program. This 96 week program is designed to provide the essentials of entry level sonographic medical imaging. The curriculum leads the student through primary sonographic education in the specialties of Abdomen, including full abdominal and small smarts, Obstetrics & Gynecology, including female pelvis and 1st, 2nd and 3rd trimester Obstetrics imaging, and Cardiovascular including the application and techniques in cardiac imaging and cardiac Doppler studies, cardiac anatomy and function. The course also provides an introduction to the principles of Vascular Sonography, introducing the two common vascular examinations most widely used by sonographers; Lower Extremity Venous Doppler and Carotid Doppler examinations. In addition to Medical Terminology, Pharmacology, and an introduction to Health Science, Sonographic Anatomy and Sonographic Physics are covered. The core curriculum devotes significant “hands-on” laboratory and clinical education skills components. The program requires general education courses in General Physics, Anatomy & Physiology, Algebra, Psychology, English and Speech.

Students receive consistent sequential didactic and scheduled laboratory instruction throughout the program. Students complete one thousand two hundred ninety (1290) didactic hours of classroom and laboratory education and one thousand twenty four (1024) hours of clinical training within an approved clinical facility. Assessments takes place at regular intervals throughout the program evaluating the student’s progress towards specific levels of competency. Students must complete each course with a 2.0 or higher to remain in the program.

Schedules

Students may attend up to a full time didactic schedule, Monday through Friday mornings from 9AM to 5PM. Once clinical rotations begin, the didactic schedule is condensed allowing ample time for students to complete clinical requirements. Clinical schedules vary from site to site offering 8 hour shifts starting from early mornings, afternoons, or even evening and weekend shifts based on clinical site availability.

Subject Titles: Diagnostic Medical Sonography

Course Number	Course Title	Semester Credits	Clock Hours
BCS 1085	Anatomy & Physiology 1	4	75
BCS 1086	Anatomy & Physiology 2	4	75
DMSA 1002	Principles of Sonographic Physics and Instrumentation	5	90
DMSA 1003	Sonographic Anatomy	3	60
DMSA 2001	Principles of Abdominal Sonography 1	4	75
DMSA 2002	Principles of Abdominal Sonography 2	4	75
DMSA 2003	Principles of OBGYN Sonography 1	4	75
DMSA 2004	Principles of OBGYN Sonography 2	4	75
DMSA 2005	Introduction to Vascular Sonography	4	75
DMSA 2006	Echocardiographic Pathology 1	4	75
DMSA 2007	Echocardiographic Pathology 2	4	75
DMSA 2008	Pharmacology	3	45
DMSA 2009	Introduction to Echocardiographic Anatomy	4	75
DMSA 2010	Clinical Externship I	6	272
DMSA 2011	Clinical Externship II	6	272
DMSA 2012	Clinical Externship III	6	272
DMSA 2013	Clinical Externship IV	6	272
DMSA 2014	Seminar	3	45
ENC 1101	English Composition	3	45
HSC 1000	Introduction to Health Science	3	45
MAC 1105	College Algebra	3	45
MEA 1239	Medical Terminology	2	30
PSY 1012	Introduction to Psychology	3	45
PHY 2053	General Physics	3	45
SPC 1016	Fundamentals of Speech	3	45
	Grand Total	98	2378

Course Descriptions

BCS 1085 Anatomy & Physiology 1

4 Semester Credits 75 Clock Hours Prerequisites: None

In this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system. Students will explore the structure and function of tissues and organs in a laboratory setting.

BCS 1086 Anatomy & Physiology 2

4 Semester Credits 75 Clock Hours Prerequisites: BCS 1085

This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.

DMS A 1002 Principles of Sonographic Physics and Instrumentation

5 Semester Credits 90 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053

Presents in-depth training in the properties of ultrasound and Doppler physics, instrumentation, equipment operations, display systems, recording devices, image artifacts, biological effects of ultrasound and quality assurance methods. Student will apply sonographic physics and instrumentation principles in an ultrasound laboratory setting.

DMS A 1003 Sonographic Anatomy

3 Semester Credits 60 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, HSC 1000, PHY 2053

Introduces ultrasound scanning principles and protocols. Topics include scanning criteria and standardization of image documentation for physician interpretation, normal anatomy, physiology and sonographic appearance of the abdomen, OB/GYN, vascular, and cardiac structures. Students will apply sonographic anatomy principles in an ultrasound laboratory setting.

DMS A 2001 Principles of Abdominal Sonography 1

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

Presents cross-sectional anatomy of the abdomen, normal and abnormal sonographic findings of the intra-abdominal organs, peritoneal spaces and retroperitoneal structures. The relationship of abnormal findings to patient history, physical examination and laboratory findings are stressed. Students will learn and perform abdomen exam protocols in an ultrasound laboratory.

DMS A 2002 Principles of Abdominal Sonography 2

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001

This course is a continuation of Principles of Abdominal Sonography I containing a comprehensive approach to in-depth studies of the organs contained within the human abdominal cavity in both normal and abnormal states. This course further explores small parts including: breast, testicular, prostate, and thyroid in addition to an introduction to musculoskeletal, neonatal brain, spine, hips and interventional sonography. Students will continue to learn and perform abdomen exam protocols in an ultrasound laboratory including phantom scanning of various small parts.

DMS A 2003 Principles of OBGYN Sonography 1

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002

Presents cross sectional anatomy of the female pelvis, normal and abnormal sonographic features of the non-gravid pelvis, as well as normal and abnormal anatomy of the first trimester. Embryology, early fetal development and the relationship of abnormal findings of the patient history, physical examination and laboratory findings are emphasized. Students will learn and perform transabdominal pelvic exam protocols in an ultrasound laboratory.

DMS A 2004 Principles of OBGYN Sonography 2

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002, DMS A 2003
Presents normal and abnormal anatomy and sonographic features of the second and third trimester pregnancies. The relationship of patient history, physical examination, and laboratory findings with abnormal fetal and maternal findings is emphasized. Students will continue to learn and perform transabdominal pelvic exam protocols in an ultrasound laboratory including phantom scanning for second and third trimester pregnancies.

DMS A 2005 Introduction to Vascular Sonography

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

This section of the course provides hands on experience in the application of the two most common vascular examinations: the lower extremity venous doppler exam and the carotid doppler exam. The student will also participate in the application and technique studied in the didactic section of the course. The laboratory sessions also emphasize and encourage the student to recognize the normal anatomy and normal ultrasonic findings while learning and performing exam protocols for lower extremity venous Doppler and carotid Doppler ultrasound exams. After completion of the basic principles, the course focuses on pathology and dysfunction and the disease process.

DMS A 2006 Echocardiographic Pathology 1

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2009

After the basic principles, the course will be focusing on pathology and dysfunction and the disease process. Cardiac pathology covered includes: left ventricular dysfunction, coronary artery diseases, valvular heart disease, Doppler-(Color, PW, CW), diseases of the aorta & pulmonary hypertension. Coordination of the patient's history, physical findings and Sonographic images are evaluated for presentation. Discussions will be both detailed and concise for understanding and comprehension. Students will learn and perform echo ultrasound exam protocols in an ultrasound laboratory.

