



CENTER FOR EDUCATION

Catalog
2024 - 2025

SCHOOL OF NURSING
SCHOOL OF RESPIRATORY CARE
SCHOOL OF MEDICAL IMAGING

Contents

Letter to Prospective Student	1
GENERAL INFORMATION	2
School of Nursing	3
School of Medical Imaging.....	3
School of Respiratory Care.....	3
DISCLAIMER	4
FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA) OF 1974.....	4
CIVIL RIGHTS ASSURANCE.....	4
CONFLICT OF CONSCIENCE.....	4
CRIMINAL BACKGROUND CHECK AND DRUG SCREEN.....	4
TIME COMMITMENT	5
COMPUTERS AND ELECTRONIC COMMUNICATION	5
CAMPUS SAFETY AND SECURITY	5
CENTER FOR EDUCATION MISSION, VISION AND EDUCATIONAL PHILOSOPHY	6
MISSION STATEMENT	6
VISION STATEMENT	6
STATEMENT OF EDUCATIONAL PHILOSOPHY	6
ACCREDITATION AND MEMBERSHIP	7
St. Mary's Medical Center	7
School of Nursing	7
School of Medical Imaging.....	7
School of Respiratory Care.....	7
SCHOOL OF NURSING.....	8
ADMISSION POLICY – NURSING	9
DISABILITY STATEMENT	13
END OF PROGRAM STUDENT LEARNING OUTCOMES.....	14
ST. MARY'S SCHOOL OF NURSING MISSION AND PHILOSOPHY	15
MISSION STATEMENT	15
PHILOSOPHY & GUIDING CONCEPTS	15
PROGRAM REQUIREMENTS.....	19
COURSE DESCRIPTIONS.....	20
RATIONALE FOR COURSE PLACEMENT	21
MARSHALL UNIVERSITY COURSE DESCRIPTION SUPPORT COURSES	22
SCHOOL OF NURSING, ADMINISTRATION, FACULTY, STAFF.....	23
WEST VIRGINIA BOARD OF EXAMINERS FOR REGISTERED PROFESSIONAL NURSES AND THE NCLEX-RN	26
PROGRAM OUTCOMES/DISCLOSURE	27
PROJECTED EXPENSES	29
SCHOOL OF RESPIRATORY CARE	30
MISSION STATEMENT	31
VISION STATEMENT	31
STATEMENT OF PHILOSOPHY.....	31
ORGANIZING FRAMEWORK	33
CURRICULUM OBJECTIVES/STUDENT LEARNING OUTCOMES.....	44
Student Curriculum Guide	55
FACULTY	71
DISCLOSURE FORM.....	72
SCHOOL OF MEDICAL IMAGING	74

PROGRAM OVERVIEW	75
SCHOOL OF MEDICAL IMAGING MISSION STATEMENT	75
PROGRAM PHILOSOPHY	76
SCHOOL OF MEDICAL IMAGING GOAL	76
APPLICATION PROCESS	78
DISCLOSURE FORM – SOMI.....	80
Revised: 7/21, 7/22, 6/23	
FINANCIAL INFORMATION: FEES AND OTHER EXPENSES	80
TECHNICAL STANDARDS	81
FACULTY	83
COURSE DESCRIPTIONS.....	89

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5/21; 7/21; 6/22; 6/23; 6/24

**ST. MARY'S MEDICAL CENTER
CENTER FOR EDUCATION**

Letter to Prospective Student

Dear Prospective Student:

Thank you for your interest in pursuing a health care career at St. Mary's Medical Center. On behalf of the faculty and staff of the Center for Education, I welcome you. It is our desire to be of assistance to you as you seek to fulfill your personal goals and aspirations of learning to provide competent and compassionate care.

Please read the information in this catalog as it relates to the school to which you are applying. An application that is incomplete will not be considered for admittance. Admittance is based on a point system. Therefore, it is essential that you closely examine the admission criteria.

Again, we are pleased that you have chosen one of our three schools to prepare you for a career in health care. We wish you well in your endeavors.

Sincerely,

Dr. Joey Trader
Vice-President of Schools of Nursing and Health Professions

**ST. MARY'S MEDICAL CENTER
CENTER FOR EDUCATION**

**SCHOOL OF NURSING, SCHOOL OF MEDICAL IMAGING, SCHOOL OF RESPIRATORY
CARE**

GENERAL INFORMATION

St. Mary's Medical Center was founded by the Missionary Sisters of the Catholic Apostolate. The Sisters are members of the Pallottine order. Their motto comes from their founder, St. Vincent Pallotti, CARITAS CHRISTI URGET NOS, which means THE LOVE OF CHRIST URGES US ON. The Center for Education at St. Mary's Medical Center is the home of St. Mary's School of Nursing, the School of Respiratory Care, and the School of Medical Imaging.

All three schools, in cooperation with Marshall University, offer collegiate degrees. Support courses for all three schools are taught at Marshall University (the main Huntington campus or any of their off-campus sites). Support courses for the Associates of Applied Science in Respiratory Care are taught at Mountwest Community and Technical College. The specific professional courses for all three schools are taught at the Center for Education. Upon completion of any of the programs, the graduates are eligible to apply for licensure or certification from their appropriate boards.

The faculty continue to meet the challenges of health care demands and the changes within the surrounding community in order to meet the needs for professional health care providers. Students have modern clinical facilities within St. Mary's Medical Center, which is a licensed 393 bed medical center. The medical center offers broad health care experiences in surgery, medicine, obstetrics, psychiatry, and extended care. The medical center is accredited by The Joint Commission, and has membership in The Catholic Health Association, The American Hospital Association, and the West Virginia Hospital Association

Students in the three schools have experiences in surrounding facilities that enhance their education while enrolled in the program. St. Mary's Medical Center and the Center for Education are conducted according to Catholic principles and teachings. The ethical Directives for Catholic Hospitals provide guidelines for students, staff and personnel in policy and decision-making related to medical-moral issues.

Since the founding of St. Mary's Medical Center in 1924, the Medical Center has grown to be one of the largest employers in the entire tri-state area and is a leader of healthcare services in the eastern part of the United States of America. From the humble beginnings of the dedicated Pallottine Sisters, many healthcare providers have made contributions world-wide and are known as St. Mary's graduates.

School of Nursing

St. Mary's School of Nursing was founded by the Pallottine Sisters of the Catholic Apostolate in 1926. It is the oldest operating RN program in West Virginia and has 4,959 graduates as of May 2024.

St. Mary's School of Nursing, in cooperation with Marshall University, offers a two-year associate degree nursing program. The nursing courses are taught at St. Mary's School of Nursing, the support courses are taught at Marshall University. Upon completion of the program, the graduate receives an Associate in Science in Nursing Degree from Marshall University and is eligible to make application to take the NCLEX-RN for licensure to practice as a registered nurse. Graduates can articulate to baccalaureate in nursing programs on a full-time or part-time basis for career advancement.

School of Medical Imaging

St. Mary's School of Medical Imaging (SOMI) is a hospital-based program in medical imaging and has partnered with Marshall University to offer a Baccalaureate in Science in Medical Imaging. The program began in 1964 and entered into a cooperative agreement with Marshall University in 2009. The program curriculum is designed to prepare students to practice radiography and introduce students to related specialized imaging modalities. The curriculum is structured so that the entering freshman will complete all degree requirements within four years. In addition, an option is available for the credentialed Radiographer to enter the professional portion of the program (fourth year) and obtain the degree.

Radiography is a multi-dimensional career that includes digital and computed radiography, trauma radiography and fluoroscopy. Radiographers have many advanced imaging opportunities available including sonography, computed tomography, magnetic resonance imaging and cardiovascular intervention radiography.

School of Respiratory Care

The School of Respiratory Care was founded in 2005. There is a cooperative baccalaureate program with Marshall University and an Associate of Applied Science with Mountwest Community and Technical College. The support courses are taught at Marshall University and Mountwest Community and Technical College respectively, and the respiratory care classes are taught at St. Mary's School of Respiratory Care.

Respiratory therapists work with individuals with acute and chronic health problems, such as asthma, pneumonia, bronchitis, and many other breathing disorders. They also encounter persons who have experienced a traumatic accident, experienced a heart attack, or the birthing of premature infants and patients in a pulmonary rehabilitation program.

DISCLAIMER

The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant or student and the Center for Education at St. Mary's Medical Center. The Center for Education reserves the right to change any of the provisions, schedules, programs, courses, rules, regulations, or fees whenever school authorities deem it expedient to do so.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA) OF 1974

This act was designed to protect the privacy of education records, to establish the rights of students to inspect and review their education records, and to provide guidelines for the correction of inaccurate or misleading data. The Center for Education at St. Mary's Medical Center is in compliance with the provisions of this act. Requests for further clarification on this Act, the regulations, and Marshall University policy should be directed to the Dean of Student Affairs.

CIVIL RIGHTS ASSURANCE

No person in the United States of America based on sex, age, race, religion, color, national origin, sexual orientation, or any otherwise qualified handicapped individual solely by reason of the handicap shall be excluded from participation in, be denied benefits, or be subjected to discrimination under any program or activity receiving federal assistance operated by or in conjunction with the Center for Education at St. Mary's Medical Center.

CONFLICT OF CONSCIENCE

It is the policy of the school that the reasonable and conscientious moral and religious convictions of students will be respected in every way possible. Students are to make these convictions known at the time of admittance to any of the schools. Faculty will make every effort to resolve such issues to the mutual advantage of both the school and the student. Should a student be requested or required to perform duties, which are objectionable because of religious or moral convictions, the student should ask to be relieved of such duty. If the request cannot be accommodated reasonably, without undue hardship or inability to meet the standards of the school, the involved parties are to bring the matter to the attention of the Vice President of Schools of Nursing and Health Professions.

CRIMINAL BACKGROUND CHECK AND DRUG SCREEN

All students who are chosen for admittance to any of the schools of the Center for Education of St. Mary's Medical Center must complete both a background check and a drug screen. Final acceptance is contingent upon a successful background check and drug screen. Once provisional acceptance is granted, the applicant will be advised of the processes to follow in obtaining the background check and the drug screen. The costs for both are paid by the applicant. Criminal results of the background check and/or drug screen will not constitute an automatic bar to admission; positive background checks will be evaluated on an individual basis. Clinical agencies may forbid students with positive criminal

background checks and/or drug screens from providing care in their agency. This policy is subject to change without prior notice.

In addition to the criminal background check and drug screen, each applicant will be asked to complete a disclosure statement at the time they submit their completed application form. Failure to acknowledge past criminal background issues will constitute automatic rejection of that applicant to any of the schools. It is recommended that those with an existing criminal background history submit court documents such as the criminal complaint or judgment of conviction and the results of such issue reflecting legal status and restitution. A crime is defined as all criminal offenses, misdemeanors and not limited to felonies. DUI (driving under the influence) is considered a crime.

TIME COMMITMENT

The curriculum of each school is challenging, labor intensive, and requires commitment and more time than most other courses of study. There are multiple courses each semester, including clinical courses which require a significant number of direct clinical experience per credit hour. This does not include time required for travel, preclinical visits to the clinical agency, or preparation/study prior to and after the clinical experiences. Clinical hours may be scheduled days, evenings, nights and weekends. Course requirements may include testing during non-scheduled class hours.

COMPUTERS AND ELECTRONIC COMMUNICATION

It is required that the students have a computer with a printer and access to the Internet. While all students have access to these things while at the Center for Education, students must also have access to these things at home or in some other capacity in the event that distance education becomes emergently necessary. Some information will be shared via the electronic method. All students have a Marshall email account and are expected to utilize that account.

CAMPUS SAFETY AND SECURITY

St. Mary's Medical Center provides security for the Center for Education campus. Information regarding safety/security incidents is provided annually to the Vice President of Schools of Nursing and Health Professions and may be reviewed upon request.

Marshall University provides security for that campus. Information regarding safety/security incidents can be reviewed on the university web page at www.marshall.edu.

CENTER FOR EDUCATION MISSION, VISION AND EDUCATIONAL PHILOSOPHY

MISSION STATEMENT

We prepare students to assume roles as caring health care providers, respecting the worth and dignity of human life.

VISION STATEMENT

Leading the way in health care education.

STATEMENT OF EDUCATIONAL PHILOSOPHY

EDUCATION

Education is an interactive process which includes formal instruction and experiential learning. Education enhances learning in the cognitive, affective, and psychomotor domains. Learning involves the translation of new knowledge, insights, skills, and values into one's conduct. This active process takes place within the learner and is fostered when consideration is given to individual differences. Learning is facilitated, through repetition and practical application, when new knowledge is related to previous knowledge and when learning is goal directed.

The need and ability to learn continues throughout life. The role of the faculty in education is to facilitate the student's learning experience through systematic guidance in their endeavors to acquire the knowledge, skills, attitudes, and judgment necessary for competence in health care practice.

ACCREDITATION AND MEMBERSHIP

St. Mary's Medical Center

St. Mary's Medical Center is accredited by The Joint Commission. The address for The Joint Commission is One Renaissance Blvd., Oakbrook Terrace, IL 60181 and the phone number is (630) 792-5000. The web address is <https://www.jointcommission.org>

School of Nursing

The Associate Degree nursing program at St. Mary's/Marshall University Associate of Science in Nursing Program located in Huntington, West Virginia is accredited by the: Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the St. Mary's/Marshall University Cooperative Associate of Science in Nursing program is Continuing Accreditation.

–View the public information disclosed by the ACEN regarding this program at <http://www.acenursing.us/accreditedprograms/programSearch.htm>

School of Medical Imaging

The School of Medical Imaging is accredited by the Joint Review Committee on Education in Radiography (JRCERT) and recognized by the West Virginia Board of Examiners of Radiologic Technologists. JRCERT can be contacted at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182, 312-704-5300, <http://www.jrcert.org>.

