

**CAMBRIDGE**  
COLLEGE OF HEALTHCARE & TECHNOLOGY



**INSTITUTIONAL CATALOG  
ADDENDUM**

**Delray Beach Campus**  
Revised 01/18/2017

## **CORPORATE ADMINISTRATION**

**Dr. Terrence W. LaPier, Ph.D.** - President

**Julie Orloff, M.Ed., CMA, RMA, CPC** – Vice President of Compliance & Regulatory

**Margherite Powell** – Corporate Director of Financial Aid

**Dominique Werner** – Corporate Registrar

**Adrian Rorie** – Controller

**Emry Somnarain, MD** – Academic Dean/Online Program Director

## **CAMPUS ADMINISTRATION**

**Dominique Werner** – Interim Campus Director/Registrar

**Jessica Terhune** – Associate Registrar

**Norlan Tolon**- Admissions Director

**Keisha Crichton** – Career Services Coordinator

**Nadia Beepath** - Bursar

**Brittney Freeman** – Financial Aid Manager

**Ellen Scalese** – Librarian

## **EDUCATION**

### **DIAGNOSTIC MEDICAL SONOGRAPHY**

**Nicole Abrahams, BS, RCS**

Program Director

Grand Canyon University, BS in Health Science

Sanford Brown Institute, AS in Cardiovascular Technology

**Bianca Paz, RDMS**

Clinical Coordinator - Echocardiography

Institute of Allied Medical Professions, Diploma in Sonography

**Jorge Valdez, RDMS**

Clinical Coordinator - Abdomen & OB/GYN

National School of Technology, AS in Diagnostic Medical Sonography

National School of Technology, AS in Cardiovascular Technology

**Joanne Bascilicato, RDMS**

Instructor-Abdomen & OB/GYN

Rochester Institute of Technology, BS Sonography

Suffolk Community College, AS in Business

**Rachel Friedman, RDMS**

Instructor – Echo

Ultrasound Diagnostic School, AS in Cardiovascular Sonography

## **RADIOLOGIC TECHNOLOGY PROGRAM**

**Stacy Kopso, M.Ed., RT(R) (M)**

Program Director

Quinnipiac University, BS in Diagnostic Imaging

Post University, Masters in Education

**Deon Durrant, RT (R) (MR)**

Clinical Coordinator

Capella University, PhD Organization & Management

Monroe College, MBA

School of Medical Radiation and Technology, Diploma in Radiography

Administration

Miami Dade College, AS in Radiology

**Cheryl Weaks,**

Instructor

University of Central Florida, Masters in Education

University of Central Florida, BS

Broward College, AA

University of Alabama/Bham, Radiologic Sciences

## **RADIATION THERAPY PROGRAM**

**Jacqueline Mylan, RT (T)**

Program Director

Ottawa University, MBA in Healthcare Management

**Greg Orasi, BA, RT (T)**

Clinical Coordinator

Broward Community College, BS in Psychology

**Brian Kogu, RT (T)**

Instructor

Erie Community College, AS in Radiation Therapy Technology

## **ASSOCIATE OF SCIENCE IN NURSING / PRACTICAL NURSING PROGRAM**

**Nursing Programs Director - OPEN**

**Kettly Elizee, BSN, RN**

Practical Nursing Clinical Coordinator

Florida Risk Management Institute, Legal Nurse Consultant Diploma

Universite` de Montreal, BS in Nursing

St. Laurent College, Diploma in Nursing

**Michelle Ugalde**

Practical Nursing Instructor  
University of Phoenix, Masters of Science in Nursing  
University of Rhode Island, BS in Nursing

**Catrina Leandre**

Practical Nursing Instructor  
Keiser University, Masters of Science in Nursing  
Keiser University, BS in Nursing

**Flavius Nascimento**

ASN Instructor  
South University, Masters of Science in Nursing  
Rio de Janeiro University, BS in Nursing

**PHLEBOTOMY TECHNICIAN PROGRAM**

**Tony Walker**

Instructor  
Keiser University, AA Degree  
United States Air Force, Phlebotomy Certificate