DMS A 2007 Echocardiographic Pathology 2

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2009, DMS A 2006

This course provides a foundation for cardiomyopathies and IHD, evaluation of pericardiac and intra cardiac tumors, anomalies of the aorta and great vessels, congenital heart diseases, pericardial pathologies, tumors and diseased valves. Each section of disease will be discussed in detail regarding causes, signs symptoms, echocardiographic findings and complications. This course also discusses wall motion abnormalities in relation to pathologic situation. Discussion is

both detailed and concise for understanding and comprehension. Students will continue to learn and perform echo ultrasound exam protocols in an ultrasound laboratory.

DMS A 2008 Pharmacology

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

This course involves understanding of clinical pharmacology including theory, indications and contraindications of drugs used in cardiac patients in addition to adverse effects of drugs used in Echocardiography and pharmacology of provocative stress agents and their uses and adverse effects. This course also discusses potential side effects of cardiac medications on the Echo findings and involves understanding the indications, utility of advances in echocardiography such as Stress echocardiography, Trans-esophageal echocardiography, Intraoperative echocardiography, & Contrast echocardiography.

DMS A 2009 Introduction to Echocardiographic Anatomy

4 Semester Credits 75 Clock Hours Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

This course provides a foundation in the principle of echocardiography, the most effective non-invasive method for use in cardiac diagnosis. This course involves understanding of the normal cardiac anatomy, coronary anatomy, and the relationship of chambers and the great vessels. An understanding of EKG, Electrophysiology, conduction system and mechanical events of the cardiac cycle in relation to electrical events will be stressed. This course provides the application and techniques in 2D cardiac imaging, M-mode, cardiac studies, cardiac anatomy and function. Students will learn and perform EKG exam protocols in an ultrasound laboratory.

DMS A 2010 Clinical Externship I

6 Semester Credits 272 Clock Hours Prerequisites: BSC 1085, BSC 1086, ENC 1101, SPC 1016, PSY 1012, HSC 1000, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

This course introduces students to the clinical setting and provides an opportunity for students to observe and participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to Abdomen in the clinical setting.

DMS A 2011 Clinical Externship II

6 Semester Credits 272 Clock Hours Prerequisites: BSC 1085, BSC 1086, ENC 1101, SPC 1016, PSY 1012, HSC 1000, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002, DMS A 2010

This course, a continuation of the clinical setting in Clinical Externship I, allows students to continue in the clinical setting and provides additional opportunity to observe and have in depth participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to OBGYN in the clinical setting. Students will continue building oral skills to communicate clearly, concisely, and intelligently to medical professionals and patients and will begin using written skills to communicate clearly, concisely, and intelligently. Student will begin to possess

the ability to demonstrate critical thinking and problem solving skills. The course also supports student's ability to better understand and apply allied health occupational information as well as encourage occupational attitudes and work ethic desired of allied health employers and members of the specific profession.

DMS A 2012 Clinical Externship III

6 Semester Credits 272 Clock Hours Prerequisites: BSC 1085, BSC 1086, ENC 1101, SPC 1016, PSY 1012, HSC 1000, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002, DMS A 2003, DMS A 2004, DMS A 2010, DMS A 2011

This course introduces students to the clinical setting and provides an opportunity for students to observe and participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to vascular examinations such as lower extremity venous and carotid doppler examinations in addition to an introduction to cardiac echo examinations in the clinical setting. The student will continue to build upon proper oral skills and will have the ability to communicate clearly, concisely, and intelligently with medical professionals and patients. Also, the student will have the opportunity to build upon written skills to communicate clearly, concisely, and intelligently along with the ability to demonstrate critical thinking and problem solving. This course continues to support the student's ability to demonstrate occupational attitudes and work ethic desired of allied health employers and members of the specific profession.

DMS A 2013 Clinical Externship IV

6 Semester Credits 272 Clock Hours Prerequisites: BSC 1085, BSC 1086, ENC 1101, SPC 1016, PSY 1012, HSC 1000, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002, DMS A 2003, DMS A 2004, DMS A 2005, DMS A 2009, DMS A 2010, DMS A 2011, DMS A 2012

This course, a continuation of the clinical setting in Clinical Externship III, allows students to continue in the clinical setting and provides additional opportunity to observe and future participate in Sonographic procedures, at the clinical sites discretion. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required competencies related to but not exclusive to echocardiography examinations in the clinical setting. The course continues to encourage the student's to communicate clearly, concisely, and intelligently with medical professionals and patients as well as continuing to build upon critical thinking and problem solving skills in an independent manner. This course will present to the student the correct way to function as a productive team member. The course will facilitate the ability to understand and apply allied health occupational information and build upon the student's ability to demonstrate occupational attitudes and work ethics.

DMS A 2014 Seminar

3 Semester Credits 45 Clock Hours Prerequisites: BSC 1085, BSC 1086, ENC 1101, SPC 1016, PSY 1012, HSC 1000, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001, DMS A 2002, DMS A 2003, DMS A 2004, DMS A 2005, DMS A 2006, DMS A 2008, DMS A 2009, DMS A 2010, DMS A 2011, DMS A 2012

In this course the student is prepared for the real world of work via assistance with resume writing, interviewing techniques and job placement. In addition, registry preparation and reviews are conducted for all modalities of the program: Abdomen, OBGYN, and Cardiovascular.

ENC 1101 English Composition

3 Semester Credits 45 Clock Hours Prerequisites: None

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

HSC 1000 Introduction to Health Science

3 Semester Credits 45 Clock Hours Prerequisites: None

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

MAC 1105 College Algebra

3 Semester Credits 45 Clock Hours Prerequisites: None

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.

MEA 1239 Medical Terminology

2 Semester Credits 30 Clock Hours Prerequisites: None

This course provides instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.

PSY 1012 Introduction to Psychology

3 Semester Credits 45 Clock Hours Prerequisites: None

In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.

PHY 2053 General Physics

3 Semester Credits 45 Clock Hours Prerequisites: MAC 1105

This course is designed to cover a broad range of physics topics. As these topics are applied to various problem situations, the student will develop critical thinking skills and through the use of group activities which the student will enhance cooperative attitudes. Topics include computer technologies, math calculations, mechanics, measurement, heat, fluid, and gas laws, as well as, atomic and nuclear physics, electromagnetic, light and sound.

SPC 1016 Fundamentals of Speech

3 Semester Credits 45 Clock Hours Prerequisites: None

Students will learn the foundations of communications including public presentations and interviewing skills.

Electronic Medical Records Management

900 Clock Hours

Diploma Program

37.5 Weeks

Method of Delivery: Residential

Program Objective: In a residential setting, the Electronic Medical Records Management program aims to provide an interactive, robust educational program that prepares graduates for entry level positions in the electronic medical records division of medical facilities.

Program Description: This course is designed to prepare students to perform all of the tasks required of an Electronic Medical Records Manager. This is accomplished in a residential setting through theory courses designed to prepare students with the knowledge and skill needed to perform EHR processes. The program provides theoretical and laboratory-based training in foundational skills, including medical terminology, anatomy and physiology, pathology, another health sciences, as well as computer sciences. The program builds upon this knowledge base with more advanced and specific processes and procedures in medical coding and billing, computerized practice management, electronic health records and systems management. Students will learn laws and codes of regulation pertaining to healthcare records privacy, archival requirements and privacy laws.