School of Respiratory Care

The School of Respiratory Care program is accredited by the Committee on Accreditation for Respiratory Care (CoARC), 1248 Harwood Road, Bedford, TX 76021, 1-817-283-2835, <http://www.coarc.com/>.

Formulated: 2/2021

Revised: 2/2021; 7/2022; 6/2023

Reviewed: 6/24

SCHOOL OF NURSING

ADMISSION POLICY – NURSING

POLICY: All applicants must meet specified requirements to be considered for admission as a student to St. Mary’s School of Nursing. All applicants must be either a high school graduate, a high school student scheduled to graduate prior to admission, or have a high school equivalent through GED testing. All applicants are strongly encouraged to take the ACT exam and submit results to the Admissions Office.

Admission is competitive. See application scoring sheet for points. Applicants are selected according to the points received.

The official deadline for submitting applications is January 15 for fall admission and July 1 for spring admission. However, late applications may be considered on a case-by-case basis.

Applicants who received grades that prohibited progression in two or more nursing courses (in either a registered nurse or licensed practical nurse program at any institution) will not be considered for admission for two years after the last unsuccessful nursing course was taken.

ADMISSION PROCEDURE: Apply to Marshall University and St. Mary’s School of Nursing as described below.

Applicants must be admitted to Marshall University if applying to St. Mary’s School of Nursing.

The following must be submitted to Marshall University (if not already a student at Marshall University) at the following address:

Office of Admissions
Marshall University
One John Marshall Drive
Huntington, WV 25755

1. Completed MU application
2. Appropriate MU application fee
3. Official high school transcript
4. Official transcripts from ALL colleges and universities attended
5. ACT score if taken (Marshall University code is 4526)

The following must be submitted / completed by the aforementioned deadlines to the Center for Education at the following address:

Admissions Office
St. Mary's Medical Center – Center for Education
2900 First Avenue
Huntington, WV 25702

1. Completed St. Mary's School of Nursing application found on the web page at <http://www.st-marys.org>. Go to "Careers and Education" tab. Click on "School of Nursing". The application form is found on that page.
 - a. If application is mailed, application fee of \$30, which is non-refundable must be included (check or money order, no cash please).
 - b. If application is hand delivered, application fee of \$30, which is non-refundable, may be paid by cash or check in the St. Mary's Center for Education Admissions Office or by cash, check, or credit card St. Mary's Medical Center on the 3rd Floor Business Office.
2. Official high school transcript or GED.
3. Official transcript from ALL colleges or universities attended, including Marshall University. ACT scores, if taken, (St. Mary's code is 4551). If the ACT has not been taken, contact Marshall University for dates of administration.
4. Signed Code of Conduct Statement and the Drug & Alcohol Testing statement contained in the application.

A. HIGH SCHOOL SENIORS AND APPLICANTS WHO HAVE COMPLETED LESS THAN 12 COLLEGE CREDIT HOURS MUST HAVE THE FOLLOWING:

1. A minimum high school GPA of 3.00.
2. An overall 2.00 GPA or better on any college courses completed.
3. An overall 2.00 GPA on all courses completed at Marshall University.
4. ACT score, if taken, sent to the Center for Education at the address above.

NOTE: It is recommended that high school students take a college prep track and take advanced courses whenever possible.

B. GED APPLICANTS MUST HAVE THE FOLLOWING:

1. Met criteria for GED admission as stated in the Marshall University catalog.
2. Completed 12 college semester credit hours, which must be 100 level or above courses and be taken for a grade. The grades must be "C" or above.
3. An overall 2.00 GPA or better on any college courses completed.
4. An overall 2.00 GPA on all courses completed at Marshall University.
5. ACT score, if taken, sent to the Center for Education at the address above.
6. Requested that GED Certification be sent to both St. Mary's School of Nursing and Marshall University.

C. APPLICANTS WITH AT LEAST 12 HOURS OF COLLEGE CREDIT MUST HAVE THE FOLLOWING:

1. A high school diploma or GED.
2. An overall 2.00 GPA or better on any college courses completed.
3. An overall 2.00 GPA on all courses completed at Marshall University.
4. ACT score, if taken, sent to the Center for Education at the address above.

D. APPLICANTS REQUESTING TRANSFER FROM ANOTHER RN NURSING PROGRAM MUST HAVE THE FOLLOWING:

1. An overall 2.00 GPA or better on all courses completed.
2. An overall 2.00 GPA on all courses completed at Marshall University.
3. ACT score, if taken, sent to the Center for Education at the address above.
4. Submitted copy of all course syllabi for the completed nursing courses at the previous nursing school.
5. Submitted transcript that includes all nursing courses taken
6. Paid a \$75 transfer consideration fee.

NOTE: Transfer applicants will be evaluated on an individual basis.

E. APPLICANTS WHO ARE LPNS AND ARE SEEKING ADMISSION MUST HAVE THE FOLLOWING:

1. An overall 2.00 GPA or better on all courses completed.
2. An overall 2.00 GPA on all courses completed at Marshall University.
3. ACT score, if taken, sent to the Center for Education at the address above.
4. Sent an official transcript from the LPN program to St. Mary's School of Nursing
5. An unencumbered LPN license.

If any applicant earns a D, F, or W in a required pre-entry course (BSC 227 & 227L, CHM 205, ENG 101, and/or PSY 201), the applicant may still be accepted into the program provisionally given the applicant completes all of these courses with a C or better prior to the first day of the first nursing course.

If any applicant earns a D, F, or W in any other required support course(s), the applicant may be eligible for admission but must retake and earn a C or greater in the required support course(s) per the normal course progression regarding co-requisite or pre-requisite placement.

F. ADDITIONAL INFORMATION FOR ADMISSION TO ST. MARY'S SCHOOL OF NURSING:

A "C" grade or better is required for each of the courses transferring for credit toward the requirements for the nursing program. CLEP credit is also accepted for some courses. St. Mary's School of Nursing and Marshall University reserve the right to accept or reject individual non-major courses that are other than those listed in the nursing curriculum. It is the applicant's responsibility to assure all transcripts, fees, etc. are present at both St. Mary's Center for Education and Marshall University. Applicants missing information will not be considered. Applicants will be notified concerning their acceptance.

- G. ALL APPLICANTS TO THE SCHOOL OF NURSING MUST BE ABLE TO MEET THE PHYSICAL, EMOTIONAL, AND FUNCTIONAL DEMANDS OF A NURSING POSITION. Applicants need to be aware that nursing and nursing education can be rigorous and physically, mentally, and emotionally demanding. The public expects that professional nurses have been prepared to provide safe and effective care. The Americans with Disability Act (ADA) provides the legal framework to guide these responsibilities.

DISABILITY STATEMENT

- St. Mary's Center for Education, along with Marshall University, is committed to equal opportunity in education for all students. To receive an academic accommodation, students should provide documentation to any of the following programs: the Office of Disability Services, College Program for Students with Autism Spectrum Disorders, Higher Education for Learning Problems (HELP) Center and/or Buck Harless Student-Athlete Program Office. Following this, Disability Services will notify the Vice President of Schools of Nursing and Health Professions (VPSONHP) at St. Mary's Center for Education or Coordinator of Academic Support outlining the recommended academic accommodation(s) the student will need. The Coordinator of Academic Support and faculty at SMMC Center for Education will meet with the student to discuss how the accommodation(s) requested will be provided. For more information, please visit <https://www.marshall.edu/accessibility> or contact Marshall University Office of Disability Services.

Revised: 11/2019; 6/24

Reviewed: 5/2020; 7/21; 6/22, 6/23

END OF PROGRAM STUDENT LEARNING OUTCOMES

Upon completion of the program, the graduate will:

Professional Behaviors

Exemplify moral, ethical, and legal standards in the role of the professional nurse.

Patient Centered Care

Provide compassionate, coordinated care based on the patient's preferences, values and needs.
Advocate for patients, recognizing the patient or designee as the source of control.

Teamwork and Collaboration

Participate cooperatively within nursing and inter-professional teams, fostering open communication, mutual respect, and shared decision-making to achieve quality patient care.

Evidence-based Practice

Integrate best current evidence with clinical practice to meet individualized patient needs and organizational goals for delivery of optimal health care.

Quality Improvement

Formulate a plan based on analysis of data to improve the quality and safety of health care. Improve the quality and safety of health care based on analysis of patient and process data.

Safety

Reduce the risk of harm within the environment of care through organizational processes and individual performance.

Informatics

Integrate patient care technologies, information systems, and communication devices to support safe nursing practice.

11/99

5/10/00

Reviewed 5/05, 3/10, 5/20, 7/21; 6/24

Revised: 7/10, 8/12, 7/15, 7/17; 8/18; 6/19; 12/19; 6/22, 6/23

ST. MARY'S SCHOOL OF NURSING MISSION AND PHILOSOPHY

MISSION STATEMENT

In addition to supporting the missions of both Marshall University and St. Mary's Medical Center, the mission of the School of Nursing is to prepare safe and competent professional nurses who provide high quality patient centered care, respecting the worth and dignity of human life.

PHILOSOPHY & GUIDING CONCEPTS

The philosophy and organizing concepts of St. Mary's/Marshall University Cooperative ASN Program are consistent with the philosophy and mission of both Marshall University and St. Mary's Medical Center. This philosophy expresses the faculty's commitment to quality and excellence in nursing education. The philosophy is grounded in the St. Mary's Medical Center values which are

- Compassion-showing loving concern and understanding for the needs of the whole person.
- Hospitality-a warm, helpful and welcoming attitude toward all persons.
- Reverence-respect for the God-given dignity of each person.
- Interdependence-cooperation and collaboration among all members of our health care community.
- Stewardship- responsible use of and accountability for our human, material and financial resources.
- Trust-integrity, truthfulness, and straight-forwardness in relationships.

These values are consistent with the NLN values of caring, diversity and inclusion, integrity, and excellence.

Professional nursing is both a caring art and a science. It is a blend of scientific knowledge, nursing theory and clinical practice. The nurse assumes the roles of provider and manager of care in a variety of health care settings. The ultimate role of nursing is to assist patients to achieve an optimal level of health.

The program is based on faculty beliefs regarding the role of the professional nurse in providing patient-centered care, evidence-based practice, quality improvement, safety, informatics, teamwork and collaboration:

The nurse demonstrates **Professional Behaviors** through the implementation of integrity, responsibility, moral, ethical, and legal practices in providing advocacy and safe quality care for patients and families (NLN, 2021).

The nursing process provides the framework for provision of patient care (ANA, 2021). **Patient-centered care** is the recognition that the patient or designee is the source of control and full partner in providing compassionate and coordinated care based on respect for patient preference, values and needs. (QSEN, 2021) Patient values guide all clinical decisions (National Academy of Medicine, 2021). Holistic patient centeredness reflects the uniqueness of an individual patient's background, diversity, values, traditions and family. A patient centered approach supports

optimal outcomes by involving patients and those close to them in decisions about clinical care. (NLN, 2021) Patient centered care supports the respectful, efficient, safe and well-coordinated transition of the patient through all levels of care (NLN, 2021).

In order to deliver patient-centered care, nursing practice must integrate **Evidence-Based Practice**. Evidence based practice is the integration of best clinical practice, research evidence, nursing expertise, and the values and preferences of individuals, families and communities served (National Academy of Medicine, 2021).

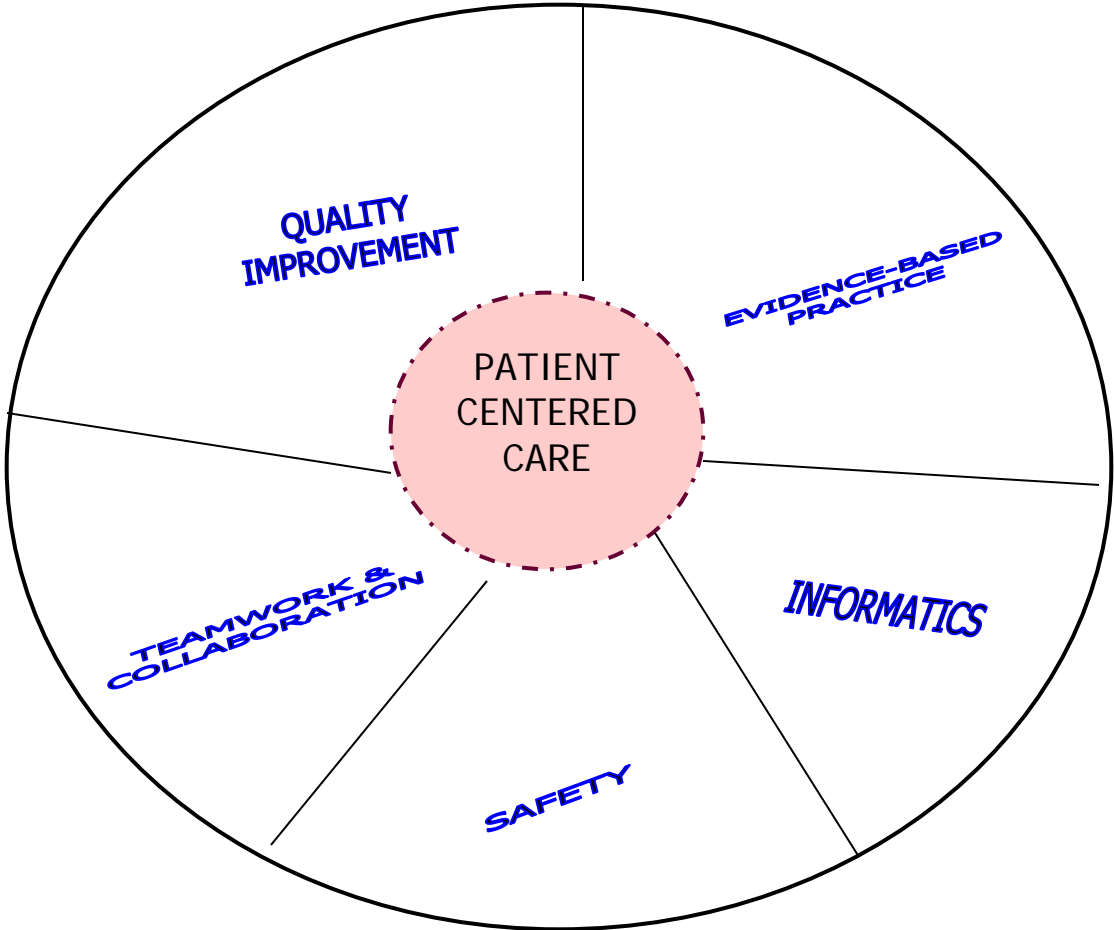
Professional nurses have an ethical obligation to improve health care through the application of **Quality Improvement** activities. Quality improvement is the use of data to monitor the outcomes of care processes and uses improvement methods to design and test changes to continuously improve the quality and safety of health care systems (QSEN, 2021).