**MEDICAL BILLING & CODING PROGRAM**

**Instructor - OPEN**

**GENERAL EDUCATION/DISTANCE EDUCATION**

**Emry Somnarain, MD**

Academic Dean / Director of Online Education  
McMaster University, BS in Chemistry  
St. Mary's School of Medicine, Medical Doctorate

**Narendra Narayana, BA, MS, BE, MBA**

Instructor  
Florida Atlantic University, MBA in Entrepreneurship & Global Business Management  
Broward Community College, Certification in Accounting & Finance  
Bangalore University, India, Bachelor of Engineering in Telecommunications

**Gregory Cecere, AA, BA, MA**

Instructor  
Broward College, AA  
Florida International University, Bachelor in English Ed  
Florida Atlantic University, Master of Arts

**Christopher Aults, MA, BS**

Instructor  
Pennsylvania University, BS in Psychology,  
Florida Atlantic University, Master of Arts Psychology

**Evelyn Strasfeld, BS**

Instructor  
Keene State College, BS in Education

**Shahla Asghari, MD**

Instructor  
Terhran University of Medical Science, MD

**Kendrick McQueen**

Instructor  
Doctorate Chiropractic, Life University  
Master of Education, The Citadel-Military College  
Bachelors in Biology, The Citadel-Military College

**TUITION & FEES**  
*Effective January 4, 2016*

Program	Application Fee	Tuition	Other Fees not in Tuition
Diagnostic Medical Sonography	\$50.00**	\$47,113.00	\$80.00 Grad Fee
Radiation Therapy	\$50.00**	\$38,898.00	\$80.00 Grad Fee
Radiologic Technology	\$50.00**	\$38,060.00	\$80.00 Grad Fee
Associate of Science in Nursing	\$50.00**	\$46,800.00	\$80.00 Grad Fee
Practical Nursing	\$50.00**	\$21,825.00	\$80.00 Grad Fee
Medical Assistant	\$50.00**	\$14,000.00	\$80.00 Grad Fee
Medical Billing and Coding	\$50.00**	\$14,300.00	\$80.00 Grad Fee
Phlebotomy Technician	\$50.00**	\$1,916.00	N/A
Ophthalmic Technician	\$50.00**	\$14,300.00	\$80.00 Grad Fee

**\*\* Indicated all application fees are Non Refundable**

## CAMBRIDGE MASTER CALENDAR

### Credit Hour Programs:

TERM DATES	Scheduled Breaks & Holidays:
01/09/2017 – 05/05/2017	Spring 2017: 03/18/2017 – 03/26/2017 MLK 01/16, PRES 02/20
05/08/2017 – 09/01/2017	Summer 2017: 07/01/2017 – 07/09/2017 MEM 05/29
09/04/2017 – 12/22/2017	Winter 2017: 12/23/2017 – 01/07/2018 LAB 09/04, THANK 11/23-24
01/08/2018 – 05/04/2018	Spring 2018: <i>To Be Determined</i> MLK 01/15, PRES 02/19
05/07/2018 – 08/31/2018	Summer 2018: 06/30/2018 – 07/08/2018 MEM 05/28
09/03/2018 – 12/21/2018	Winter 2018: 12/22/2018 – 01/06/2019 LAB 09/03, THANK 11/22-23

### Clock Hour Programs:

PROGRAM	START DATE	GRAD DATE
Medical Billing & Coding	March 2017	TBD
Phlebotomy (EVE)	02/20/2017	TBD
Practical Nursing (DAY)	03/27/2017	05/11/2018
Phlebotomy (EVE)	06/19/2017	TBD
Phlebotomy (EVE)	10/02/2017	TBD
Practical Nursing (DAY)	08/28/2017	TBD
Practical Nursing (EVE)	10/16/2017	08/09/2019

### SCHOOL CLOSINGS

Classes will not be held on the following days:

New Year's Day

Martin Luther King Jr. Day

Presidents Day

Memorial Day

Independence Day

Labor Day

Veteran's Day

Thanksgiving Day & Day after

Christmas Day

# Updates to Programs Page 14 of the Catalog

## **Registered Nurse to Bachelor of Science in Nursing (RN to BSN)**

Bachelor of Science Degree Program

### **Method of Delivery – 100% Distance Education**

64 weeks- hours may vary

125 semester hours

(77 semesters credits awarded for prior learning and admission requirements\*)