Program Outline

Course Number	Course Title	Clock Hours
HSC100	Health Science Core Fundamentals I	45
HSC120	Anatomy & Physiology I with Lab	60
HSC130	Anatomy & Physiology II & Pathophysiology	75
HSC140	Medical Terminology	45
HSC101	Health Science Core Fundamentals II	45
MCB110	Electronic Medical Office Procedures	75
COM100	Computer Applications	60
COM120	Computerized Practice Management	45

MCB120	CPT 4	60
MCB140	ICD 9/HCPCS	75
MCB180	ICD10	60
MCB200	Medicare & Medicaid	30
EMR120	Records Management Systems	60
EMR140	Electronic Medical Records I	75
EMR150	Electronic Medical Records II	75
HSC160	Professional Development and Career Preparation	15
Grand Total		900

Course Descriptions

COM100 Computer Applications

60 Clock Hours

This course is designed to prepare students to become proficient at using Microsoft Office software. Students will be familiar with and know how to use at least 75% of the features and capabilities of Microsoft Office Word & Excel 2010. They will also learn how to effectively utilize PowerPoint and Outlook for creating presentations and managing email.

HSC120 Anatomy & Physiology I with Lab

60 Clock Hours

This course provides a strong foundation in principles of anatomy and physiology for medical professionals. Emphasis in this course is placed upon the organization of the body, structure and function, the origins of biomedical sciences, body systems, histology, general terminology and the contextual preface of the language of medicine.

HSC130 Anatomy & Physiology II with Pathophysiology

75 Clock Hours

This course provides a strong foundation in principles of anatomy and physiology for medical professionals. Emphasis in this course is placed upon the structure and function of human physiology and anatomy, as well as special emphasis on the pathology of diseases.

HSC140 Medical Terminology

45 Clock Hours

This course provides instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included. The student will possess the aptitude to comprehend and use information in both written and oral formats. The student will

possess the ability to demonstrate critical thinking and problem solving appropriate to his/her program of study.

HSC 100 Health Science Core Fundamentals I

45 Clock Hours

This course describes health care delivery system and health occupations communication interpersonal skills, computer literacy, infection control and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concept, CPR, 4 hours of HIV/AIDS education, Domestic Violence and OSHA are also included.

HSC 101 Health Science Core Fundamentals II

45 Clock Hours

This course describes health care delivery system and health occupations communication interpersonal skills, computer literacy, infection control and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, new healthcare regulation, and basic math and science.

MCB110 Electronic Medical Office Procedures

75 Clock Hours

This course is a foundational and critical structure in the development of medical office professionals, and health information technicians. Emphasis in this course is placed upon the medical office tasks, customer service, limiting liability and the relationship of these tasks to revenue collection.

COM120 Computerized Practice Management

45 Clock Hours

In this course, students develop knowledge of the revenue models for healthcare facilities, their respective cycles, report generation, medical office management software, patient appointment and scheduling management.

MCB120 CPT 4

60 Clock Hours

This course provides students with the knowledge base, and skill to perform CPT-4 coding procedures. In an online environment this course will emphasize the rules and guidelines of the CPT – 4 manual. The course is designed to help the beginner coder learn and understand the concept of coding using the CPT-4 coding manual.

MCB140 ICD-9/HCPCS

75 Clock Hours

This course provides an introduction for beginning coders to develop an understanding of ICD-9-CM characteristics, terminology, and conventions. The focus is to orient the student to the coding requirements of the prospective payment system in order to correctly code disorders to obtain reimbursement from insurance companies. Special emphasis is placed on level II (HCPCS).

MCB180 ICD10

60 Clock Hours

Students will learn the procedures for conducting ICD 10 diagnosis coding and mapping. In an online environment, students will be able to adapt ICD-9 principles, and information to an ICD 10 universe. This course places special emphasis on CM and PCS systems, reimbursement mapping, applied conversion mechanisms, medical record coding, analytics, and interpretation.

MCB200 Medicare & Medicaid

30 Clock Hours

This course provides students with an understanding of the publicly financed health insurance system in our country that impacts virtually all aspects of the rest of the American health care system. The history and growth of each program will be explored, with a particular emphasis on political, social, and economic factors that have influenced this development. Students will learn present coding procedures of these programs under law.

EMR120 Records Management Systems

60 Clock Hours

Students develop skill and knowledge of records management techniques, procedures and methodology for medical offices. Students will be able to create, develop, document and archive records using common systems and codifications.

EMR140 Electronic Medical Records I

75 Clock Hours

This course will cover the usage and management of health information and the electronic health record (EHR). This course will introduce the students to the use of health information and the electronic health record for any setting within the health care industry from acute, ambulatory, long term, home health, specialty, population health, and personal health that encompass the continuum of care. This course will provide students with a practical understanding of what an electronic health record specialist is and how important they are in the job market today.

EMR140 Electronic Medical Records II

75 Clock Hours

This course continues with skills practice of usage and management of health information and the electronic health record (EHR). This course will introduce the students to the use of health information and the electronic health record for any setting within the health care industry from acute, ambulatory, long term, home health, specialty, population health, and personal health that encompass the continuum of care. This course will provide students with a practical understanding of what an electronic health record specialist is and how important they are in the job market today.

HSC 160 Professional Development & Career Preparation

15 Clock Hours

This course is designed to prepare the students for career transition. Students in this course will be able to study career pathways, learn more about certifications, receive introductory

information concerning professional societies, and the importance of achieving certifications and credentials. Students in this course learn more about the career pathway in terms of academic opportunities, and develop leadership skills and knowledge in order to learn the creation of value for employers.

Phlebotomy Technician

Diploma program 10 weeks/220 clock hours

Method of Delivery: Residential

PROGRAM OBJECTIVE

The program objective is to provide students with career training for employment as basic Phlebotomists in a physician’s office, hospital, outpatient center, laboratory, or other healthcare facility. Phlebotomy procedures are practiced on a training arm. The national Phlebotomy Technician certification examination through NCCT may be taken (not required by the state) when the applicable number of venipuncture’s and capillary sticks have been obtained and documented by an employer.

PROGRAM OUTLINE

Course Code	Course Title	Clock hours
HC 101	Health Care & Body Systems	100
PH101	Phlebotomy	120

HC101 Health Core and Body Systems 5 weeks/100 clock hours

This course describes health care delivery system and health occupations communication interpersonal skills, computer literacy, infection control and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concept, HIV/AIDS, Domestic Violence and OSHA are also included.

Prerequisites: None

PH101 Phlebotomy 6 weeks/120 clock hours

This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control, special procedures and documenting competency skills.