Safety is the avoidance of injury or harm and is essential for the provision of all health care. Safety is necessary for nursing practice within ethical, legal and regulatory frameworks. Application of safety principles minimizes risk of harm to individuals, populations and providers through system effectiveness and individual performance (QSEN, 2021)

The use of **Informatics** is integral to the provision of safe patient care. Informatics is the use of information and technology to communicate, manage knowledge, mitigate errors, and support decision making (QSEN, 2021).

A culture of integrity and ethical behavior is essential for the development of **Teamwork and Collaboration** in order to achieve quality patient care. To ensure that care is continuous and reliable, nurses must function effectively within nursing and inter-professional teams, foster open communication, mutual respect, and shared decision-making (QSEN, 2021).

NURSING PROCESS AND PROFESSIONAL BEHAVIORS



KNOWLEDGE
NURSING THEORY
CLINICAL PRACTICE

<p>SMMC VALUES COMPASSION HOSPITALITY REVERENCE INTERDEPENDENCE STEWARDSHIP TRUST</p>	<p>NLN CORE VALUES CARING INTEGRITY DIVERSITY AND INCLUSION EXCELLENCE</p>
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DESCRIPTION OF CONCEPTUAL MODEL

The conceptual model serves as a guiding framework for curriculum development, provision of education and evaluation of achievement of student learning outcomes.

The base depicts the values which are the foundation of the school. SMMC values are Compassion, Hospitality, Reverence, Interdependence, Stewardship, and Trust. NLN core values include Caring, Diversity and Inclusion, Integrity, Excellence.

The trunk/pedicle/stalk demonstrates that nursing knowledge, theory and clinical practice provide the direction for development of the curriculum. These essential elements for nursing education flow from the basic or core values.

The inner circle depicts patient centered care as the central element of nursing practice and education. The circle remains intermittent to signify the interdependent relationship with the outer constructs in an ongoing dynamic interaction.

The outer circle displays the core competencies of Evidence-based Practice, Informatics, Quality Improvement, Teamwork & Collaboration, and Safety as constructs that influence nursing practice and the care provided to each individual patient.

Depicted as the surrounding for the outer circle are the components of the nursing process and professional behaviors. These components encompass the whole of nursing practice and serve as the basis for interaction with each patient.

Approved 4/18/94

Revised 6/02/94, 5/96, 7/15; 8/17; 8/18

Reviewed 4/16/01, 5/05, 7/07, 3/10, 7/10, 8/12; 6/19; 5/20; 7/21; 6/22, 6/23; 6/24

PROGRAM REQUIREMENTS

Graduation from the program requires successful completion, with a grade of “C” or higher, of seventy two (72) credit hours. Forty two (42) credit hours are nursing courses and thirty (30) credit hours are support courses. A GPA of 2.00 or higher is required for graduation.

Prior to First Nursing Course	
BSC 227 & 227L (Anatomy)	4 Credits
CHM 205 (Chemistry)	3 Credits
ENG 101 (Composition I)	3 Credits
PSY 201 (Introduction to Psychology)	3 Credits
13 Credits	

First Semester	
BSC 228 & 228L (Physiology)	4 Credits
PSY 311 (Developmental Psychology)	3 Credits
DTS 210 (Nutrition)	3 Credits
NUR 120 (Introduction to Nursing)	8 Credits
Total 18 Credits	

Second Semester	
BSC 250 & 250L (Microbiology)	4 Credits
NUR 220 (Health Alterations I)	8 Credits
NUR 225 (Psychiatric Nursing)	4 Credits
Total 16 Credits	

Third Semester	
NUR 230 (Health Alterations II)	7 Credits
NUR 235 (Maternal / Child Nursing)	6 Credits
Total 13 Credits	

Fourth Semester	
NUR 241 (Health Alterations III)	9 Credits
ENG 201 (Composition II)	3 Credits
Total 12 Credits	

Required Credits for Graduation	
Nursing Courses	42 Credits
Support Courses	30 Credits
Total 72 Credits	

Credit Hour

One lecture credit hour is given for each 15 classroom contact hours, plus necessary outside preparation. For nursing courses, one laboratory credit hour requires at least 45 hours of laboratory work per credit hour, plus necessary outside preparation. Laboratory experiences are complements to classroom courses that focus on the theory and principles of the discipline.

Formulated: Prior to 5/2002

Reviewed: 8/12, 8/16; 6/19; 5/20; 6/22, 6/23, 6/24

Revised: 6/02, 5/03, 5/04, 5/05, 5/06, 4/08, 3/10, 7/10, 12/12, 6/15, 7/17, 8/18; 7/20, 7/21

COURSE DESCRIPTIONS

PR – Pre-requisite

CR – Co-requisite

SCHOOL OF NURSING

NURSING 120, INTRODUCTION TO NURSING, 8 Credits (6 theory; 2 clinical)

Introduce the nursing role and use of the nursing process in assisting adult patients to meet basic needs. Clinical included.

(PR – BSC 227 & 227L, CHM 205, ENG 101, PSY 201; CR –BSC 228 & 228L, DTS 210, PSY 311)

NURSING 220, HEALTH ALTERATIONS I, 8 Credits (6 theory; 2 clinical)

Focus is on nursing care of adult patients responding to potential and actual health alterations. Clinical included.

(PR – NUR 120 and ASSOCIATED CRs; CR – BSC 250 & 250L)

NURSING 225, PSYCHIATRIC NURSING, 4 Credits (3 theory; 1 clinical)

Focus is on the nursing role in caring for patients with alterations of psychosocial functioning. Clinical included.

(PR – NUR 120 and ASSOCIATED CRs)

NURSING 230, HEALTH ALTERATIONS II, 7 Credits (5 theory; 2 clinical)

Focus is on nursing care of adult patients with health alterations of specific physiological systems. Role requirements and processes utilized in managing groups of patients is introduced. Clinical included.

(PR – NUR 220 and NUR 225 and ASSOCIATED CRs)

NURSING 235, MATERNAL-CHILD NURSING, 6 Credits (4 theory; 2 clinical)

Focus is on the nursing role utilized in promoting health and caring for the child bearing family and pediatric patients. Clinical included.

(PR – NUR 220 and NUR 225 and ASSOCIATED CRs)

NURSING 241, HEALTH ALTERATIONS III, 9 Credits (4 theory; 5 clinical)

Focus is on nursing care of adult patients with health alterations of specific physiological systems. Clinical included.

(PR – NUR 230 and NUR 235 and ASSOCIATED CRs; CR ENG 201)

Revised: 9/05, 6/06, 7/07, 12/12, 6/15, 8/16, 8/18; 6/22

Reviewed: 5/05, 3/10, 7/10, 8/12; 8/17; 6/19; 5/20, 7/21, 6/23, 6/24

RATIONALE FOR COURSE PLACEMENT

PSY 201	Basic psychology helps explain the human behavior in response to illness.
BSC 227 &227L	Principles of normal human anatomy are required to understand basic human needs.
CHM 205	General, Organic and Biochemistry is necessary for a basic understanding of the physiological functioning of the human body that is taught in all nursing courses.
ENG 101	Written communication skills are important throughout a professional discipline.
DTS 210	Nutrition provides a basis for the understanding of the body's utilization of nutrients and how this may be affected by health alterations that are taught in all nursing courses.
BSC 228 &228L	Principles of normal human physiology are required to understand basic human needs and pathophysiology.
PSY 311	Child Development explains principles of developmental stages covering specific age groups.
NUR 120	Introduction to Nursing provides the fundamental concepts involved in the basic role of the nurse.
BSC 250 &250L	Microbiology provides basic concepts that relate to infection control and aseptic technique that is used throughout nursing practice.
NUR 220	Health Alterations I provides concepts of alterations in physiological functioning and other knowledge basic to the nursing role.
NUR 225	This course builds on concepts introduced in PSY 201, and provides principles of alterations in psychosocial functioning.
NUR 230	This course continues with the concepts of alterations in physiological functioning in increasing complexity. Further requirements of the nursing role are presented.
NUR 235	This course utilizes knowledge presented in all previous courses to understand the physiological and psychosocial processes for the maternal-child patient.
ENG 201	This course allows the student to build on written communication skills.
NUR 241	This course utilizes all previous knowledge for understanding complex alterations in physiological functioning. Provisions are made for practical application of nursing roles in the transition phase of student to graduate.

Revised: 6/2004, 10/2005, 6/2006, 8/2012, 6/15, 7/16, 8/18; 6/22, 6/23

Reviewed: 7/10; 8/17; 6/19; 5/20, 7/21, 6/24

MARSHALL UNIVERSITY COURSE DESCRIPTION SUPPORT COURSES

BIOLOGICAL SCIENCE 227 – Human Anatomy - 3 credit hours

Study of gross and microscopic anatomy of human body systems and their development. Provides preparation for degrees in health professions.

BIOLOGICAL SCIENCE 227L– Human Anatomy Lab – 1 credit hour

Laboratory companion course to BSC 227. Practical and computer aided exercises related to gross and microscopic anatomy of human body systems and their development.

BIOLOGICAL SCIENCE 228 – Human Physiology – 3 credit hours

Study of normal human physiology, from cells to systems. Provides the scientific background for understanding pathophysiology and preparation for degrees in health professions.

BIOLOGICAL SCIENCE 228L – Human Physiology Lab–1 credit hour

Basic concepts of human physiology, including an introduction to physiological control mechanisms operating at cellular, tissue, organ, and systems level.

BIOLOGICAL SCIENCE 250 - Microbiology and Human Disease – 3 credit hours

Introduction to microbiology with emphasis on the role of microorganisms in the disease process.

BIOLOGICAL SCIENCE 250L– Microbiology and Human Disease Lab– 1 credit hour

Laboratory companion course to BSC 250. Practical exercises with emphasis on microscopy, microorganism identification, and aseptic technique.

CHEMISTRY 205 – General, Organic and Biochemistry – 3 credit hours

Introductory course for health professions students and non-science majors covering basic chemical principles with applications in organic chemistry and biochemistry.

ENGLISH 101 – Beginning Composition – 3 credit hours

Introduction to academic writing with emphasis on writing as a multi-stage process, critical thinking, and fundamental research strategies and skills.

ENGLISH 201 Advanced Composition – 3 credit hours

An advanced composition course centered on critical reading, writing, and research skills for the disciplines.

DIETETICS 210 – Nutrition– 3 credit hours

Principles of human nutrition and their application in planning and evaluating dietaries for individuals and families.

PSYCHOLOGY 201 – General Psychology – 3 credit hours

Principles and methods in the scientific study of behavior.

PSYCHOLOGY 311 – Child Development – 3 credit hours

Psychological characteristics and personal and social problems of developmental periods.

SCHOOL OF NURSING, ADMINISTRATION, FACULTY, STAFF
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**WEST VIRGINIA BOARD OF EXAMINERS FOR REGISTERED PROFESSIONAL NURSES
AND THE NCLEX-RN**

Excerpted from the WVRN Board:

“Individuals who are considering entering the nursing profession and who may have a criminal history often ask about potential barriers to licensure following successful completion of an approved nursing program.”

If this situation is of concern to you, please contact the Program Director or

[Click this link for information from the West Virginia RN Board](#)

PROGRAM OUTCOMES/DISCLOSURE
NCLEX-ULTIMATE PASS RATE
By Calendar Year

Ultimate Pass Rate Table- Aggregated for the Entire Program	
Year	Ultimate Pass Rate (Includes Repeat Testers)
Jan 1 – Dec 31, 2023	100% (122/122)
Jan 1 – Dec 31, 2022	99.37% (157/158)
Jan 1 – Dec 31, 2021	99.05% (105/106)
Jan 1 – Dec 31, 2020	99.02% (102/103)
Jan 1 – Dec 31, 2019	100% (109/109)

Ultimate Pass Rate includes first and subsequent attempts. Updated 6/19/2024

NCLEX-ULTIMATE PASS RATE
By Cohort

Year	EXAMINATION PASS RATE	
	Cohort May	Cohort December
	Ultimate Pass Rate	Ultimate Pass Rate
2023	100% (56/56)	100% (55/55)
2022	98.67% (74/75)	100% (65/65)
2021	98.04% (50/51)	100% (59/59)
2020	97.87% (46/47)	100% (55/55)
2019	100% (56/56)	100% (56/56)

Ultimate Pass Rate includes first and subsequent attempts.