720 clock hours

## **Medical Billing and Coding**

900 Clock Hours

Diploma Program

37.5 Weeks

### **Method of Delivery: 100% Distance Education**

**These programs are offered out of our Altamonte Springs, Florida campus through the Blackboard Platform.**

## **Diagnostic Medical Sonography**

98 Semester Credits

2378 Clock Hours

96 Weeks

Credential awarded – Associate of Science

Method of Delivery: Blended

### **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 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.

## Subject Titles: Diagnostic Medical Sonography

### Course

Number	Course Title	Semester Credits	Clock Hours
BCS 1085	Anatomy & Physiology I	3	45
BCS 1085L	Anatomy & Physiology I Lab	1	30
BCS 1086	Anatomy & Physiology II	3	45
BCS1086L	Anatomy & Physiology II Lab	1	30
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

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 organism a laboratory setting.

Prerequisites: None

**BCS 1086 Anatomy & Physiology 2** 4 Semester Credits 75 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. 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: BCS 1085

**DMS A 1002 Principles of Sonographic Physics and Instrumentation**

5 Semester Credits 90 Clock Hours

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.

Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053

DMS A 1003 Sonographic Anatomy 3 Semester Credits 60 Clock Hours  
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.

Prerequisites: BSC 1085, BSC 1086, MEA 1239, HSC 1000, PHY 2053

DMS A 2001 Principles of Abdominal Sonography 1 4 Semester Credits 75 Clock Hours  
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.

Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

DMS A 2002 Principles of Abdominal Sonography 2 4 Semester Credits 75 Clock Hours

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.

Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2001

DMS A 2003 Principles of OBGYN Sonography 1 4 Semester Credits 75 Clock Hours

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.

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 2004 Principles of OBGYN Sonography 2 4 Semester Credits 75 Clock Hours

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.

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

DMS A 2005 Introduction to Vascular Sonography 4 Semester Credits 75 Clock Hours  
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.  
Prerequisites: BSC 1085, BSC 1086, MEA1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

DMS A 2006 Echocardiographic Pathology 1 4 Semester Credits 75 Clock Hours  
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, and 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.  
Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2009

DMS A 2007 Echocardiographic Pathology 2 4 Semester Credits 75 Clock Hours  
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.  
Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003, DMS A 2009, DMS A 2006

DMS A 2008 Pharmacology 4 Semester Credits 75 Clock Hours  
This course involves understanding of clinical pharmacology including theory, 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.  
Prerequisites: BSC 1085, BSC 1086, MEA 1239, MAC 1105, PHY 2053, DMS A 1002, DMS A 1003

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

DMS A 2010 Clinical Externship I 6 Semester Credits 272 Clock Hours  
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.  
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 2011 Clinical Externship II 6 Semester Credits 272 Clock Hours  
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.  
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

DMS A 2012 Clinical Externship III 6 Semester Credits 272 Clock Hours  
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.

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

#### DMS A 2013 Clinical Externship IV

6 Semester Credits 272 Clock Hours

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.

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

#### DMS A 2014 Seminar

3 Semester Credits 45 Clock Hours

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.

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

#### ENC 1101 English Composition

3 Semester Credits 45 Clock Hours

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

#### HSC 1000 Introduction to Health Science

3 Semester Credits 45 Clock Hours

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

MAC 1105 College Algebra

3 Semester 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

MEA 1239 Medical Terminology

2 Semester Credits 30 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.

Prerequisites: None

PSY 1012 Introduction to Psychology

3 Semester 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

PHY 2053 General Physics

3 Semester Credits 45 Clock Hours

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.

Prerequisites: MAC 1105

SPC 1016 Fundamentals of Speech

3 Semester Credits 45 Clock Hours

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

Prerequisites: None

# Practical Nursing

Diploma Program

Method of Delivery - Residential

54 weeks - Days

85 weeks - Evenings

1350 clock hours

## Program Objective

The Practical Nurse program offers preparation in the knowledge and clinical skills for students to enter the Practical Nursing field. Students in this program are conditioned to take the NCLEX-PN examination required for employment as an entry-level Licensed Practical Nurse (LPN).