Prerequisites: None

Advanced Medical Assistant – Imaging Specialist

Diploma Program

Method of Delivery: Residential

54 weeks/ 1440 clock hours/70.5 Semester Credits

Program Objective

The program objective is to provide students with career training for employment as a Medical Assistant with additional skills sets in imaging, specifically Basic X Ray. More and more medical offices desire to hire medical assistants who possess diverse skill sets. Graduates of the program who choose to take the BXMO may do so, and if they successfully pass this program; they may perform limited x rays in multiple healthcare settings. (under their BXMO licenses). Other settings in which an Advanced Medical Assistant and Imaging Specialist can seek employment include physician's offices, outpatient medical facilities, hospital, clinics, and other related health care setting. Specific course objectives relate to administrative procedures that include use of computerized practice management software, medical billing, and insurance codes, office supplies, collections, correspondence, knowledge and appointment scheduling. Course objectives relative to clinical procedures include: anatomy & physiology, medication administration, injections, EKG, assisting with minor surgical procedures, phlebotomy and lab procedures in a physician's office, outpatient medical facility, hospital and other related healthcare settings. Student must complete a 140 hour externship in an ambulatory care medical facility. Students are required to present a negative TB report from a doctor before attending clinical externship. Phlebotomy procedures are practiced on training arms and injections practiced on manikins, and once student demonstrates skill proficiency, skills are performed on humans. Evening students are encouraged to attend their 160 clock-hour externship during the day when most doctors' offices are available. Program graduates are eligible to take the following credentialing examinations: Registered Medical Assistant (RMA) through the American Medical Technologists (AMT) or Certified Medical Assistant exam (CMA through the American Association of Medical Assistants. The National Certification for Phlebotomy Technician examination may be taken (not required by the state) when the applicable number of venipuncture's and capillary sticks have been obtained and documented by an employer. Students may also sit for the BXMO exam with the state of Florida, A criminal record may keep a student from obtaining a license or certification. A criminal record may affect the student's ability to gain employment in the field of training.

PROGRAM OUTLINE

Course Code	Course Description	Credit Hours	Clock Hours
HC101	Health Care and Body Systems	5	100
XR101	Basics of Radiation Protection Principles and Practice	8	120
XR102	PACS (Picture Archiving Communication System) Processing	5	80
XR103	Term & Position for Chest & Upper Extremities; Basics of Radiographic Principles	7	120
XR104	Term & Positioning for Abdomen & Lower Extremities; Radiation Safety	7	120
XR105	Anatomy & Positioning of Spine and Skull	3	60
XR106	Radiology – Imaging Specialties	3	60
XR107	Pathology	2	30
XR108	BXMO Review	2	30
MA101	Medical Office Process	1.5	40
MA102	Insurance & Financial Office Process	2	60
MA103	Anatomy & Physiology	5	80
MA104	Electrocardiography	4	80

MA105	Pharmacology & Medication Administration	3.5	80
PH101	Phlebotomy	5	100
MA106	Clinical Procedures for Medical Assisting	4.0	120
MA107	Medical Assisting Externship	3.5	160
Total		70.5	1440

COURSE DESCRIPTION

XR101 Basic Radiographic and Principals 120 Residential hours/ 8 Semester Credits

This course instructs students in basic radiographic exposure, principles of radiation projection, patient and self- protection, and patient care and management.

Prerequisites: None

XR102 PACS (Picture Archiving Communication System)/Processing 80 Residential hours/ 5 Semester Credits

This course includes image receptors, x-ray darkroom, film critique, standards of professionalism and ethics. Emphasis in this course is placed on PACS (Picture Archiving and Communications Systems)

Prerequisites: None

XR103 Terminology & Positioning for Chest & Upper Body 120 Residential hours/ 7 Semester Credits

This course includes radiological and positioning terminology for the chest and upper extremities, and includes anatomy of the chest, limbs, thorax, ribs and sternum.

Prerequisites: None

XR104 Terminology & Positioning for Abdomen & Lower Body 120 Residential hours/ 7 Semester Credits

This course includes radiological and positioning terminology for the abdomen and lower extremities.

Prerequisites: None

XR105 Anatomy & Positioning of the Spine & Skull 60 Residential hours/ 3 Semester Credits

This course includes radiological and positioning terminology for the spine and skull segments.

Prerequisites: None

XR106 Radiology – Imaging Specialist 60 Residential hours/ 3 Semester Credits

This course includes radiological and positioning terminology for additional diagnostic procedures such as pediatrics, geriatrics and various modalities.

Prerequisites: None

XR107 Pathology 30 Residential Hours/2 Semester Credits

An overview of the disease process, common diseases, and their appearance on medical images. Radiographic pathology is the study of disease processes visualized radiographically. The purpose of this course is to provide the student with a basic working knowledge of pathology as it pertains to diagnostic medical radiography. This course presents those pathologic conditions

that are most commonly encountered in radiography and the medical terminology associated with those pathologic conditions.

Prerequisites: None

XR108 BXMO Review 30 Residential Hours/2 Semester Credits

Provides a comprehensive review of limited radiography in preparation for the ARRT administered state examination.

Prerequisites: None

C101 Health Core and Body Systems 100 Residential Hours/5 Semester Credits

This course includes health care delivery system, health occupations, communication, interpersonal skills, computer literacy, infection control, and recognition and response to emergency situations. This course also includes safety and security, ethical and legal issues, employability skills, basic math and science, and wellness and disease concepts. In addition, students receive instruction and certification in HIV/AIDS, Domestic Violence, and OSHA. Students in this course become familiar with Basic X Ray machine operations.

Prerequisites: None

MA101 Medical Office Process 40 Residential Hours/1.5 Semester Credits

This course is designed to introduce the student to the Medical office environment and responsibilities of the Medical Assistant. Included are safety, office design, communication, personal characteristics, and professionalism. Computer entry of data and appointments will be introduced.

Prerequisites: None

MA102 Financial & Insurance Office Process 60 Residential Hours/ 2 Semester Credits

In an online and on campus mode of delivery, this course is designed to introduce the student to the patient's medical record. Included is knowledge of insurance, preparing claims, billing, coding, basic bookkeeping, and accounting. Transcription and documentation are introduced. Computer software is introduced and used in the computer lab.

Prerequisites: None

MA103 Anatomy & Physiology 80 Residential Hours/4 Semester Credits

This course includes fundamental anatomy and physiology of the human body. The student is introduced to selected body systems as well as common diseases related to each, Included are nervous, senses, skin, skeletal, muscular, and immune system.

Prerequisites: None

MA104 Electrocardiography 80 Residential hours/3 Semester Credits

This course is designed to teach the student how to perform a 12-lead Electrocardiogram. Included are basic anatomy and electrophysiology of the heart. The student will be able to identify sinus rhythms as well as life-threatening dysrhythmias. Lab included.

Prerequisites: None

MA105 Pharmacology/ Medication Administration 80 Residential hours/ 3.5 Semester Credits

This introduces the student to basic pharmacology and medication administration. Included are

drug classifications, calculations, abbreviations, and safety. The student is instructed in preparation and administration of medications including injections.

Prerequisites: None

PH101 Phlebotomy

100 Residential/ 5 Semester Credits

This course includes an introduction to phlebotomy, equipment, safety, and specimen collection techniques. The student receives instruction in anatomy, infection control, special procedures and documenting competency skills.