PROGRAM COMPLETION PERCENTAGE By Cohort

	ENTERED FALL 2022 ON TIME GRADUATION MAY 2024	ENTERED SPRING 2022 ON TIME GRADUATION DEC 2023	ENTERED FALL 2021 ON TIME GRADUATION MAY 2023	ENTERED SPRING 2021 ON TIME GRADUATION DEC 2022	ENTERED FALL 2020 ON TIME GRADUATION MAY 2022	ENTERED SPRING 2020 ON TIME GRADUATION DEC 2021
Number Entered	81	75	78	77	88	76
4 semester completion rate	71.60	50.67	65.38%	76.62%	62.5%	56.58%
5 semester completion rate	81.48% Projected	66.67%	74.36%	85.71%	79.54%	79.95%
6 semester completion rate	82.72% Projected	69.33% Projected	78.21%	89.61%	86.36%	81.58%

PROGRAM COMPLETION PERCENTAGE By Year

Expected Level of Achievement		Entered 2022	Entered 2021	Entered 2020	Entered 2019	Entered 2018
40% of all students who begin in Nursing 120 will complete the program on-time in 4 semesters.	NUMBER ENTERED	156	155	164	150	145
	4 semester completion rate	61.53% projected	70.97%	59.76%	63%	62%
	5 semester completion rate	74.36% projected	80.00% projected	79.27%	81%	72%
	6 semester completion rate	76.28%projected	83.87% projected	84.15%	85%	75%

[Analysis of 2022-2023 End of Program Student Learning Outcomes](#) I will update this once I get it written

PROJECTED EXPENSES
NURSING CLASSES ONLY

<u>FIRST SEMESTER</u>		<u>THIRD SEMESTER</u>	
Tuition: 8 credits	\$2,720	Tuition: 13 credits	\$4,080
Uniform	\$150	<u>Learning Resources</u>	<u>\$750</u>
Learning Resources	\$2,080	Total:	\$4,830
<u>Background Check/Drug Screen</u>	<u>\$100</u>		
Total:	\$5,050		
<u>SECOND SEMESTER</u>		<u>FOURTH SEMESTER</u>	
Tuition: 12 credits	\$4,080	Tuition: 9 credits	\$3,060
Learning Resources	\$965	Learning Resources	\$285
Total:	<u>\$5,045</u>	<u>Graduation Expenses</u>	<u>\$100 - \$400</u>
		Total:	\$3,445 - \$3755

NOTE: These expenses do **NOT** reflect the cost of the non-nursing courses.

Students will receive an invoice from St. Mary's School of Nursing for books and ATI resources. Students will receive a bill from MU for courses and fees for non-nursing courses and for nursing courses taken at St. Mary's Center for Education. Tuition is capped at 12 hours per semester. However, nursing courses and non-nursing courses are not counted together. For example, if a student is taking 13 hours of nursing courses and six hours of non-nursing courses, the student will be billed for 12 hours of nursing courses and six hours of non-nursing courses. However, if a student is taking only 13 hours of nursing courses, the student will be billed 12 hours of nursing courses only. Another example: if a student is taking eight hours of nursing courses and six hours of non-nursing courses, the student will be billed eight hours of nursing and six hours of non-nursing. Please contact the Admissions office or the Program Director for further clarification.

Payments for books and ATI resources are to be paid directly to SMMC-SON by the student.

Despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, we will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

SCHOOL OF RESPIRATORY CARE

MISSION STATEMENT

We prepare students to become respiratory therapists who believe each individual is of importance and worth.

VISION STATEMENT

To provide all respiratory care students with the best learning environment and to assist them in becoming successful in the field of respiratory care.

GOALS

Goal 1:

To prepare graduates with demonstrated competence in the cognitive (knowledge) psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

Goal 2:

To prepare leaders for the field of respiratory care by including curricular content that includes objectives related to the acquisition of skills in one or more of the following: management, education, research, advanced clinical practice (which may include an area of clinical specialization).

Goal 3:

To prepare our graduates to take the NBRC examination upon graduation and to achieve the high cut score on the TMC examination and to pass the CSE to become a Registered Respiratory Therapist.

STATEMENT OF PHILOSOPHY

PERSON

Each person is a unique individual, capable of rational thoughts and self-directed behaviors, with physiological, psychosocial, and spiritual needs. Each individual has a varying capacity to respond to environmental changes. A person's response to environmental changes affects the ability to meet basic needs. Basic needs are defined as those physiological, psychosocial, and spiritual requirements that are essential to optimal health throughout the life span.

ENVIRONMENT

Environment is the surroundings, conditions and influences which affect the individual. There are interacting and reciprocal processes within the environment which continually occur and affect individuals. People in the environment are often joined in social networks of families, groups, and communities.

HEALTH

Health is a dynamic state which is dependent on genetic, physical, emotional, and sociocultural factors. A person's state of health is determined by responses to environmental factors that affect the ability to meet basic needs. Unmet basic needs result in alterations in physiological and psychosocial functioning.

RESPIRATORY CARE

Respiratory care is both a caring art and a science. It is a blend of scientific knowledge, theory, and clinical practice. The respiratory therapist, as a member of the allied health team, assumes the role of provider in pulmonary care as well as assists the physician, nurse, and other members of the allied health team to manage the patient's care in a variety of health care settings.

The ultimate role of the respiratory therapist is to assist patients to achieve an optimal level of health within the environment of pulmonary care. The respiratory care process in conjunction with all allied health specialties is an integral component in the provision and management of patient care.

EDUCATION

Education is an interactive process that includes formal instruction and experiential learning. Education enhances learning in the cognitive, affective, and psychomotor domains. Learning involves the translation of new knowledge, insights, skills, and values into one's conduct. This active process takes place within the learner and is fostered when consideration is given to individual differences.

Learning is facilitated through repetition and practical application, when new knowledge is relative to previous knowledge, and when learning is goal-directed. The need and ability to learn continue throughout life. The role of the faculty in respiratory care education is to facilitate the student's learning experiences through systematic guidance in their endeavors to acquire those knowledge, skills, and judgments necessary for competence in the practice of respiratory therapy.

The Bachelor of Science Degree in Respiratory Care is based on knowledge from the humanities and the natural, social, behavioral, and respiratory therapy sciences. The Bachelor of Science Degree and the Associate of Applied Science in Respiratory Care prepares a graduate whose practice is characterized by critical thinking, clinical competence, collaboration, and accountability, and encompasses practice in both acute and long-term care settings where policies and procedures are specific, and guidance is available.

Approved: June 2007

Revised: January 2019, 6/23, 6/24

Reviewed: 7/21; 6/22, 6/23

ORGANIZING FRAMEWORK

The educational program for the Bachelor of Science Degree in Respiratory Care is designed to prepare the student to assume the role of a respiratory therapist. The curriculum plan is based on knowledge from the humanities, and the natural, social, behavioral, and respiratory sciences, and provides a basis for clinical decisions and competence.

The major organizing concepts for the curriculum are a person as a patient, environment, health, and respiratory therapist. The person is the primary focus of care and is studied systematically by assessing the patient as an individual and within the context of the family or group. Health is a dynamic state determined by responses to environmental factors throughout the life span. Respiratory Care is a caring art and a science that assists the patient to achieve an optimal level of health. These organizing concepts can be visualized as Horizontal Threads progressing from the initial respiratory care course to the final course. Horizontal Threads are themes that are repeated in various courses across the program.

The respiratory therapist assumes the roles of provider and manager of pulmonary care. As a provider of care, the respiratory therapist must assist in assessing the patients' basic needs in order to make effective clinical decisions to determine caring interventions and appropriate teaching/learning outcomes. As a manager of pulmonary care, the respiratory therapist must utilize resources in the environment to plan, organize and direct the patients' pulmonary care. Collaboration and communication with the physician, nurse, and other members of the allied health team are an integral part of these roles. These respiratory therapist roles and behaviors form the Vertical Threads of the curriculum. Vertical Threads build in complexity from start to finish in the respiratory care curricula.

The program of respiratory care proceeds from the simple to the more complex and/or specialized with beginning courses providing a foundation for future learning. In the basic curriculum, first semester courses begin with fundamentals of respiratory care and progress to health alterations of the patient's span. The second year courses continue with health alterations in the critically ill patient. The curriculum plan is designed to integrate knowledge and skills for effective practice. Content is provided in each respiratory care course to facilitate the development of the skills for practice in a variety of health care settings. For all students, the final course in the program is designed as a capstone course to integrate knowledge and skills for effective practice.

Approved: June 2007

Reviewed: 7/21, 6/23

ADMISSION POLICY
School of Respiratory Care

POLICY:

All applicants must meet specified requirements to be considered for admission as a student to St. Mary's/Marshall University Co-Operative School of Respiratory Care. All applicants must be either a high school graduate or have a high school equivalent through GED testing. All applicants are strongly encouraged to take the ACT exam and submit results to the Admissions Office.

Admission is competitive. The deadline for submitting applications is April 15 for fall admission. Please meet the deadline as established.

Applicants who received grades that prohibited progression in two or more respiratory courses will be considered for readmission after a one-year waiting period.

ADMISSION PROCEDURE:

Apply to Marshall University and St. Mary's School of Respiratory Care as described below.

Applicants must be admitted to Marshall University if applying to St. Mary's School of Respiratory Care. The following must be submitted to Marshall University (if not already a student at Marshall University) at the following address:

Office of Admissions
Marshall University
One John Marshall Drive
Huntington, WV 25755

1. Completed MU application
2. Appropriate MU application fee
3. Official transcripts from ALL colleges and universities attended

The following must be submitted/completed by the deadline to the Center for Education at the following address:

Admissions Office
 St. Mary’s Medical Center – Center for Education
 2900 First Avenue
 Huntington, WV 25702

1. Completed St. Mary’s School of Respiratory Care application found on the web page at <http://www.st-marys.org>.
 - Go to the “Education & Training” tab.
 - Click on “School of Respiratory Care”.
 - The application form is found on that page.
2. If the application is mailed, an application fee of \$30, which is non-refundable must be included (check or money order, no cash please).
3. If the application is hand-delivered, an application fee of \$30, which is non-refundable, may be paid at St. Mary’s Medical Center on the 3rd Floor Business Office in person or with a credit/debit card by phone at 304-526-8932, or at the Center for Education (cash or check only).

Payments by Mail or In Person	Phone Payments	Payments Made In Person
St. Mary’s Medical Center 2900 First Avenue, Huntington, WV, 25702 Attn: Ginger Walker	St. Mary’s Medical Center Accounting Office – 3 rd Floor Phone: 304-526-8932 Attn: Ginger Walker A 2.25% credit/debit card fee will be applied	St. Mary’s Medical Center - Center for Education 2853 5 th Ave. Huntington, WV 25702 Cash, Check, Money Order Only Pay fees to: Melba Curry – Admissions Leah Chapman - Admissions Paula Cremeans – Admin. Asst. Dr. Joey Trader – VP, CFE

4. Official high school transcript or GED.
5. Official transcript from ALL colleges or universities attended, including Marshall University. ACT scores, if taken, (St. Mary’s code is 4551). If the ACT has not been taken, contact Marshall University for dates of administration.
6. Sign the Code of Conduct Statement and the Drug & Alcohol Testing statement contained in the application.

H. GED APPLICANTS MUST HAVE THE FOLLOWING:

1. Met criteria for GED admission as stated in the Marshall University catalog.
2. Completed 12 college semester credit hours, which must be 100 level or above courses and be taken for a grade. The grades must be “C” or above.
3. An overall 2.00 GPA or better on any college courses completed.

4. An overall 2.00 GPA on all courses completed at Marshall University.
5. ACT score, if taken, sent to the Center for Education at the address above.
6. Requested that GED Certification be sent to both St. Mary's School of Respiratory Care and Marshall University.

I. APPLICANTS WITH AT LEAST 12 HOURS OF COLLEGE CREDIT MUST HAVE THE FOLLOWING:

1. A high school diploma or GED.
2. An overall 2.00 GPA or better on any college courses completed.
3. An overall 2.00 GPA on all courses completed at Marshall University.
4. ACT score, if taken, sent to the Center for Education at the address above.

If any applicant earns a D, F, or W in a required pre-entry course (BSC 227 & 228L, CHM 205, ENG 101), the applicant may still be accepted into the program provisionally given the applicant completes all of these courses with a C or better prior to the first day of the first respiratory course.

If any applicant earns a D, F, or W in any other required support course(s), the applicant may be considered for re-admission, however, you must still retake and earn a C or greater in the required support course(s) per the normal course progression regarding co-requisite or prerequisite placement.

J. APPLICANTS REQUESTING TRANSFER/ADVANCED PLACEMENT FROM ANOTHER RESPIRATORY CARE PROGRAM MUST HAVE THE FOLLOWING:

1. An overall 2.00 GPA or better on all courses completed.
2. An overall 2.00 GPA on all courses completed at Marshall University.
3. A copy of all course syllabi for the completed courses at the previous respiratory school.
4. Paid a \$75 transfer consideration fee.

NOTE: Transfer/Advanced Placement applicants will be evaluated on an individual basis.

K. ADDITIONAL INFORMATION FOR ADMISSION TO ST. MARY'S SCHOOL OF RESPIRATORY CARE:

- A "C" grade or better is required for each of the courses transferring for credit toward the requirements for the respiratory care program.
- CLEP credit is also accepted for some courses (the applicant is responsible for all fees associated with this).

Challenge Exam Procedure

If a student feels they have already met the requirements of a specific respiratory therapy course, they have the option to bypass attendance for that specific course. The procedure below outlines the steps and requirements students must meet/take to bypass course attendance.