## Practical

Nursing experiences include theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, and geriatric nursing and respective clinical rotations in both acute and long-term care situations. Theoretical instruction of the clinical application of the vocational role and function and personal, family and community health concepts, nutrition, human growth and development over the lifespan, body structure and function, interpersonal relationship skills, mental health concepts, pharmacology and administration of medications, legal aspects of practice, Health Careers

Core, Basic Life Support (BLS and CPR) for health-care providers, and current issues in nursing are all components of the program. Practical Nurses are employed in a variety of healthcare settings including hospitals, ambulatory care settings, long-term care facilities, home health agencies, private duty opportunities, and other appropriate medical areas. Upon program completion, graduates are eligible to take NCLEX-PN credentialing examination.

## PROGRAM OUTLINE

Course Code	Course Title	Clock Hours
PN 100	Health Care	90
PN 102	Medical Terminology	40
PN 103	Anatomy and Physiology	100
PN 104	Human Growth and Development	20
PN 105	Vocational Role and Function –	15
PN 106	Legal Aspects of Nursing	15
PN 107	Nutrition	15
PN 108	Pharmacology and Administration of Medications	80
PN 109	Mental Health Nursing	30
PN109CL	Mental Health Nursing (clinical)	65
PN 110	Community Health Nursing	20
PN110CL	Community Health Nursing (clinical)	50
PN 111	Geriatric Nursing	30
PN111CL	Geriatric nursing (clinical)	144
PN 112	Medical Surgical I Nursing	75
PN112CL	Medical Surgical Nursing I (clinical)	144
PN 113	Medical Surgical Nursing II	75
PN113CL	Medical Surgical nursing II (clinical)	144
PN 114	Obstetric Nursing	35

PN 114CL	Obstetric nursing (clinical)	64
PN 115	Pediatric Nursing	35
PN115CL	Pediatric Nursing (clinical)	64
Total Clock Hours		1350

## COURSE DESCRIPTIONS

### Theoretical Instruction & Lab Courses, Clinical Experience

PN 100 Health Care 90 clock hours  
 This course covers the Core and the competencies of basic knowledge necessary in the health occupations career. It includes basic communication skills; math and science, employability skills, safety practices, legal and ethical responsibilities, knowledge of the health care system as a whole, principles of infection control, first aid, and basic patient care competencies.  
 Prerequisites: None

PN 102 Medical Terminology 40 clock hours  
 This course introduces the student to the basic knowledge and understanding of medical language and terminology used by health care professionals. Students are required to receive a final grade of B or 3.0 or higher in this course or they must repeat the course.  
 Prerequisites: PN 100

PN 103 Anatomy and Physiology 100 clock hours  
 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, special senses, integumentary, skeletal and muscular, and respiratory systems. Students are required to receive a final grade of B or 3.0 or higher in this course or they must repeat the course.  
 Prerequisites: PN 100

PN 104 Human Growth and Development 20 clock hours  
 In a learning training setting, this course examines the human life cycle from infancy through old age. Emphasis will be placed on the psychological, biological, and sociological development of the human being and the factors influencing changes that occur during each life stage. The role of the family as it relates to health and wellness and its role in growth and development will also be explored.  
 Prerequisites: PN 100

PN 105 Vocational Role and Function 15 clock hours  
 This course will stress the importance of professional and interpersonal communication in order to maintain interdisciplinary relationships. The student is introduced to strong work ethics, personal and professional traits, interpersonal relationship, practicum, and career planning.  
 Prerequisites PN 100



PN 106 Legal Aspects of Practice 15 clock hours

In a learning training setting, this course introduces the student to the medical legal issues confronting nurses in the health care settings.

Prerequisites: PN 100

PN 107 Nutrition 15 clock hours

In a learning training setting, this course will emphasize the importance of promoting good nutrition and the concepts of planning modified diets for the health impaired client. Concepts of nutrition promotion will be explored.