Prerequisites: None

MA106 Clinical Procedures for Medical Assisting 120 Residential/4 Semester Credits

This course instructs the students in the following clinical duties and responsibilities clinical duty preparation, medical database, exam preparation and related clinical procedures, laboratory & specimen collection, diagnostic tests and procedures, minor surgical procedures, acute illness, accidents, and emergencies.

Prerequisites: None

MA107 Medical Assisting Externship

160 externship hours/3.5 Semester Credits

Required classes: All theory and lab classes

The medical assistant externship will be completed in a physician's office, outpatient medical facility, hospital, or other relative healthcare setting.

Prerequisites: None

Radiologic Technology – Associate of Science

2595 Total Hours

96 Credits

90 Weeks

Credential Awarded: Associate in Science

Type of Instructional Delivery: Residential

PROGRAM DESCRIPTION

The program is 90 weeks in length. The program is designed to provide a well-planned didactic and clinical education experience to enable students to become competent, entry-level professionals upon graduation. The clinical competency requirements have been developed in accordance with ARRT (American Registry of Radiologic Technologists) guidelines.

Radiologic Technology Program Outline:

Course #	Course Title	Credits	Hours
HSC 1000	Introduction to Health Science	3	45
SPC 1016	Fundamentals of Speech	3	45
MEA 1239	Medical Terminology	2	30
BSC 1085	Anatomy & Physiology I	3	45

BSC 1085 Anatomy & Physiology I Lab	1	30
BSC 1086 Anatomy & Physiology II	3	45
BSC 1086L Anatomy & Physiology II Lab	1	30
MAC1105 College Algebra	3	45
ENC 1101 English Composition	3	45
PSY 1012 Introduction to Psychology	3	45
RTE 1202/RTE1202L Radiographic Procedures I	4	75
RTE 1000 Introduction to Radiation Safety	1	15
RTE 1025 Principles of Image Production I	2	30
RTE 1030 Radiographic Physics	4	60
RTE 1203/RTE1203L Radiographic Procedures II	4	75
RTE 1204/RTE 1204L Radiographic Procedures III	4	75
RTE 1205/RTE1205L Radiographic Procedures IV	4	75
RTE 1206/RTE1206L Radiographic Procedures V	3	60
CTS 1050 Introduction to Computers	3	45
RTE 2025 Cross Sectional Anatomy/ Advanced Modalities	3	45
RTE 2015 Radiographic Biology and Protection	2	30
RTE 2500 Senior Registry Review	3	45
RTE 1270 Clinical I	5	240
RTE 1280 Clinical II	5	240
RTE 2005 Clinical III	8	360
RTE 2010 Clinical IV	8	360
RTE 2020 Clinical V	8	360
Totals:	96	2595

Course Descriptions:

HSC 1000 - Introduction to Health Science

3 Credits 45 clock hours

This course provides a review of basic knowledge from previous courses and helps the student prepare for national certification examination for radiographers. Topics include: principles of radiographic exposure, radiographic procedures, anatomy, physiology, pathology, terminology, radiologic equipment, radiation protection, and patient care techniques

Prerequisite: RTE 1206 & 1206L

SPC 1016 Fundamentals of Speech

3 Credits 45 clock hours

Students will learn the foundations of communications including public presentations and interviewing skills

Prerequisites: None

MEA 1239 – Medical Terminology

2 Credits 30 clock hours

This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.

Prerequisites: None

BSC 1085 - Anatomy & Physiology I

3 Credits 45 clock hours

Students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.

Prerequisite: None

**BSC 1085 L – Anatomy & Physiology I Lab
hours**

1 Credit 30 clock

In an online delivery students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.

Prerequisite: None

BSC 1086 - Anatomy & Physiology II

3 Credits 45 clock hours

This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.

Prerequisites: BSC1085

**BSC 1086L – Anatomy & Physiology II Lab
hours**

1 Credit 30 clock

Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.

Prerequisites: BSC 1085, BSC 1085L MEA 1239

MAC 1105 – College Algebra

3 Credits 45 clock hours

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponents, polynomials, factors, and rational expressions. Student will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.

Prerequisites: None

**ENC 1101-English Composition
hours**

3 Credits

45 clock

Students will learn grammar, punctuation and usage skills that are useful in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing to aid in essay preparation and completion.

Prerequisites: None

PSY 1012 - Introduction to Psychology **3 Credits** **45 clock hours**

In this course, students learn basic principles of human behavior. Challenges, responsibilities, problems and satisfactions of being a health care provider are discussed. Theories of human behavior and personality development are included.

Prerequisites: None

RTE 1202 - Radiographic Procedures I RTE 1202L – Lab **4 Credits** **75 clock hours**

This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology of abdomen and chest radiography as well as positioning terminology of the upper extremity and lower extremity (foot and ankle). Students will master practical experience in positioning patients, exercising independent judgment, creativity, and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing and simulating patient and technologist. Student will learn and practice how to communicate effectively with patients and family members regardless of existing barriers. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.

Prerequisites: RTE 1202 & RTE 1202L

RTE 1000 – Introduction to Radiation Safety **1 Credit** **15 clock hours**

Content is designed to present principles of radiation protection, including the responsibility of the radiographer for patient, personnel and the general public. Students will be provided with overview of the principles of the interaction of radiation to the body systems. Fundamental principles of molecular and cellular responses to radiation will be learned, including acute and chronic effects of radiation.

Prerequisites: None

RTE 1025 - Principles of Image Production I **2 Credits** **30 clock hours**

This course is about the knowledge of the factors that govern and influence the production of radiographic images. Content establishes a knowledge base in radiographic and mobile equipment requirements and design. Content imparts an understanding of the components, principles and operation of digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital system, quality assurance and maintenance are presented.

Prerequisites: MAC 1105, RTE 1030

RTE 1203 - Radiographic Procedures II , RTE 1203L Lab **4 Credits** **75 clock hours**

This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology of the humerus and shoulder, lower extremity, and the hip and pelvis. Film critique covering the elements of diagnostic radiographs is emphasized. Also included are the precautions needed when using mobile or surgical equipment. Students will

master practical experience in positioning patients, exercising independent judgment, creativity, problem solving skills, and knowledge of technical factors in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing patient and technologist and using positioning aids available to complete exams being simulated. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.

Prerequisites: RTE 1202 & RTE 1202L, BSC 1085 & BSC 1085L

RTE 1030 - Radiographic Physics 4 Credits 60 clock hours

Students in this course will receive a working knowledge of radiologic physics as it relates to the field of radiography. This will include the make-up of the Bohr atom, electromagnetic radiation, electricity and magnetism and electromagnetism. They will become familiar with equipment used in medical imaging for general x-rays and their production, as well as for special procedures. The student will understand how the x-ray beam is produced as well as the radiographic image. They will also be introduced to the equipment utilized for film processing and the equipment needed to improve the quality of the x-ray image. Students will learn about the components involved in quality improvement, assessment and assurance regarding all aspects of the radiology department. Equipment quality control is included, as well as tests to evaluate specific components of radiographic imaging systems.