- The student indicates the course they intend to bypass to the program director at St. Mary's CFE - School of Respiratory Care
- The program director in conjunction with the instructor of record for the course can either create a challenge examination or use an existing comprehensive final examination.
- The student completes the exam under the supervision of St. Mary's CFE.
- The grade the student receives for the course is at the discretion of the instructor of record and program director.
- The student must still register for the course and pay any associated course fees.

- The student has the option to attend the course and complete the course if they fail the given challenge/final examination.
- Marshall University College Of Health Professions must be provided with sufficient documentation that a student has completed a challenge exam and the grade the student will receive.
- St. Mary's School of Respiratory Care and Marshall University reserve the right to accept or reject individual non-major courses that are other than those listed in the respiratory curriculum.
- It is the applicant's responsibility to assure all transcripts, fees, etc. are present at both St. Mary's Center for Education and Marshall University.
- Applicants missing information will not be considered.
- Applicants will be notified concerning their acceptance.

L. ALL APPLICANTS TO THE SCHOOL OF RESPIRATORY CARE MUST BE ABLE TO MEET THE PHYSICAL, EMOTIONAL, AND FUNCTIONAL DEMANDS OF A RESPIRATORY THERAPIST POSITION. THE CRITERIA FOLLOW:

- Applicants need to be aware that respiratory and respiratory education can be rigorous and physically, mentally, and emotionally demanding. A healthy status in all areas is essential for the completion of the program.
- The public expects the professional respiratory therapist to have been prepared to provide safe and effective care.
- The Americans with Disabilities Act (ADA) provides the legal framework to guide these responsibilities.
- If you are a student who has a disability requiring accommodations, notify ALL instructors of each course within the first two (2) weeks of class.

Specific health, physical and technical requirements are required from all candidates entering the Respiratory Care program. The clinical practicum requires that each student be capable of demonstrating the following functions

The attached Essential Functions/Core Performance Standards Worksheet provides the framework and categories that relate to an individual's functional ability, activities/attributes, and any limitations/deficits of functional abilities

<p>1. Gross Motor Ability</p>	<ul style="list-style-type: none"> • Move within confined spaces • Sit and maintain balance • Stand and maintain balance • Reach above shoulders • Reach below the waist • Reach out front 	<p>Skills:</p> <ul style="list-style-type: none"> • Grasp, hold, and read small instruments such as volume-measuring devices. • Lift medication vials to eyes to read. • Record patient data in the record or change the settings on equipment by turning the knob and observing change(s). • Squeeze the suction catheter button • Squeeze medication vials to empty. • Write in the patient chart. • The ability to move around and maintain your balance in tight spaces between patients and equipment.
<p>2. Fine Motor Ability</p>	<ul style="list-style-type: none"> • Pickup objects with hands • Grasp small objects with hands • Write clearly and neatly with a pen or pencil • Enter data on a keyboard • Pinch/squeeze or pick up objects • Twist objects/knobs with hands • Possess manual dexterity for sterility and infection control purposes. 	<p>Skills:</p> <ul style="list-style-type: none"> • Change equipment settings above the head and below the waist. • Function in an ICU environment by moving about in an ICU room to perform procedures on the patient. • Students must also read patient chart, equipment settings, and/or equipment displays • Sit or stand to record findings.
<p>3. Physical Endurance</p>	<ul style="list-style-type: none"> • Stand at the patient's side during the procedure 	<p>Skills:</p> <ul style="list-style-type: none"> • Bend to change equipment

	<ul style="list-style-type: none"> • Sustain repetitive movements • Maintain physical tolerance (continue tasks throughout a shift) • Work and complete tasks at a reasonable pace 	<p>settings on the floor, at knee level, waist level, chest level, eye level, or above the head.</p> <ul style="list-style-type: none"> • Gather equipment and manually resuscitate patients. • Make rapid adjustments if needed to ensure patient safety. • Make way to patient's room if an emergency is called using stairs. • Turn to change settings on the monitor while standing at the patient's bedside
4. Physical Strength	<ul style="list-style-type: none"> • Push, pull, lift, move, and support 10 - 60 pounds • Carry equipment/supplies • Squeeze with hands (e.g., use of a manual resuscitator) 	<p>Skills:</p> <ul style="list-style-type: none"> • Procedures such as CPT and CPR require that you stand, move, and perform repetitive procedures on patients throughout the day. • You will repeat this procedure periodically throughout a shift.
5. Mobility	<ul style="list-style-type: none"> • Twist • Bend • Stoop/squat • Move quickly • Walk and climb ladders/stools/stairs 	<p>Skills:</p> <ul style="list-style-type: none"> • Help patient up in bed and from stretcher to bed and back. • Carry medications, pulse oximeter, stethoscope, or other equipment to the patient room. • Push the ventilator or other heavy equipment from the respiratory care department to the patient room. • Lift equipment from bed height to shelf height above chest level.
6. Hearing	<ul style="list-style-type: none"> • Hear normal and different speaking level sounds • Hear faint sounds & voices • Hear audible alarms • Hear telephones 	<p>Skills:</p> <ul style="list-style-type: none"> • Hear audible alarms such as a ventilator alarm. • Hear overhead pages to call for emergency assistance

	<ul style="list-style-type: none"> • Hear sounds with a stethoscope (e.g., lungs and heart sounds) • Hear in situations when you are not able to see the patients, family members, and other members of the healthcare team 	<ul style="list-style-type: none"> • Listen to heart sounds to determine if the heart is beating. • Determine the intensity and quality of patient breath sounds to help determine a diagnosis. • Listen to the patient's breath sounds to determine if the patient is breathing.
7. Visual	<ul style="list-style-type: none"> • See objects from 20 inches to 20 feet away • Distinguish color and intensity • See emergency lights/lamps objects object up to 20 inches away • Use peripheral vision • Use depth perception • Visually assess clients 	<p>Skills:</p> <ul style="list-style-type: none"> • Confirm settings visually such as with ventilator display. Read the patient chart to determine the correct therapy. • Read settings on monitors and other equipment. • Visually assess patient color to assess for hypoxia or any changes in patient condition.
8. Tactile	<ul style="list-style-type: none"> • Detect environmental temperature • Detect the patient's temperature • Feel the differences in sizes, and shapes (e.g., palpate artery/vein) • Feel differences in sizes and shapes • Feel vibrations (e.g., pulses) 	<p>Skills:</p> <ul style="list-style-type: none"> • Assess the patient by feeling for a pulse, temperature, tactile fremitus, edema, and subcutaneous emphysema. • Palpate vein, artery, and other body landmarks • Notice surface characteristics of skin turgor, pitting edema, rashes
9. Smell	<ul style="list-style-type: none"> • Detect odors from the client • Detect smoke • Detect gas or noxious smells (e.g. gas leak or smoke) 	<p>Skills:</p> <ul style="list-style-type: none"> • Assess for unusual odors originating from the patient or environment requiring attention. <ul style="list-style-type: none"> ✓ Foul-smelling drainage ✓ Alcohol ✓ Smoke ✓ Gases ✓ Noxious smells
10. Reading	<ul style="list-style-type: none"> • Read and interpret physicians' orders 	<p>Skills:</p>

	<ul style="list-style-type: none"> • Read and understand written documents • Read the very fine or small print • Read digital and analog displays 	<ul style="list-style-type: none"> • Read and interpret physician orders and/or physician, therapist, and nurse's notes. • Read from a computer monitor screen. • Gather data accurately, and in a reasonable amount of time to ensure safe and effective patient care relative to other caregivers.
11. Math	<ul style="list-style-type: none"> • Calibrate equipment • Compute fractions • Convert numbers to metric • Count rates (e.g. pulses, breathing rate) • Tell and measure time (duration) • Perform basic arithmetic functions add, subtract, multiply, divide • Read and understand columns of writing (e.g. flow sheets) • Read digital displays and graphic printouts • Read graphs (e.g. vital sign sheets, ventilator flow) • Read measurement marks • Record numbers (chart observed parameters) • Use a calculator • Use measuring tools (e.g., thermometer, MIP/NIF, Peak Flow, VC) 	<p>Skills:</p> <ul style="list-style-type: none"> • Read, comprehend and interpret patient graphics charts and graphic displays. • Perform basic arithmetic functions to calculate minute ventilation, convert temperature, correctly place graduated tubing and other functions. • V •
12. Emotional Stability	<ul style="list-style-type: none"> • Establish therapeutic boundaries • Provide client with appropriate emotional support • Adapt to changing environment stress • Deal with the unexpected (e.g., emergency situations, trauma) 	<p>Skills:</p> <ul style="list-style-type: none"> • Provide safe patient care despite a rapidly changing and intensely emotional environment. • Perform multiple tasks concurrently such as delivering medication or oxygen in one room while performing an arterial blood gas in another (in an

	<ul style="list-style-type: none"> • Perform multiple responsibilities concurrently • Show appropriate compassion through communications 	<p>emergency room or general floor environment).</p> <ul style="list-style-type: none"> • Maintain enough composure to provide for effective patient care despite crisis circumstances.
13. Analytical Thinking	<ul style="list-style-type: none"> • Evaluate outcomes • Prioritize tasks • Problem solve • Process and interpret information from multiple sources • Transfer/extrapolate knowledge from one situation to another • Use long- and short-term memory 	<p>Skills:</p> <ul style="list-style-type: none"> • Evaluate priorities and different sources of diagnostic information to help arrive at a patient diagnosis. • Appropriately evaluate data to notify physicians and nurses when necessary.
14. Critical Thinking	<ul style="list-style-type: none"> • Identify cause-effect relationships • Plan/control activities for others • Synthesize knowledge and skills • Sequence information and adapt decisions based on new information • Make decisions independently 	<p>Skills:</p> <ul style="list-style-type: none"> • Evaluate priorities and different sources of diagnostic information to help arrive at a patient diagnosis and treatment plan.
15. Interpersonal	<ul style="list-style-type: none"> • Respect differences in clients • Negotiate interpersonal conflict • Establish rapport with patients, patients family's and co-workers • Work effectively with physicians, staff, clients, and their families • Respect & value cultural differences in others 	<p>Skills:</p> <ul style="list-style-type: none"> • Communicate effectively under any circumstance (courteous or offensive) with patients, families, doctors, nurses, and other staff to meet therapeutic goals for the patient.
16. Communication	<ul style="list-style-type: none"> • Convey information through writing • Teach patients & Family members • Explain procedure(s) 	<p>Skills:</p> <ul style="list-style-type: none"> • Communicate effectively and appropriately with doctors, nurses, patients, family, and other staff to provide for

	<ul style="list-style-type: none">• Give oral reports• Speak clearly and distinctly• Speak on the telephone	most effective and efficient patient care.
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NOTE: This description reflects the general details considered necessary to describe the principle functions of the physical demands for this program.

Formulated: Fall 2005

Revised: Spring 2005, 7/10, 8/12, 12/14; 7/15, 6/24

Reviewed: January 2010; 7/17, 7/18, 6/19, 7/21; 6/22, 6/23

CURRICULUM OBJECTIVES/STUDENT LEARNING OUTCOMES

Upon completion of the program, the graduate will:

- I. ASSESSMENT
 - a. Complete comprehensive assessments.
- II. CLINICAL DECISION MAKING
 - a) Utilize assessment data and evidence-based information to make decisions that ensure safe, effective, individualized care.
 - b) Evaluate the effectiveness of care and modify patient care as needed.
- III. CARING INTERVENTIONS
 - a) Provide care that assists the patient in meeting needs.
 - b) Implement caring behaviors that are nurturing, protective, compassionate, and person-centered.
- IV. TEACHING/LEARNING
 - a) Implement an individualized teaching plan based on the assessed needs of the patient and significant others.
 - b) Provide assistive personnel with relevant instruction to support achievement of patient outcomes.
- V. COLLABORATION
 - a) Collaborate with the patient, significant others, and members of the health care team to plan, implement, and evaluate patient care.
 - b) Function as an advocate, liaison, coordinator and colleague in working with the health care team toward the achievement of positive patient outcomes.
- VI. MANAGING CARE
 - a) Assist the patient to achieve positive outcomes by effectively utilizing human, physical, financial, and technological resources.
 - b) Utilize the management process (plan, organize, direct, and control) to assist patients to interact effectively with the health care system.
- VII. COMMUNICATION
 - a) Communicate effectively with members of the health care team utilizing appropriate methods and skills.
 - b) Utilize therapeutic communication skills when interacting with patients and significant others.
- VIII. PROFESSIONAL BEHAVIORS
 - a) Practice respiratory care within the ethical, legal, and regulatory framework.

Approved: June 2007 Reviewed: 7/21; 6/22, 6/23

Title of Position: Registered Respiratory Therapist

Aptitudes:

These aptitudes are considered to be occupationally significant for the specific job description: i.e., essential for successful job performance.

Reading/Verbal:

Ability to read and understand meanings or words and ideas associated with them, and to use them effectively. To comprehend language, understand relationships between words, and understand the meanings of whole sentences and paragraphs. The ability present information and ideas clearly.

Writing:

Ability to write with proper grammar and spelling.

Numerical:

Ability to perform arithmetic operations quickly and accurately.

Form perception:

Ability to perceive pertinent detail in objects or in pictorial or graphic material: to make visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of lines.

Clerical Perception:

Ability to perceive pertinent detail in verbal or tabular material. To observe differences in copy, proofread words and numbers, and avoid perceptual errors in arithmetic computation.

Motor Coordination:

Ability to coordinate eyes and hands or fingers rapidly and accurately in making precise movements with speed. The ability to make a movement response accurately and quickly.

Finger Dexterity:

The ability to move the fingers and manipulate small objects with the fingers rapidly and accurately.