Prerequisites: PN 100

PN 108 Pharmacology & Administration of Medications 80 clock hours

This course introduces the PN student to the basics of Pharmacology. Students will explore the major classes of medications, their therapeutic uses, and nursing interventions related to medication side effects. Students are required to receive a final grade of B or 3.0 or higher in this course or they must repeat the course.

Prerequisites: PN 100

PN 109 Mental Health Nursing 30 clock hours

This course introduces the student to the basic concepts of mental health, mental illness and the role of the practical nurse in caring for clients with mental health needs. The concepts of nursing process, therapeutic communication and legal/ethical/professional standards of care will be explored as they influence mental health nursing practice. Students will develop skills in differentiating among various mental disorders in terms of symptoms, nursing diagnoses, treatment modalities, pharmacology and in the formulation of nursing intervention strategies. Students will have the opportunity to develop skills in assessment and intervention for clients experiencing mood disorders, psychosis and substance abuse.

Prerequisites: PN 100

PN 109CL Mental Health Clinical Nursing 65 clinical clock hours

This clinical practicum emphasizes in the application of the nursing process and knowledge of the mental health population. It also focuses in the application of mental health theory disorders such as eating, mood, personality, substance abuse, and schizophrenia to meet the mental health client needs.

Prerequisites: PN100, PN102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, PN113

PN 110 Community Health Nursing 20 clock hours

This course introduces students to the theoretical concepts of community and population based community health nursing practice. Emphasis will be on promotion of community health and community health nursing roles.

Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, PN108, PN109, PN112, and PN113

PN110CL Community Health Concepts Clinical Nursing 50 clinical clock hours  
This clinical course will enable students to apply the community health principles. Clinical experiences focus on principles and concepts of health promotion and health education in various community setting such as respite homes, homeless outreach centers, and other organizations promoting quality of life for the underserved in the community.  
Prerequisites: PN100, PN102, PN103, PN104, PN105, PN106, PN107, PN108, PN109, PN110, PN112, PN113.

PN 111 Geriatric Nursing 30 clock hours  
In this module, the student will be introduced to health promotion and care of the older adult. Student will have the opportunity to learn about the health and wellness of the aging population in the United States, explore some of the common myths about aging, and the theories of aging. Next the student will explore methods for assessing body systems, nursing diagnoses appropriate to the older adult, areas in which older adults differ in their response to illness and other stressors, and changes that occur with aging in intelligence, learning and memory. Finally, the student will have the opportunity to learn ways to preserve dignity and self-esteem in the older adult.  
Prerequisites: PN100

PN111CL Geriatric nursing (clinical) 144 clinical clock hours  
This course provides clinical experience for students with nursing care in geriatric settings working with aging population. The course introduces the students to the practical application of the basic concepts caring for geriatric patients and the role of the practical nurse in their care. This clinical experience builds upon the theory and knowledge gained.  
Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, and PN113

PN 112 Medical Surgical Nursing 1 75 clock hours  
The course is designed to introduce the student to nursing principles in the care of the adult patient. The student will study patient care problems that are specific to altered body systems. The focus will be on the cardiovascular, respiratory, lymphatic and neurological systems. The student will study the essential nursing considerations for total patient care management and the application of the nursing process to formulate nursing care plans.  
Prerequisites: PN 100, PN105, PN115, PN110

PN112CL Medical Surgical Nursing I (clinical) 144 clinical clock hours  
This clinical practice emphasizes the life process of adulthood and aging. Integration of nursing science into the problem solving process,, interpersonal, and clinical skills in the nursing care of adults, in varying stages of health.  
Prerequisite: PN110, PN102, PN103, PN104, PN105, PN106, PN, 107, PN108, PN112

PN 113 Medical Surgical Nursing II 75 clock hours  
In a learning and residential training setting, this course the course is a continuation of Medical Surgical I. Further study will include the urinary, gastrointestinal, cardiovascular, endocrine, reproductive, immune, neurological, and lymphatic systems. The course will also discuss

sexually transmitted diseases. The student will study essential nursing considerations for total patient care management and the formulation of nursing care plans.

Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, and PN108

PN 113CL Surgical Nursing II (clinical) 144 clinical clock hours

This clinical practice is continuation of Medical Surgical I. Also emphasizes on the life process of adulthood and aging. Integration of nursing science into the problem solving process,, interpersonal, and clinical skills in the nursing care of adults, in varying stages of health.

Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, and PN108, PN112

PN 114 Obstetric Nursing 35 clock hours

This course introduces the student to the role of the practical nurse in assessing and meeting the needs of the OB/GYN patient. Emphasis will be placed on the roles of the PN in reproductive anatomy and physiology, prenatal development, labor and delivery (including pain management), antepartum and post-partum care, and complications and risk factors of pregnancy. Diseases of the reproductive system will be covered in terms of their deviation from normal functioning.

Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, and PN113

PN114CL Obstetric nursing (clinical) 64 clock hours

This course considers the nursing care of individuals on a continuum related to childbearing, evolving through the maternity cycle and care of the neonate. Students apply the basic concepts in caring for childbearing families. Students' knowledge and understanding of the family and how it is affected during the reproductive experiences is approached in terms of basic health needs--physical, psychosocial, and socio-cultural. Students are exposed to concepts and techniques used in childbirth preparation classes. Throughout the childbearing experience, students will provide nursing care to clients during pregnancy, labor/delivery, and postpartum.

Prerequisites: PN100, PN102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, PN113

PN 115 Pediatric Nursing 35 clock hours

In a learning training setting, this course focuses on the care of children from birth through adolescence. The effects of acute and chronic illness on growth and development are studied in the acute and community care setting. Education of the child and family on health promotion, disease prevention, and safety issues are addressed. Ethical issues are discussed regarding the relationship to the child and family, including issues such as child abuse, informed consent, and the impact of diverse cultural and spiritual beliefs on health care decisions in the family.

Prerequisites: PN100, PN 102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, and PN113

PN115CL Pediatric Clinical Nursing 64 clinical clock hour

This course focuses on health management and maintenance and the prevention of illness, care of the family as a whole, care of the child as a whole, and deviations from the normal state of health. The definition of client care includes using the nursing process, performing assessments, using critical thinking, and providing client education. Topics include: health management and maintenance and prevention of illness, care of the child as a whole, and deviations from the

normal state of health in the pediatric client; care, treatment, pharmacology, medication administration, and diet therapy of the pediatric client; growth and development; and standard precautions.

Prerequisites: PN100, PN102, PN103, PN104, PN105, PN106, PN107, PN108, PN112, PN113

## Ophthalmic Technician

Diploma

900 clock hours

37.5 Instructional Weeks

### Program Description

The Ophthalmic Technician program at Cambridge College of Healthcare & Technology is designed to provide training and education in order to prepare graduates to plan, deliver, and manage patient care as an ophthalmic technician. The program offers students the opportunity to learn to effectively function as an integral part of the interdisciplinary team in a healthcare delivery system. At the completion of the program, graduates who have attended class and their clinical externship, studied, and practiced their skills should have the ability to seek entry-level employment as ophthalmic technician.

The requirements of the Program for graduation are as follows:

Completion of all program courses with a satisfactory grade of 75% or above in theory and a passing grade in all clinical courses. Completion with an earned grade point average of 2.5 or above. Tuition accounts satisfied

### Core Curriculum

Code	Course Name	Hours
OPT100	Ocular Anatomy & Physiology	60 clock hours
OPT105	Ocular Pathology & Microbiology	60 clock hours
OPT110	Medical Terminology	60 clock hours
OPT115	Introduction to Health Science	60 clock hours
OPT120	Administrative Procedures & Protocol	120 clock hours
OPT125	Clinical Procedures & Protocol	240 clock hours
OPT130	Ocular Imaging & Pharmacology	150 clock hours
OPT200	Externship	150 clock hours
Total		900 clock hours

### Course Descriptions

Ocular Anatomy & Physiology – OPT 100 60 clock hours  
Instruction on Anatomy of the visual sensory organs and related structure. Gross, as well as microscopic structures will be examined, as well as identification of major structures. The mechanisms of action, or physiology of the structures will also be explored within the course.  
Prerequisites: None

Ocular Pathology & Microbiology OPT - 105 60 clock hours  
Instruction of the pathology and microbiology as it relates to the visual sensory organs. Students will learn to identify the various pathogens and microbes that affect the eyes.