Prerequisites: MAC 1105; BSC 1085 & 1085L; BSC 1086 & 1086L

RTE 1204 - Radiographic Procedures III RTE 1204 L Lab 3 Credits 75 clock hours

This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology of spine radiography. The students will learn radiographic positioning and procedures for the axial skeleton including the spine and bony thorax. Students will master practical experience in positioning patients, exercising independent judgment, creativity, and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing patient and technologist. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique.

Prerequisites: RTE1203 & RTE1203L

RTE 1205 - Radiographic Procedures IV RTE 1205L –Lab

3 Credits 75 clock hours This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology, radiographic positioning and procedures of the esophagus, stomach, small and large intestine, gallbladder, kidneys, ureters, bladder and fluoroscopy examinations. Film critique covering the elements of diagnostic radiographs is emphasized. Students will master practical experience in positioning patients, exercising independent judgment, creativity and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing patient and technologist. Pathology and disease as they relate to various radiographic procedures are discussed. Students will also learn how different pathology affects the radiographic image and technique. Pharmacologic terminology, drug classifications, pharmacokinetics, and drugs used in imaging are also

studied. It also offers comprehensive coverage of diagnostic contrast agents, along with drug administration procedures, emergency responses to drug reactions, and legal and ethical aspects of medication administration. The theory and practice of basic venipuncture techniques and the administration of diagnostic contrast agents are also practiced and mastered.

Prerequisites: MAC 1105, RTE 1030

CTS 1050 – Introduction to Computers 3 Credits 45 clock hours

Students will learn the basic operation of Microsoft Word, Excel, and PowerPoint. Student will learn proper techniques for business letter writing and resume writing.

Prerequisites: None

RTE 2025 Cross Sectional Anatomy/Advanced Modalities 3 Credits 45 clock hours

Students will learn sectional anatomy to develop a realistic understanding of 3-dimensional sense of anatomy of the head, neck, thorax, abdomen, and pelvis. Students will acquire basic principles, image appearance and education/certificate for Ultrasound, MRI, Nuclear Medicine/PET, Angiography and Radiation Therapy. Students will also acquire a basic understanding of Computed Tomography.

Prerequisite: RTE 1206 & RTE 1206L

RTE 2015 – Radiographic Biology and Protection 2 Credits 30 clock hours

This course is designed to provide students with overview of the principles of the interaction of radiation to the body systems. Fundamental principles of molecular and cellular responses to radiation will be learned, including acute and chronic effects of radiation.

Prerequisites: RTE 1000

RTE 1206 - Radiographic Procedures V RTE 1206L Lab 3 Credits 60 clock hours

This course is designed to provide instruction in the proper positioning methods in the laboratory setting to prepare the student to perform these methods competently in the clinical setting. This course will include positioning terminology, radiographic positioning and procedures of the skull and facial structures. Film critique covering the elements of diagnostic radiographs is emphasized. Students will master practical experience in positioning patients, exercising independent judgment, creativity and problem solving in the clinical laboratory. Students will learn the synopsis of radiation protection and exposure. Students work in teams, role-playing patient and technologist.

Prerequisites:

RTE 2500 – Senior Registry Review 3 Credits 45 Clock Hours

This Course provides a review of basic knowledge from previous courses and helps the student prepare for national certification examination for radiographers. Topics include: principles of radiographic exposure, radiographic procedures, anatomy, physiology, pathology, terminology, radiographic equipment, radiation protection, and patient care techniques.

Prerequisites: RTE1025

RTE 1270 - Clinical 5 Credits 240 clock hours

Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All

activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.

Prerequisites: BSC 1085 & 1085L, RTE 1202 & 1202L

RTE 1280 - Clinical II

5 Credits 240 clock hours

Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.

Prerequisites: RTE 1270, RTE 1030, BSC1086, RTE 1203

RTE 2005 – Clinical III

8 Credits 360 clock hours

Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.

Prerequisites: RTE 1204 & 1204L, RTE 1280, RTE 1025, BSC 1086 &1086L

RTE 2010 – Clinical IV

8 Credits 360 clock hours

Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.

Prerequisites: RTE 1205 & 1205L, RTE 2005, RTE 1026, BSC 1086 &1086L

**RTE 2020 – Clinical V
hours**

8 Credits 360 clock

Introduces students to the clinical setting and provides an opportunity for students to observe and participate in radiographic procedures, with emphasis on specific structures. All activities of students are under the supervision of a designated site clinical instructor or designee. Emphasis is placed on the demonstration of proficiency in required and elective competencies in the area of abdomen, chest and upper extremity.

Prerequisite: RTE 1206 & 1206L, RTE 2010, RTE 2015, BSC 1086 &1086L

Radiation Therapy

2655 Total Hours

105 Semester Credits

98 Weeks

Credential Awarded: Associate in Science

Type of Instructional Delivery: Residential

PROGRAM DESCRIPTION

The program is 98 weeks in length. The program is designed to provide a well-planned didactic and clinical education experience to enable students to become competent, entry-level radiation therapists upon graduation. The curriculum has been developed in accordance with the guidelines established by the American Society of Radiologic Technologists (ASRT). The clinical competency requirements have been developed in accordance with ARRT (American Registry of Radiologic Technologists) guidelines.

PROGRAM OUTLINE

Course #	Course Title	Credits	Hours
HSC 1000	Introduction to Health Science	3	45
MEA 1239	Medical Terminology	2	30
BSC 1085	Anatomy & Physiology I	3	45
BSC 1085	Anatomy & Physiology I Lab	1	30
BSC 1086	Anatomy & Physiology II	3	45
BSC 1086L	Anatomy & Physiology II Lab	1	30
MAC1105	College Algebra	3	45
ENC 1101	English Composition	3	45
PSY 1012	Introduction to Psychology	3	45
SPC 1016	Fundamentals of Speech	3	45
CTS 1050	Introduction to Computers	3	45
RAD 1000	Orientation to Radiation Therapy & Medical Ethics	3	45
RAD 1002	Introduction to clinical Radiation Therapy & Operations	4	60
RAD 1003	Radiation Therapy Physics I	4	60
RAD 1004	Radiation Therapy Physics II & Quality Management	4	60
RAD 1005	Radiation Biology & Protection	3	45
RAD 1006	Radiation Therapy Patient Care	3	45
RAD 1008	Sectional Anatomy & Imaging Principles	3	45
RAD 1009	Principles & Practice of Radiation Therapy I	4	60
RAD 1010	Principles & Practice of Radiation Therapy II	3	45
RAD 2000	Treatment Planning I	3	45
RAD 2001	Treatment Planning II	3	45
RAD 2002	Oncology Pathology	3	45
RAD 2006	Radiation Therapy Review Seminar	3	45
RAD 1012	Clinical Externship I	5	240

RAD 1013 Clinical Externship II	5	240
RAD 2003 Clinical Externship III	8	360
RAD 2004 Clinical Externship IV	8	360
RAD 2005 Clinical Externship V	8	360

Totals:

Course Descriptions

HSC 1000 - Introduction to Health Science 3 credits 45 clock hours

Students will examine the following topics: The healthcare professions and teams, interactions between and reactions of patients in altered physical &/or mental states including gerontology and diverse cultures, professionalism and professional organizations, vital signs, OSHA standards, asepsis and isolation techniques including universal precautions, ethics and legal concerns of the healthcare provider, lifting/moving/body mechanics, patient and environmental emergency assessment and response, and Basic Cardiac Life Support (BCLS). The student will possess the aptitude to comprehend and use information in both written and oral formats.