Manual Dexterity:

Ability to move the hands easily and skillfully. To work with the hands in placing and turning motions.

Temperaments:

These temperaments are considered to be occupationally significant for the specific job description: i.e., essential for successful job performance,

- Situations involving communication with patients and the public, whether on the telephone, in writing or in person.
- Situations involving a variety of duties often characterized by frequent change.
- Situations involving the necessity of dealing with people in actual job duties beyond giving and receiving instructions.
- Situations involving influencing people in their opinion, attitudes, or judgments about ideas or things.
- Situations involving performing adequately under stress when confronted with the critical or

unexpected.

- Situations involving the evaluation of information against sensory or judgmental criteria.
- Situations involving the evaluation of information against measurable or verifiable criteria.
- Situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint.
- Situations involving the precise attainment of set limits, tolerance or standards.

Physical Demands:

Physical demands are those physical activities required of a worker in a job. The worker must possess physical capabilities at least in an amount equal to the physical demands made by the job. The minimum physical qualifications are listed below.

Reaching:

Extending the hands and arms in any direction.

Handling:

Seizing, holding, grasping, turning, or otherwise working with the hand or hands.

Fingering: Picking, pinching, or otherwise working with the fingers primarily.

Feeling:

Perceiving such attributes of objects and materials as size, shape, temperature, or texture, by means of receptors in the skin particularly those of the fingertips.

Talking:

Expressing or exchanging ideas by means of the spoken word.

Hearing:

Perceiving the nature of sounds by the ear.

Acuity, far:

Clarity of vision at 20 feet or more.

Acuity, near

Clarity of vision at 20 inches or less.

Depth perception:

3-dimensional vision. The ability to judge distance and space relationships so as to see objects where and as they actually are.

Accommodation:

Adjustment of the lens of the eye to bring an object into sharp focus. This item is especially important when doing near-point work at varying distances from the eye.

Essential Function/Core Performance Standards – Respiratory Therapy Student

In your role as a respiratory therapy student, there are job-specific health, physical and technical requirements required of all candidates enrolled in the Respiratory Care program. When participating in your assigned clinical practicum, you will be required to demonstrate the following tasks and functions.

You will demonstrate gross and fine motor abilities, physical strength and endurance, mobility, hearing, visual, tactile, smell, reading, math, emotional stability, analytical and critical thinking, and interpersonal and communicative skills.

You must review the descriptions in each area and acknowledge a complete understanding of these requirements.

The attached Essential Functions/Core Performance Standards Worksheet provides valuable and essential information by categories that relate to an individual's functional ability, activities/attributes, and any limitations/deficits of practical skills. The Respiratory Care Program shall implement these standards in combination with the professional scope of practice, job analysis, and expert consultation to make decisions related to the ability of the respiratory therapy student to perform the essential functions of respiratory care.

Essential Function/Core Performance Standards – Respiratory Therapy Student

<p>1. Gross Motor Ability</p>	<ul style="list-style-type: none"> • Move within confined spaces • Sit & Maintain Balance • Stand & Maintain Balance • Reach Above Shoulders • Reach Below Waist • Extending the hands and arms in any Direction • Seizing, holding, grasping, turning, or otherwise working with the hand or hands • Feeling: Perceiving such attributes of objects and materials as size, shape, temperature, or texture, using receptors in the skin particularly those of the fingertips. 	<p>Skills:</p> <ul style="list-style-type: none"> • Grasp, hold and read small instruments such as volume-measuring devices. • Lift medication vials to eyes to read. • Record patient data in the record or change the settings on equipment by adjusting settings and observing change(s). • Squeeze the suction catheter button. • Squeeze medication vials to empty. • Write/keyboard entry in the patient chart. • Reach for IV poles • Plug electric-powered equipment into the wall electrical outlet
<p>2. Fine Motor Ability</p>	<ul style="list-style-type: none"> • Pickup objects with hands • Grasp small objects with hands • Fingering: Picking, pinching, or otherwise working with the fingers primarily. 	<p>Skills:</p> <ul style="list-style-type: none"> • Change equipment settings above the head and below the waist. • Function in an ICU environment by moving about in an ICU room

	<ul style="list-style-type: none"> • Feeling: Perceiving such attributes of objects and materials as size, shape, temperature, or texture, using receptors in the skin particularly those of the fingertips. • Write clearly and neatly with a pen or pencil • Type on a keyboard • Pinch/squeeze or pick up objects • Twist knobs with hands • Possess manual dexterity for sterility and infection control purposes. 	<p>to perform procedures on the patient.</p> <ul style="list-style-type: none"> • Student must also read the patient chart, equipment settings, and/or equipment displays. • Sit or stand to record findings. • Use pen/pencil • Manipulate a syringe • Turn knobs or objects using both hands • Use an eyedropper
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<p>3. Physical Endurance</p>	<ul style="list-style-type: none"> • Stand at the patient’s side during the procedure • Sustain repetitive movements • Maintain physical tolerance - continue tasks throughout a shift • Work and complete tasks at a reasonable pace 	<p>Skills:</p> <ul style="list-style-type: none"> • Bend to change equipment settings on the floor, at knee level, waist level, chest level, eye level, or above head. • Using both hands to do CPR • Gather equipment and manually resuscitate patients. • Make rapid adjustments if needed to ensure patient safety. • Make way to patient’s room if an emergency is called using stairs. • Turn to change settings on the monitor while standing at the patient’s bedside • Work an entire shift of 8, 12, and 16 hours • Stand at the patient’s side during a surgical or therapeutic procedure
<p>4. Physical Strength</p>	<ul style="list-style-type: none"> • Lift 25 - 100 pounds • Carry equipment/supplies 25 pounds to 100 pounds • Squeeze with hands (e.g., use a manual resuscitator) • Able to push/roll 60 pounds • Move heavy objects weighing from 10-50 pounds by using upper body strength. 	<p>Skills:</p> <ul style="list-style-type: none"> • Procedures such as CPT and CPR require that you stand, move, and perform repetitive procedures on patients throughout the day. • Repeat this procedure periodically throughout a shift. • Push and pull 25 pounds – Move Ventilators • Support 25 pounds of weight - ambulate patient • Lift 25 pounds – pick up the child or transfer the patient • Move light objects weighing up to 10 pounds - IV poles • Move heavy objects weighing from 11 to 50 pounds • Defend self against the combative patient • Carry equipment/supplies • Use upper body strength - perform CPR, physically restrain a patient

		<ul style="list-style-type: none"> • Use upper body strength - perform CPR, physically restrain a patient
5. Mobility	<ul style="list-style-type: none"> • Twist, Bend, Stoop/Squat • Move quickly - Walk (at times at a rapid pace) • Climb ladders/stools/stairs • Physical endurance and ability to work effectively in a clinical setting for 8, 12, and 16 hrs./day • Move in and out of treatment areas. • Reach equipment and parts of the patient's body. • Reach below waist level to manipulate equipment. • Able to move quickly from place to place to perform patient care • Reach above shoulder height to manipulate equipment. 	<p>Skills:</p> <ul style="list-style-type: none"> • Help patient up in bed and from stretcher to bed and back. • Support and transfer patients safely from bed to wheelchair, and modify patient position in bed • Carry medications, pulse oximeter, stethoscope, or other equipment to the patient room. • Push the ventilator or other heavy equipment from the respiratory care department to the patient room. • Lift equipment from bed height to shelf height above chest level. • Respond to Emergency, Rapid Response, and STAT calls
6. Hearing	<ul style="list-style-type: none"> • Hear normal and different speaking level sounds • Communicate and interact with patients, staff, and families from a variety of cultural backgrounds. • Hear percussion sounds during patient assessment. • Hear audible equipment alarms • Hear telephones • Hear sounds with a stethoscope lung, and heart sounds • Perceiving the nature of sounds by the ear 	<p>Skills:</p> <ul style="list-style-type: none"> • Hear audible alarms such as a ventilator alarm. • Hear overhead pages to call for emergency assistance. • Listen to heart sounds to determine if the heart is beating. • Determine the intensity and quality of the patient's breath sounds to help determine a diagnosis. • Listen to the patient's breath sounds to determine if the patient is breathing.
7. Visual	<ul style="list-style-type: none"> • Distinguish color • Distinguish color intensity • See emergency lights/lamps • Use peripheral vision • Usually assess clients 	<ul style="list-style-type: none"> • Confirm settings visually such as with ventilator display. • Read the patient chart and read written instructions/orders to determine the correct therapy.

	<ul style="list-style-type: none"> • Acuity, far: Clarity of vision at 20 feet or more. • Acuity, near: Clarity of vision at 20 inches or less. • Depth perception: 3-dimensional vision. <ul style="list-style-type: none"> ✓ The ability to judge distance and space relationships to see objects where and as they are. • Accommodation: Adjustment of the lens of the eye to bring an object into sharp focus. <ul style="list-style-type: none"> ✓ This is especially important when doing near-point work at varying distances from the eye. 	<ul style="list-style-type: none"> • Read settings on monitors and other equipment. • Visually assess patient color to assess for hypoxia or any changes in patient condition. • See objects up to 20 inches away (e.g., information on a computer screen, skin conditions) and See objects up to 20 feet away (e.g., patient in a room) • Use depth perception • Use peripheral vision • Distinguish color (e.g., color codes on supplies, charts, bed) • Distinguish color intensity (e.g., flushed skin, skin paleness)
8. Tactile	<ul style="list-style-type: none"> • Detect environmental temperature • Detect temperature • Feel the differences in sizes, shapes (e.g., palpate artery/vein) • Feel vibrations (e.g., pulses) 	<p>Skills:</p> <ul style="list-style-type: none"> • Assess the patient by feeling for pulse, temperature, tactile fremitus, edema, and subcutaneous emphysema.
9. Smell	<ul style="list-style-type: none"> • Read and interpret physicians' orders • Read and understand written documents • Read the very fine or small print 	<p>Skills:</p> <ul style="list-style-type: none"> • Read and interpret physician orders and or physician, therapist, and nurse's notes. • Read from a computer monitor screen. • Gather data accurately, and in a reasonable amount of time to ensure safe and effective patient care relative to other caregivers.
10. Reading	<ul style="list-style-type: none"> • Read and interpret physicians' orders • Read and understand written documents • Read very fine or small print 	<p>Skills:</p> <ul style="list-style-type: none"> • Read and interpret physician orders and or physician, therapist, and nurse's notes. • Read from a computer monitor screen.

		<ul style="list-style-type: none"> • Gather data accurately, and in a reasonable amount of time to ensure safe and effective patient care relative to other caregivers.
11. Math	<ul style="list-style-type: none"> • Calibrate equipment • Compute fractions • Convert numbers to metric • Count rates (e.g., pulses, breathing rate) • Tell time and measure time (duration) • Perform basic arithmetic functions add, subtract, multiply, divide • Read and understand columns writing (e.g., flow sheets) • Read digital displays and graphic printouts 	<p>Skills:</p> <ul style="list-style-type: none"> • Read and interpret patient graphics charts and graphic displays. • Perform basic arithmetic functions in order to calculate: <ul style="list-style-type: none"> ✓ Minute ventilation, ✓ Convert temperature ✓ Correctly place graduated tubing and other functions.

Essential Function/Core Performance Standards – Respiratory Therapy Student

12. Emotional Stability	<ul style="list-style-type: none"> • Read measurement marks • Record numbers (chart observed parameters) • Use a calculator • Use measuring tools: <ul style="list-style-type: none"> ✓ Thermometer ✓ NIF gauge ✓ Peak Flow Meter ✓ Vital Capacity gauge • Establish therapeutic boundaries • Provide the client with appropriate emotional support • Adapt to changing environment/stress • Deal with the unexpected (e.g., emergency situations, trauma) 	<p>Skills:</p> <ul style="list-style-type: none"> • Provide for safe patient care despite a rapidly changing and intensely emotional environment. • Perform multiple tasks concurrently such as delivering medication or oxygen in one room while performing an arterial blood gas in another (in an emergency room or general floor environment). • Maintain enough composure to provide for safe effective patient care despite crisis circumstances.
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	<ul style="list-style-type: none"> • Perform multiple responsibilities concurrently • Show appropriate compassion through communication 	
13. Analytical Thinking	<ul style="list-style-type: none"> • Evaluate outcomes • Prioritize tasks • Problem solve • Process information • Transfer/extrapolate knowledge from one situation to another • Use long- and short-term memory 	Skills: <ul style="list-style-type: none"> • Evaluate priorities and different sources of diagnostic information to help arrive at a patient diagnosis. • Appropriately evaluate data in order to notify physicians and nurses when necessary.
14. Clinical Thinking	<ul style="list-style-type: none"> • Identify cause-effect relationships • Plan/control activities for others • Synthesize knowledge and skills • Sequence information 	Skills: <ul style="list-style-type: none"> • Evaluate priorities and different sources of diagnostic information to help arrive at a patient diagnosis and treatment plan.
15. Interpersonal	<ul style="list-style-type: none"> • Respect differences in clients • Establish rapport with clients and co-workers • Work effectively with physicians, staff, clients, and their families 	Skills: <ul style="list-style-type: none"> • Communicate effectively under any circumstance (courteous or offensive) with patients, families, doctors, nurses and other staff in order to meet therapeutic goals for the patient.
Communication	<ul style="list-style-type: none"> • Convey information through writing • Explain procedure(s) • Give oral reports • Speak clearly and distinctly • Speak on the telephone • Expressing or exchanging ideas by means of the spoken word 	Skills: <ul style="list-style-type: none"> • Communicate effectively and appropriately with doctors, nurses, patients, family, and other staff to provide for most effective and efficient patient care.