Prerequisites: None

Medical Terminology OPT - 110 60 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.

Prerequisites: None

Introduction to Health Science OPT - 115 60 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

Administrative Procedures & Protocol – OPT 120 120 clock hours  
This course introduces the student to administrative procedures for contributing to a successful functioning physician's/clinic office.

Prerequisites: None

Clinical Procedures & Protocol – OPT 125 240 clock hours  
This course introduces the student to the various clinical procedures that would take place in a clinical/surgical setting.

Prerequisites: OPT100 & OPT105

Ocular Imaging & Pharmacology – OPT 130 150 clock hours  
This course covers the fundamentals of ophthalmic photography, ultrasonic techniques, and light based imaging.

Prerequisites: OPT100 & OPT105

Externship – OPT 200 150 clock hours  
Students will be assigned to a physician's office or clinic to obtain practical experience to reinforce subject matter and skills learned in the classroom

Prerequisite: All courses

# Update to SAP Policy Page 67 of the Catalog

## STANDARDS OF SATISFACTORY ACADEMIC PROGRESS (SAP)

According to federal regulations, students participating in the federal financial aid program at Cambridge Institute must meet our Standards of Satisfactory Academic Progress (SAP). The SAP calculation uses cumulative credit/hour totals.

### **Definition and Purpose of Satisfactory Academic Progress (SAP)**

Satisfactory Academic Progress (SAP) is measured in both qualitative and quantitative components. SAP is defined as a method of determining student eligibility for assistance under a Title IV, HEA program, and applies reasonable standards for measuring whether an otherwise eligible student is maintaining satisfactory progress in his or her educational program.

There are three standards that are used to measure academic progress for financial aid purposes:

**Standard 1-Qualitative:** Cumulative grade point average (GPA) is at or above 2.0 for all students with the exception of Nursing, which requires a cumulative grade point average (GPA) at or above 2.8.

**Standard 2-Quantitative (Pace of Progression):** Cumulative completion rate is at or above 67% Students must successfully complete at least 67% of their cumulative attempted credit/clock hours to stay on pace with the Maximum Time Frame requirements. Anytime a student withdraws, fails, and/or repeats a class, it is counted as attempted but not completed for this measurement. For example, if a student has attempted 24 cumulative credit hours, but only completed 12 cumulative credit hours, this equates to a 50% completion rate.

**Standard 3-Maximum Timeframe:** Credits/clock hours completed and/or attempted does not exceed 150% of the credits/clock hours required to complete the program Financial aid recipients are required to complete their program within 150% of the published length of the program as measured by the cumulative number of credit/clock hours the student is required to complete and expressed in calendar time. (Note that a student in a clock hour program cannot receive aid for hours beyond those in the program; the maximum timeframe applies to the amount of calendar time the student takes to complete those hours.) Students become ineligible for Title IV aid in the current program of study when it becomes mathematically impossible to complete the program within 150 percent of the length of the program, even when the student has not yet reached 150 percent.

### **Course incompletes (I), Withdrawals (W/WF) and Repetitions**

Grades including Incomplete (I), Fail (F), and Withdrawn (W/WF) are defined as unsuccessful completion. Accordingly, these courses count as the applicable credits/hours attempted and count as zero credits/hours earned in the SAP calculation. The grade of “F” additionally counts as zero quality points when the qualitative SAP standard is assessed. Grades of I and W/WF are not counted when the qualitative SAP standard is assessed. Grades of I and W/WF do not carry any quality points. Students who have a grade of incomplete that results in an unsatisfactory

standing, may have their SAP status recalculated when they subsequently complete the course requirements those grades are later reported. Students who achieve satisfactory standing as the result of a grade recalculation will be evaluated for reinstatement of financial aid so long as all other eligibility criteria are met. The grade earned in a repeated course will be substituted for the original grade, if higher, in computing the grade point average for SAP.