Prerequisites: None

PSY 1012 - Introduction to Psychology 3 credits 45 clock hours

This course offers students the basic principles of human behavior. Students will discuss challenges, responsibilities, problems and satisfaction of being a health care provider and relate this to the theories of human behavior and personality development.

Prerequisites: None

SPC 1016 - Fundamentals of Speech 3 credits 45 clock hours

Students will learn the foundations of communication including public presentations and interviewing skills. Emphasis will be placed on motivational speaking.

Prerequisites: None

CTS 1050 - Introduction to Computers 3 credits 45 clock hours

In this course students will learn the basic operation of Microsoft Word, Excel and Power Point. Students will learn proper techniques for business letter-writing and resume-writing.

Prerequisites: None

ENC 1101 - English Composition 3 credits 45 clock hours

Students will be taught the proper use of grammar, punctuation and usage skills that are used in everyday language. The goals of effective writing will be covered as well as essay preparation. Students will take several mastery and editing tests as part of the course. Students will review readings for writing, to aid in essay preparation and completion.

Prerequisites: None

MAC 1105 - College Algebra 3 Credits 45 clock hours

Students in this course will explore college algebra through a detailed examination of practical applications. Students will calculate algebraic problems with linear equations, exponential functions, polynomials, factors and rational expressions. Students will solve problems using graphs, slopes, inequalities, linear equations, roots, radicals and quadratic equations.

Prerequisites: None

MEA 1239 - Medical Terminology 2 credits 30 clock hours

This course will provide students with instruction in how to decipher useful medical terminology into everyday language. Students analyze and learn prefixes and suffixes, spelling use and correct pronunciation. Medical abbreviations and symbols are included.

Prerequisites: None

BSC 1085 - Anatomy & Physiology I 3 credits 45 clock hours

This course will offer students the opportunity to learn about the structure and function of the human body. The concepts of cells, tissues, organs and systems are presented to form the framework for a comprehensive study of anatomic structures and basic functions of each body system. In addition, the concepts of biochemistry will be discussed. Also provided will be the concepts of structural anatomy as students analyze the complex functions of each system.

Prerequisites: None

BSC 1085L - Anatomy & Physiology I Lab 1 credit 30 clock hours

In an online delivery students in this course will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved. Anatomy and Physiology I will focus on the cells, cell metabolism, tissues and membranes, integumentary system and body temperature, skeletal system, muscular system, nervous system tissue and brain, nervous system spinal cord & peripheral nerves, autonomic nervous system and endocrine system.

Prerequisites: None

BSC 1086 - Anatomy & Physiology II 3 credits 45 clock hours

This course is a continuation of BSC 1085 lecture. Students will continue to will explore the human body as a whole, its levels or organization, the terms used in describing body structure and directional terms, homeostatic mechanisms, the relationship of structure and function and how they relate to each other and homeostasis as directed by each body system involved.

Prerequisites: BSC 1085

BSC 1086L - Anatomy & Physiology II Lab 1 credit 30 clock hours

Students will explore the structure and function of tissues and organs in a laboratory setting. This will include visiting the office of the Medical Examiner, Video web cast of dissections and autopsies.

Prerequisites: BSC 1085, BSC 1085L & MEA 1239

RAD 1000 - Orientation to Radiation Therapy & Medical Ethics 3 credits 45 clock hours

This course is designed to provide the student with an overview of the foundations in radiation therapy and the therapist's role in the health care delivery system. The principles, practices and policies of the CIAHT educational program, health care organizations, principles of radiation and health safety and professional responsibilities of the radiation therapist will be covered in this course.

This course also provides sequential development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy. Concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Problem-solving will be utilized along with critical thinking skills in discussion of the source of law, causes of action and litigation processes related to the professional practice of radiation therapy. The ethical stands and standards of law will be compared and examined.

Prerequisites: None

RAD 1002 - Introduction to Clinical Radiation Therapy & Operations

4 credits 60 clock hours

This course will introduce the students to the clinical setting. Personnel and responsibilities will be discussed with regard to each person involved with patients and their care. Equipment utilized and safe operation of equipment will be discussed. The proper and ethical behaviors of students and personnel in the clinical setting will be demonstrated via role play and discussion groups. The psychological aspects of patient reactions and fears will be discussed with regard to the waiting room, treatment room and personnel they will meet. This course will prepare students for clinical externships beginning the second semester of the program.

This course also focuses on various Radiation Therapy operational issues. Continued quality improvement issues are discussed and evaluated and assessment techniques will be emphasized. Human resource regulations impacting the radiation therapist will be examined. Accreditation agencies and the radiation therapist's role in the accreditation process will be discussed. Billing and reimbursement issues pertinent to the radiation therapy department will be presented.

Basic Cardiac Life Support for the Health Care Provider will also be provided involving training in risk factors of heart disease, recognition of a heart attack and choking victim. Activating the emergency medical services system and managing the unconscious victim with rescue breathing using airway adjuncts/ventilation devices along with the automated external defibrillator educational course. Adult, child and infant cardio pulmonary resuscitation and obstructed airway instruction for the one-rescuer and two-rescuer team will be covered.

Prerequisites: None

RAD 1006 - Radiation Therapy Patient Care 3 credits 45 clock hours

The student will be provided with concepts in assessment and evaluation of the patient for delivery of radiation therapy. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures will be presented.

Prerequisites: BSC 1085, BSC 1085L, MEA 1239, RAD 1000 & RAD 1001

RAD 1003 - Radiation Therapy Physics I 4 credits 60 clock hours

This course provides students with an understanding of the concepts of general physics. It then develops into an understanding of radiations used in the clinical setting. Fundamental physical units, measurements, principles, atomic structure and types of radiation are emphasized. Also presented are the fundamentals of x-ray generating equipment, x-ray production and its interactions with matter.

Prerequisites: MAC 1105, RAD 1000 & RAD 1001

RAD 1004 - Radiation Physics II & Quality Management 4 credits 60 clock hours

This course is a continuation of RAD 1003A and is designed to review and expand concepts and theories in the radiation physics I course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production and interactions of ionizing radiations are emphasized. The student is also presented with treatment units used in external beam radiation

therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution and scatter analysis.

This course is also designed to focus on the evolution of quality management programs and continuing quality improvement in radiation oncology. Students will examine the need for quality assurance checks, quality assurance of the clinical aspects and chart checks, film checks, the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units, the role of radiation therapists in quality management programs. Legal and regulatory implications for maintaining appropriate quality management guidelines as well as the role of computers and information systems are discussed as they serve within the radiation oncology department. As part of this course, students will be required to document competency in performing daily treatment machine checks as part of their clinical competency requirements.