For the following: **Never**=0% **Rarely**=1-10% **Occasionally**=11-33% **Frequently**=34-66%
Continuously=67 -100%

Description	Weight Limit	Never 0%	Rarely 1-10%	Occasionally 11-33%	Frequently 34-66%	Continuously 67 -100%
Lifting	100 lbs.		√			
Carrying	100 lbs.		√			
Pushing	100 lbs.		√			
Bending/Stooping			√			
Crawling		√				
Reaching Above Shoulder Level			√			
Pushing/Pulling			√			
Sitting				√		
Walking					√	
Crouching			√			
Kneeling			√			
Standing					√	
Climbing			√			
ENVIRONMENTAL SURROUNDINGS						
The environmental surroundings of a worker in this job description						
Time Spent Inside						√
Time Spent Outside		√				

TITLE: PROGRAM REQUIREMENTS: SCHOOL OF RESPIRATORY CARE

POLICY: Graduation from the program requires successful completion, with a grade of “C” or higher, of one hundred twenty-one (121) credit hours. Seventy (70) credit hours are respiratory courses, and fifty one (51) credit hours are support courses.

PURPOSE: To meet the requirements for graduation.

PROVISIONS OR DIRECTIONS FOR IMPLEMENTATION:

Student Curriculum Guide

Bachelor of Science

Freshman Year

Course Number	Fall Semester Course Description	Credit Hours	Course Number	Spring Semester Course Description	Credit Hours
BSC 227 & 227L	Human Anatomy	4	BSC 228 & 228L	Human Anatomy	4
CHM 205	General Chemistry	3	SOC 200	Introduction to Sociology	3
MTH 121	Concepts & Application	3	HS 200	Medical Terminology	3
ENG 101	English Composition	3		Humanities Elective	3
FYS 100	First Year Seminar	3		Fine Arts – ART 112, MUS 142, THE 112	3
	TOTAL HOURS	16		TOTAL HOURS	16

Sophomore Year

Course Number	Fall Semester Course Description	Credit Hours	Course Number	Spring Semester Course Description	Credit Hours
BSC 250 & 250L	Microbiology Human Diseases	4	RSP 201	Pulmonary Pathophysiology	3
RSP 100	Respiratory Pharmacology	3	RSP 203	Respiratory Internship 1	4
RSP 101	Introduction to Respiratory Care	3	RSP 212	Acute/Chronic Pulmonary Mgt	3
RSP 102	Introduction to Respiratory Care Procedures	3	CMM 103	Fundamentals of Speech	3
RSP 102L	Introduction to Respiratory Care Procedures Lab	1	ENG 201	English Composition	3
	TOTAL HOURS	14		TOTAL HOURS	16

Junior Year

Course Number	Fall Semester Course Description	Credit Hours	Course Number	Spring Semester Course Description	Credit Hours
RSP 202	Introduction to Mechanical Ventilation	3	RSP 206	Intro to Neo/Peds Resp Care	3
RSP 207	Introduction to Critical Care Management	3	RSP 210	Respiratory Internship 3	4
RSP 209	Respiratory Internship 2	4	RSP 308	Respiratory Management & QI	3
RSP 303	Respiratory Education	3	RSP 314	Advanced Mechanical Ventilation	3
	TOTAL HOURS	13		TOTAL HOURS	13

Senior Year

Course Number	Fall Semester Course Description	Credit Hours	Course Number	Spring Semester Course Description	Credit Hours
RSP 302	Respiratory Internship 4	4	RSP 403	Respiratory Care Research	3
RSP 304	Advanced Neo/Peds Critical Care	3	RSP 404	Advanced Practicum	4
RSP 307	Advanced Critical Care	4	RSP 407	Clinical Decision Making	3
RSP 401	Introduction to Sleep Disorders	4	RSP 420	Capstone in Respiratory Care	5
	TOTAL HOURS	15		TOTAL HOURS	15

Reviewed: 6/19; 6/20; 6/24

Revised: 7/21, 6/23

STUDENT CURRICULUM GUIDE

Associate of Applied Science

Prerequisite Courses

Course Number	Course Description	Credit Hours
BIOL 257	Intro to Anatomy & Physiology	3
BIOL 259	Intro to Anatomy & Physiology - Lab	3
MAT 120	Applied Professional Math	3
ENL 101	Written Communication	3
COM 112	Oral Communication	3
PSYC 211	Child Development	3
	Total Prerequisites Course Hours	18

Year 1

Fall Semester			Spring Semester		
Course Number	Course Description	Cr Hr	Course Number	Course Description	Cr Hr
RESP 100	Respiratory Pharmacology	3	RESP 201	Pathophysiology	3
RESP 101	Patient Assessment/Intro to Resp	4	RESP 209	Clinical Experience II	2
RESP 102	Introduction to Respiratory Skills	3	RESP 211	Procedure & Application	4
RESP 102L	Introduction to Respiratory Skills Lab	1	RESP 212	Pulmonary Diagnostics	3
RESP 104	Clinical Experience 1	1	RESP 201		
Total Fall Semester Hours		12	Total Spring Semester Hours		12

Year 2

Fall Semester			Spring Semester		
Course Number	Course Description	Cr Hr	Course Number	Course Description	Cr Hr
RESP 202	Mechanical Ventilation 1	3	RESP 208	Respiratory Seminar	5
RESP 206	Neonatal/Pediatric Respiratory Care	3	RESP 214	Mechanical Ventilation II	3
RESP 207	Critical Care Management	3	RESP 215	Critical Care Management II	3
RESP 210	Clinical Experience III	3	RESP 216	Clinical Experience IV	2
Total Fall Semester Hours		12	Total Spring Semester Hours		13

Course Descriptions
Bachelor of Science
School of Respiratory Care

Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites	Co-Requisites
RSP 100	Respiratory Pharmacology	3	Introduces the student to the basic pharmacology of medicines used in respiratory care and physiological implications on the human body.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L Acceptance to Respiratory Program	<ul style="list-style-type: none"> • RSP 101 • RSP 102 • RSP 102L
RSP 101	Introduction to Respiratory Care	2	Introduces the student to the history of respiratory care and professional organizations. Emphasis is on the role of the respiratory therapist as a member of the health care team.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L Acceptance to Respiratory Program	<ul style="list-style-type: none"> • RSP 101 • RSP 102 • RSP 102L
RSP 102	Introduction to Respiratory Care Procedures	3	Administration of medical gases, humidity, and aerosol therapy with emphasis on the handling of medical gases and safety in administration. Techniques of therapeutic procedures used in respiratory care are included.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L Acceptance to Respiratory Program	<ul style="list-style-type: none"> • RSP 101 • RSP 102 • RSP 102L
RSP 102L	Introduction to Respiratory Care Procedures - Lab	1	Administration of medical gases, humidity, and aerosol therapy with emphasis on the handling of medical gases and safety in administration. Techniques of therapeutic procedures used in respiratory care are included.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L Acceptance to Respiratory Program	<ul style="list-style-type: none"> • RSP 101 • RSP 102 • RSP 102L
RSP 201	Pulmonary Pathophysiology	3	Emphasis is placed on the etiology, signs and symptoms, pathology, clinical manifestations, sequelae, and- treatment. The respiratory therapist's role in recognizing and treating pulmonary diseases is highlighted.	Sophomore Level Status <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L Sophomore Level Status	<ul style="list-style-type: none"> • RSP 100 • RSP 101 • RSP 102 • RSP 102L Sophomore Level Status
RSP 202	Mechanical Ventilation Technology and Mgt.	3	An introduction to the fundamentals of mechanical ventilation techniques and terminology. Monitoring and the ability to solve clinical problems relating to mechanical ventilation are emphasized. Lab included.	Junior Level Status <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 Junior Level Status	<ul style="list-style-type: none"> • RSP 102 • RSP 102L • RSP 201 • RSP 203 • RSP 212 Junior Level Status

RSP 203	Respiratory Internship (1 - 4 hr.)	4	Emphasis is on information gathering from the patient record, physical evaluation of the patient, and basic respiratory interventions	Sophomore Level Status <ul style="list-style-type: none"> BSC 227 & 227L BSC 228 & 228L BSC 250 & 250L RSP 100 	Sophomore Level Status <ul style="list-style-type: none"> RSP 101 RSP 102 RSP 102L 	Sophomore Level Status <ul style="list-style-type: none"> RSP 201 RSP 212
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Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites	Co-Requisite	
RSP 206	Neonatal/Pediatric Respiratory (Writing Intensive)	3	Provide knowledge of neonatal/pediatric patient fetal cardiopulmonary development and changes at birth, care methods used, and evaluation of neonatal and pediatric patients are covered.	Junior Level Status <ul style="list-style-type: none"> BSC 227 & 227L BSC 228 & 228L BSC 250 & 250L RSP 100 RSP 102 RSP 102L 	Junior Level Status <ul style="list-style-type: none"> RSP 201 RSP 202 RSP 203 RSP 207 RSP 209 RSP 212 	Junior Level Status <ul style="list-style-type: none"> RSP 210 RSP 303 RSP 308 RSP 314
RSP 207	Introduction to Critical Care Management	3	Designed to provide the student with knowledge of airway management, Trans tracheal oxygen therapy and aspiration, bronchoscopy, thoracentesis, pleural chest tubes, arterial lines, ABG interpretation, and analysis, transports, and electrocardiogram interpretation	Junior Level Status <ul style="list-style-type: none"> BSC 227 & 227L BSC 228 & 228L BSC 250 & 250L RSP 100 	Junior Level Status <ul style="list-style-type: none"> RSP 102 RSP 102L RSP 201 RSP 203 RSP 212 	Junior Level Status <ul style="list-style-type: none"> RSP 202 RSP 209

				<ul style="list-style-type: none"> • RSP 101 		
RSP 209	Respiratory Internship 2	3	Emphasis is on the supervised practice of humidity and aerosol therapy, aerosol drug therapy, lung inflation therapy, and techniques used in electrocardiography	<p>Junior Level Status</p> <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L RSP 100 • RSP 101 	<p>Junior Level Status</p> <ul style="list-style-type: none"> • RSP 102 • RSP 102L • RSP 201 • RSP 202 • RSP 203 	<p>Junior Level Status</p> <ul style="list-style-type: none"> • RSP 202 • RSP 207
RSP 210	Respiratory Internship III	3	The emphasis is on the supervised practice of arterial blood gas sampling and analysis, arterial line management, chest tube management, ECGs observation of hemodynamic measurement and monitoring, IABP management.	<p>Junior Level Status</p> <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L RSP 100 • RSP 101 • RSP 102 	<p>Junior Level Status</p> <ul style="list-style-type: none"> • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 209 	<p>Junior Level Status</p> <ul style="list-style-type: none"> • RSP 303 • RSP 309

Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites		Co-Requisite
RSP 212	Acute/Chronic Pulmonary Management	3	Emphasis is placed on pulmonary function testing/interpretation and care of a patient with long-term pulmonary disability requiring home care and rehabilitation	Junior Level Status <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L RSP 100 • RSP 101 	Junior Level Status <ul style="list-style-type: none"> • RSP 102 • RSP 102L • RSP 201 • RSP 202 • RSP 203 	Junior Level Status <ul style="list-style-type: none"> • RSP 201 • RSP 203
RSP 302	Respiratory Internship IV	2	Emphasis is on cardiopulmonary assessment and treatment of trauma, post-surgical, cardiac, renal, neonatal, and pediatric patients with the refinement of monitoring procedures and interpretation of data.	Senior Level Status <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 	Senior Level Status <ul style="list-style-type: none"> • RSP 203 • RSP 206 • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 303 • RSP 308 • RSP 314 	Senior Level Status <ul style="list-style-type: none"> • RSP 304 • RSP 307 • RSP 401
RSP 303	Clinical Respiratory Education	3	Designed as an introduction to clinical teaching in a respiratory care program. Emphasis is on instructional and evaluation strategies and the development of performance objectives	Junior Level Status <ul style="list-style-type: none"> • BSC 227 & 227L 	Junior Level Status <ul style="list-style-type: none"> • RSP 203 • RSP 206 	Junior Level Status <ul style="list-style-type: none"> • RSP 206 • RSP 210 • RSP 303 • RSP 308

				<ul style="list-style-type: none"> • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 	<ul style="list-style-type: none"> • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 303 • RSP 308 • RSP 314 	
RSP 304	Advanced Neonatal and Pediatric	3	Advanced study of neonatal/pediatric pathophysiology including parenchymal disease, obstructive airway disease, lesions of the lungs and airways, congenital abnormalities, respiratory distress syndrome, apnea disorders, neurological disorders, and trauma.	<p>Senior Level Status</p> <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 	<p>Senior Level Status</p> <ul style="list-style-type: none"> • RSP 203 • RSP 206 • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 303 • RSP 308 • RSP 314 	<p>Senior Level Status</p> <ul style="list-style-type: none"> • RSP 302 • RSP 307 • RSP 401

Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites		Co-Requisite
				Senior Level Status	Senior Level Status	Senior Level Status
RSP 307	Advanced Techniques in Adult C	4	Emphasis is on current respiratory care procedures for critically ill adult patients with an exploration into newer techniques	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 	<ul style="list-style-type: none"> • RSP 203 • RSP 206 • RSP 207 • RSP 208 • RSP 209 • RSP 210 • RSP 212 • RSP 303 • RSP 308 	<ul style="list-style-type: none"> • RSP 302 • RSP 304 • RSP 401
RSP 308	Respiratory Management and C	3	<p>This course introduces the student to basic management principles of a respiratory department.</p> <p>Discussion includes scope of management, quality issues, budgeting issues, and evaluation and application of management concepts.</p>	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 	<ul style="list-style-type: none"> • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 207 • RSP 209 • RSP 212 	<ul style="list-style-type: none"> • RSP 206 • RSP 210 • RSP 303 • RSP 314
RSP 314	Advanced Mechanical Ventilatio	3	Advanced theory and application of mechanical ventilation. Study of various mechanical ventilators and artificial airways, with major emphasis on all aspects of the management of the patient-ventilator system	<ul style="list-style-type: none"> • BSC 227 & 227L 	<ul style="list-style-type: none"> • RSP 102L 	<ul style="list-style-type: none"> • RSP 206 • RSP 210