### **Transfer Credits**

Transfer credits that count toward the student's current program are counted as both attempted and completed hours in the quantitative measures.

### **The SAP Review**

A review of SAP requires that both the qualitative and quantitative measures be reviewed.

- We will count all credits/clock hours that appear on a student's transcript as cumulative hours attempted and/or completed.
- If a student is enrolled in a credit granting program, we will calculate all standards at the end of each term.
- If a student is enrolled in a clock hour program, we will calculate all standards at the time he/she successfully completes the required hours in a payment period.

### **Notification**

Students are notified via email when they have not met SAP requirements. The student is then required to meet with the Registrar and Program Official to discuss requirements for meeting SAP.

### **SAP Violations**

If a satisfactory progress check shows that a student does not have the required GPA or is not maintaining the required pace, the following actions will occur:

- First violation: Student to be placed on SAP Warning status until the next check. During this time, the student will be eligible for aid. If the student is meeting SAP standards at the next checkpoint, the student will return to good standing.
- Second consecutive violation: At this time, the student will be placed on SAP Termination and will not be eligible for aid unless they successfully appeal. If appeal is successful, student will be placed on SAP Probation status until the next checkpoint.

**SAP Termination-** Students whose eligibility has been terminated (because of failure to meet the standards of satisfactory progress) that do not appeal, will not be eligible to receive aid, but may maintain enrollment. Student will be required to pay for their own classes until they have earned the minimum required GPA and/or completion rate. Students will not be reimbursed for courses taken while ineligible for aid. Eligibility will be regained once a student is found to be meeting both the Quantitative and Qualitative SAP standards, but while not exceeding the Maximum Time Frame.

Students whose eligibility has been terminated (because of failure to meet the standards of satisfactory progress) may, in certain cases, appeal their suspension of eligibility. Circumstances that may be considered for this special review (appeal) include: illness of student and/or immediate family member (mother, father, sister, brother, spouse), death of immediate family member and relocation due to military duty or employment. If there are extenuating

circumstances that caused the student to fail SAP, the student may file an appeal. A student whose appeal is approved will have financial aid eligibility reinstated on a Probationary basis for one payment period. The student may continue to receive financial aid during this Probationary Period but must meet the regular SAP standards or be making progress under an approved improvement plan by the end of the Probationary Period. By the end of that term/payment period, your academic credentials must meet SAP standards. Appeals are not retroactive.

### **Procedure for SAP Appeal**

Appeals are to be submitted to the Registrar's office. The Registrar will provide the appeal to the Academic Affairs Committee for a final decision. In order to appeal the decision on this basis; the following procedures must be used:

1. Complete SAP Appeals Form.
2. Type an appeal letter, or print legibly. Make sure to include a detailed explanation of the circumstances that occurred.
3. Provide documentation from a third party to support the appeal.
4. Be sure that the circumstances referenced apply to the term/payment period for which the student is claiming mitigating circumstances.
5. Once your appeal has been reviewed the student will be notified of the result by email.

## **Insert to the Catalog Financial Aid – Page 73**

Some of the frequently used financial aid programs are listed here and described below:

- Pell Grants
- FSEOG
- Federal Work Study
- Direct Subsidized Stafford Loans
- Direct Unsubsidized Stafford Loans
- Direct PLUS loans for parents of qualified dependent students
- Florida Student Assistance Grant (FSAG)
- Florida Bright Futures Grant
- Workforce Investment Act (WIA)
- 529 Prepaid College Plans
- Veteran Benefits
- Scholarships



## **Insert to the Catalog Withdrawal Policy – Page 78**

### Withdrawal Policy

#### Official Withdrawal:

A student who wishes to officially withdraw must notify the office of the Registrar via email, certified mail or in person.

#### Unofficial Withdrawal:

**Credit Hour Programs:** If a student misses eight (8) consecutive scheduled classes, the student will be automatically terminated without the opportunity to appeal.

**Clock Hour Programs:** If a student misses five (5) consecutive scheduled classes, the student will be automatically terminated without the opportunity to appeal.

**Students attending only online classes:** If a student does not submit any coursework for 14 consecutive calendar days, the student will be automatically terminated without the opportunity to appeal.