Prerequisites: MAC 1105, CTS 1050, RAD 1000, RAD 1001, RAD 1003, RAD 1005

RAD 1005 - Radiation Biology & Protection 3 credits 45 clock hours

This course will present the basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are included. The specific responsibilities of the radiation therapist are discussed, examined, performed and evaluated. The student will also be presented with basic concepts and principles of radiation biology; the interactions of radiation with cells, tissues and the body as whole and resultant biophysical events will be presented. Discussion of the theories and principles of tolerance dose, time-dose relationships, fractionation schemes and the relationship to the clinical practice of radiation therapy will be discussed, examined and evaluated

Prerequisites: BSC 1085, BSC 1086, HCS 1000, MEA 1239, MAC 1105, RAD 1002 & RAD 1003

RAD 1008 - Sectional Anatomy & Imaging Principles 3 credits 45 clock hours

The student is introduced to a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. Radiation oncology imaging equipment and related devices will be emphasized. This course will also provide the student the opportunity to study normal sectional anatomy utilizing diagrams and radiologic images. Guest speakers will be invited to demonstrate the different imaging modalities utilized for diagnosis

Prerequisites: BSC 1085, BSC 1086, HCS 1000, MEA 1239, RAD 1001, RAD 1002, & RAD1003

RAD 1009 - Principles and Practice of Radiation Therapy I 4 credits 60 clock hours

In this course the student is provided with an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspect as well as the physical and technical aspects will be discussed. The role and responsibility of the radiation therapist, the treatment prescription, the documentation of treatment parameters and delivery will also be discussed.

Prerequisites: MAC1101, MEA1239, BSC1085, BSC1085L, BSC1086, BSC1086L, RAD 1000, & RAD1001

RAD 1010 - Principles and Practice of Radiation Therapy II 3 credits 45 clock hours

This course is a continuation of RAD 1009A. The course is designed to examine and evaluate the management of neoplastic disease while promoting critical thinking skills and the basis of ethical clinical decision-making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease will be presented for each organ and system. This will be discussed and evaluated in relationship to histology, anatomical site and patterns of spread. The radiation therapist's role in the management of neoplastic disease will also be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession.

Prerequisites: MAC1101, MEA1239, BSC1085, BSC1085L, BSC1086, BSC1086L, RAD 1000, & RAD1001, & RAD1009

RAD 2000 - Treatment Planning I 3 credits 45 clock hours

The content of this course is designed to establish factors that influence and govern clinical treatment planning of patient treatment. Encompassed are isotope distributions, patient contouring, and radiobiologic considerations.

Prerequisites: BSC 1085, BSC 1085L, BSC 1086, BSC 1086L, MAC 1105, RAD 1000A, RAD 1001, RAD 1002, RAD 1003, RAD 1004, RAD 1005

RAD 2001 - Treatment Planning II 3 credits 45 clock hours

This is a continuation of RAD 2000A. Students will be required to make dosimetric calculations, utilizing compensating filters, blocking considerations and other treatment accessories. Clinical application of treatment beams will be taken into consideration and optimal treatment planning will be emphasized along with particle beams. Stereotactic and emerging technologies will also be presented. Coincidental with this course, students will be provided with a clinical rotation in the radiation dosimetry department to work with radiation physicists to observe and participate in the computerized treatment planning process.

Prerequisites: BCS 1085, BCS 1086, MAC 1105, RAD 1000, RAD 1001, RAD 1003, RAD 1004, RAD 1005, & RAD 2000

RAD 2002 - Oncologic Pathology 3 credits 45 clock hours

This course provides the student with an introduction into the general pathology of cancer. It introduces the basic disease concepts, theories of disease etiology and the pathologic disorders of each system most frequently encountered in clinical practice. Also provided to the student is an in-depth study of new and abnormal development of cells in the cancer process. The student is introduced into the processes involved in the development and classification of both benign and malignant tumors and site-specific information on malignant tumors.

Prerequisites: BSC 1085, BSC 1086, HCS 1000, MAC 1105, MEA 1239

RAD 2006 - Radiation Therapy Review Seminar 3 credits 45 clock hours

Course is designed to synthesize previous coursework and integrate didactic and clinical concepts. Various Instructors will present interactive lectures, reviews and comprehensive exams based on all course topics and materials covered throughout the two year program. Instructors will emphasize the application process, completion of the programmatic requirements and practice computerized simulations of the registry exam based on the outline in the Radiation Therapy Certification Handbook.

Prerequisites: MAC1101, MEA1239, BSC1085, BSC1085L, BSC1086, BSC1086L, RAD 1000, RAD 1002, RAD 1003, RAD 1004, RAD 1005, RAD1006, RAD1007, RAD2003, RAD2004, RAD 1008, RAD 1009, RAD 1010 & RAD 2000

RAD 1012 - Clinical Externship I 5 credits 240 clock hours

The student will rotate through nursing, simulation and treatment. The student will participate in routine procedures under the direct supervision of a registered radiation therapist. The student will develop competence in basic patient care skills as well as basic simulation and treatment setups.

Prerequisites: BSC 1085, BSC 1085L, HSC 1000, MEA 1239, RAD 1000 & RAD 1001

RAD 1013 - Clinical Externship II 5 credits 240 clock hours

The student will rotate through nursing, simulation and treatment. The student will participate in routine procedures under the direct supervision of a registered radiation therapist. The student will develop competence in basic patient care skills as well as basic simulation and treatment setups.

Prerequisites: RAD 1000A, RAD 1001A, RAD 1002A, RAD 1003A & RAD 1006

RAD 2003 - Clinical Externship III 8 credits 360 clock hours

The student will be introduced to the general operations of a radiation oncology department including equipment used for simulation and treatment, patient flow, and roles and responsibilities of the healthcare team that comprises the staff.

Prerequisites: RAD 1000, RAD 1001, RAD 1002, RAD 1003, RAD 1004, RAD 1005 & RAD 1007

RAD 2004 - Clinical Externship IV 8 credits 360 clock hours

The student will introduced to the general operations of a radiation oncology department including equipment used for simulation and treatment, patient flow, and roles and responsibilities of the healthcare team that comprises the staff. The student will develop competence in basic patient care skills, as well as, dosimetry, simulation and treatment setups

Prerequisites: RAD 1000, RAD 1001, RAD 1002, RAD 1003, RAD 1004, RAD1005, RAD 1008A, RAD 1009, & RAD 2003

RAD 2005 - Clinical Externship V 8 credits 360 clock hours

The student will introduced to the general operations of a radiation oncology department including equipment used for simulation and treatment, patient flow, and roles and responsibilities of the healthcare team that comprises the staff.

Prerequisites: RAD 1000, RAD 1001, RAD 1002, RAD 1003, RAD 1004, RAD1005, RAD 1008, RAD 1009, RAD 2000, RAD 2001, RAD 2002 & RAD

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Independent Study

Students wishing to take a course by independent study must contact the instructor of the course for permission and submit an independent study contract for review and approval. The instructor specifies the requirements to be completed by the student including tests, periodic class attendance, term papers, etc.

Not all courses at the institution may be taken by independent study. The respective institution has jurisdiction in the determination of which courses may be taken in this manner. One independent study course will be accepted during the program enrollment period.

The regular grading system applies to all independent study students. Grades earned by independent study have the same status as those acquired through regular class attendance. Students taking a course by independent study must register for the specific course section in the regular manner.