				<ul style="list-style-type: none"> • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 	<ul style="list-style-type: none"> • RSP 201 • RSP 202 • RSP 203 • RSP 207 • RSP 209 • RSP 212 	<ul style="list-style-type: none"> • RSP 303 • RSP 308
RSP 401	Introduction to Sleep Disorders	4	Designed to teach how a Polysomnogram is performed, the major categories of sleep disorders, the presenting symptoms of sleep apnea, narcolepsy, psychophysiological insomnia and sleep disturbance due to depression.	Senior Level Status <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 	Senior Level Status <ul style="list-style-type: none"> • RSP 203 • RSP 206 • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 303 • RSP 308 • RSP 314 	Senior Level Status <ul style="list-style-type: none"> • RSP 302 • RSP 304 • RSP 307

Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites	Co-Requisite
RSP 402	Issues in Respiratory Management	3	Designed to examine respiratory care in rural America. This course will address the key issues confronting rural respiratory healthcare today, examine the causes and develop solutions to these issues.	Acceptance in the Degree Advancement Program	N/A
RSP 403	Respiratory Care Research	3	Designed to provide the student with knowledge about survey of research problems, methods, designs utilized in respiratory care, with emphasis on data presentation and analysis.	Senior Level Status	Senior Level Status

				<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 206 	<ul style="list-style-type: none"> • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 302 • RSP 303 • RSP 304 • RSP 307 • RSP 308 • RSP 314 	<ul style="list-style-type: none"> • RSP 403 • RSP 407 • RSP 420
RSP 404	Advanced Practicum 4	4	This is a 4-hour course where the emphasis is placed on advanced respiratory techniques and management of clients across the life span	<p>Senior Level Status</p> <ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 206 	<p>Senior Level Status</p> <ul style="list-style-type: none"> • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 302 • RSP 303 • RSP 304 • RSP 307 • RSP 308 • RSP 314 • RSP 401 	<p>Senior Level Status</p> <ul style="list-style-type: none"> • RSP 403 • RSP 407 • RSP 420

Note:

For any course listed in this table, you must be formally accepted into the Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre-Requisites		Co-Requisite
				Senior Level Status	Senior Level Status	Senior Level Status
RSP 407	Clinical Decision Making	3	The course focuses on gathering appropriate clinical information to make evidence-based decisions in the treatment of respiratory care diseases.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 206 	<ul style="list-style-type: none"> • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 302 • RSP 303 • RSP 304 • RSP 307 • RSP 308 • RSP 314 RSP 401 	<ul style="list-style-type: none"> • RSP 403 • RSP 404 • RSP 407 • RSP 420
RSP 420	Capstone in Respiratory Care	5	Role synthesis practicum incorporating provision of care, coordinator of care, member of the profession and Leadership roles.	<ul style="list-style-type: none"> • BSC 227 & 227L • BSC 228 & 228L • BSC 250 & 250L • RSP 100 • RSP 101 • RSP 102 	<ul style="list-style-type: none"> • RSP 207 • RSP 209 • RSP 210 • RSP 212 • RSP 302 • RSP 303 • RSP 304 • RSP 307 • RSP 308 • RSP 314 RSP 401 0 	<ul style="list-style-type: none"> • RSP 403 • RSP 404 • RSP 407

				<ul style="list-style-type: none"> • RSP 102L • RSP 201 • RSP 202 • RSP 203 • RSP 206 		
RSP 480	Special Topics	1-4	Study of topics not available in other course	Permission from Program Director	Permission from Program Director	N/A
RSP 481	Special Topics	1-4	Study of topics not available in other course	Permission from Program Director	Permission from Program Director	N/A
RSP 482	Special Topics	1-4	Study of topics not available in other course	Permission from Program Director	Permission from Program Director	N/A
RSP 483	Special Topics	1-4	Study of topics not available in other course	Permission from Program Director	Permission from Program Director	N/A
RSP 485	Special Topics (1-4; 1-4; 1-4)	4	Study of topics not available in other course	Permission from Program Director	Permission from Program Director	N/A
RSP 486	Independent Study (1-4)	4	The course will consist of directed and independent reading, directed and independent research, problem reports, or tutorials. Will allow the student to complete individualized learning in respiratory care	Permission from Program Director	Permission from Program Director	N/A
RSP 487	Independent Study	1-4	The course will consist of directed and independent reading, directed and independent research, problem reports, or tutorials. Will allow the student to complete individualized learning in respiratory care	Permission from Program Director	Permission from Program Director	N/A
RSP 488	Independent Study	1-4	The course will consist of directed and independent reading, directed and independent research, problem reports, or tutorials. Will allow the student to complete individualized learning in respiratory care	Permission from Program Director	Permission from Program Director	N/A

Revised: 7/21

Reviewed: 4/22, 6/23

ASSOCIATE OF APPLIED SCIENCE

Note:

For any course listed in this table, you must be formally accepted into the Associate of Applied Science Respiratory Care Program or receive permission from the Program Director.

Course Number	Course Title	Cr Hr	Course Description	Pre Requisites	Co Requisites
RESP 100	Respiratory Pharmacology	3	<p>This course introduces the student to the study of pharmacological principles related to treating patients with cardiopulmonary disease.</p> <p>This course includes principles of drug action, the basic methods of drug administration, standard drug calculations, and the effects of drugs on body systems.</p> <p>Inhaled bronco-active aerosols and other agents in cardiopulmonary patient care are discussed</p>	Admission to the SMMC MCTC Respiratory Program	RESP 101 RESP 102 RESP 102L RESP 203
RESP 101	Introduction to Respiratory Care Patient Assessment	3	<p>This course is an introduction to respiratory care as a profession.</p> <p>Topics discussed include the history of respiratory care and professional organizations, the role of the respiratory therapist as a member of the healthcare team, medical ethics, taking and recording the patient's vital signs, proper body mechanics, emphasis on cardiopulmonary assessment of the respiratory patient, infection control, and cardiopulmonary resuscitation (CPR).</p>	Admission to the SMMC MCTC Respiratory Program	RESP 100 RESP 102 RESP 102L RESP 203
RESP 102	Introduction to Respiratory Care Skills	3	<p>This course introduces the student to therapeutic procedures used in respiratory care.</p> <p>The proper administration of medical gases, humidity therapy, and aerosol therapy with emphasis on the safe handling of medical gases and safety in administration are included</p>	Admission to the SMMC MCTC Respiratory Program	RESP 100 RESP 101 RESP 102L RESP 203
RESP 102L	Introduction to Respiratory Care - Lab	1	<p>This laboratory course will provide the student with hands-on practice and manipulation of essential respiratory equipment and the training of assessment skills, including oxygen therapy equipment, humidification devices, aerosol therapy devices, airway clearance equipment, and management of secretions.</p> <p>Handwashing and infection control are practiced</p>	Admission to the SMMC MCTC Respiratory Program	RESP 100 RESP 101 RESP 102 RESP 203
RESP 104	Clinical Experience I	1	<p>This course introduces the student to respiratory care practice in the hospital setting.</p> <p>This clinical experience includes the development of skills such as basic therapeutics, patient assessment, medical record review, safety practices, patient interaction, and communication skills.</p> <p>Emphasis is placed on the promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care</p>	Admission to the SMMC MCTC Respiratory Program	RESP 100 RESP 101 RESP 102 RESP 102L
Course	Course Title	Cr	Course Description	Pre	Co

Number		Hr		Requisites	Requisites
RESP 201	Pulmonary Pathophysiology	3	<p>This course is a comprehensive study of the etiology, signs and symptoms, diagnosis, pathogenesis, pathophysiology, treatment, and prognosis of various pulmonary pathologies.</p> <p>The role of a respiratory therapist in recognizing and treating pulmonary diseases will be emphasized</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 203	RESP 209 RESP 212
RESP 202	Mechanical Ventilation 1	3	<p>This course introduces mechanical ventilation techniques and ventilator terminology.</p> <p>This course will cover information necessary to understand the essential functions of a life support ventilator,</p> <p>Proper monitoring procedures and the ability to solve clinical problems relating to mechanical ventilation will be emphasized. Lab included</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 203 RESP 209 RESP 212	RESP 206 RESP 207 RESP 210
RESP 203	Clinical Experience 1	2	<p>This course introduces the student to Respiratory Therapy practice in the hospital setting.</p> <p>This clinical experience Includes the development of skills such as basic therapeutics, patient assessment, medical record review, safety practices, patient interaction, and communication.</p> <p>Emphasis is placed on the promotion of evidence-based practice using established clinical practice guidelines and published research for its relevance to patient care.</p>	Admission to the SMMC MCTC Respiratory Program	RESP 100 RESP 101 RESP 102 RESP 102L
RESP 206	Neonatal/Pediatric Respiratory Care	3	<p>This course provides a comprehensive overview of pediatric and neonatal respiratory care.</p> <p>Special considerations of respiratory care practice that are unique to pediatrics and neonatology will be discussed.</p> <p>Topics include pediatric anatomy and physiology, fetal development, clinical assessment, oxygen therapy, airway management, mechanical ventilation, resuscitation, cardiopulmonary pathophysiology, and disorders specific to this specialty profession within the respiratory care</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 201 RESP 203 RESP 209 RESP 212	RESP 202 RESP 207 RESP 210
RESP 207	Critical Care Management 1	3	<p>This course covers in detail the advanced skills necessary to manage intensive care patients.</p> <p>Students will learn proper methods and techniques to evaluate, monitor, and use Respiratory Therapy protocols to provide advanced management therapies based on the pathophysiology of the critically ill patient.</p> <p>The student will be presented with knowledge of oxygen and carbon dioxide transport, airway management, chest drainage systems, cardiac function, and interventions, obtaining blood from arterial lines and radial artery punctures, and ABG and electrocardiogram interpretation skills will be taught</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 201 RESP 203 RESP 209 RESP 212	RESP 202 RESP 206 RESP 210
Course	Course Title	Cr	Course Description	Pre	Co

Number		Hr		Requisites	Requisites
RESP 208	Respiratory Seminar	5	<p>This course incorporates discussions of critical questions and contemporary issues in the current respiratory care environment</p> <p>The goal is to facilitate a successful transition from student to graduate respiratory care professional.</p> <p>The student will demonstrate the value of lifelong learning and provide evidence of adequate preparation for assuming the role of a respiratory care professional</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 104 RESP 201 RESP 202 RESP 206 RESP 207 RESP 209 RESP 210 RESP 212	RESP 214 RESP 215 RESP 216
RESP 209	Clinical Experience 2	2	<p>This course provides clinical experience in treatment procedures continued from Clinical Practice 1 with greater emphasis on respiratory procedures previously practiced with greater emphasis on independence.</p> <p>Specialty rotations will be introduced to respiratory care, critical care, aerosol therapy, and various pulmonary function tests.</p> <p>Students will gain further experience with bronchial hygiene therapies, including postural drainage and chest percussion</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 203	RESP 201 RESP 212
RESP 210	Clinical Experience 3	4	<p>This course provides students with a rotation for arterial blood gas sampling and analysis.</p> <p>The student will gain clinical experience in adult mechanical ventilation monitoring ventilator monitoring including mode, mechanical/spontaneous tidal volumes, FiO₂, PEEP/CPAP, flow rate, minute volume, PIP, I:E ratio, compliance, airway resistance, MAP, all alarm settings and airway management in the critical care setting, as well as the continued performance of the basic respiratory care skills.</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 201 RESP 203 RESP 209 RESP 212	RESP 202 RESP 206 RESP 207
RESP 211	Procedures & Application	4	<p>This course includes in-depth coverage of respiratory therapeutic procedures and/or modalities that student respiratory therapists are likely to encounter.</p> <p>Building off of basic principles, this course helps the student apply theory to practice promoting critical thinking and problem solving skills related to the ever changing patient care area</p>	RESP 100 RESP 102 RESP 102L RESP 104	RESP 201 RESP 209 RESP 212
RESP 212	Pulmonary Diagnostics		<p>This course will introduce the student to the principles and techniques of pulmonary function testing.</p> <p>The cardiovascular and pulmonary function testing of patients will be covered with an emphasis on the evaluation and interpretation of the results of the tests. This course will cover an introduction to integrating test results with a clinical picture of the patient and emphasizing therapeutics and principles</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 203	RESP 201, RESP 209

Course Number	Course Title	Cr Hr	Course Description	Pre Requisites	Co Requisites
RESP 214	Mechanical Ventilation II	3	<p>The course emphasizes applying various ventilation techniques and concepts to different patient disease state seen in critical care areas.</p> <p>The student develops the ability to use waveforms and patient values as some of the tools in the assessment and management of respiratory care patients.</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 201 RESP 202 RESP 203 RESP 206 RESP 207 RESP 209 RESP 210 RESP 212	RESP 215 RESP 216 RESP 220
RESP 215	Critical Care Management II	3	<p>Designed to provide the student with knowledge of oxygen and carbon dioxide transport, airway management, chest drainage systems, cardiac function, and interventions, obtaining blood from arterial lines and radial artery punctures, and ABG and electrocardiogram interpretation skills will be taught.</p> <p>Orientation to patient care in the I.C.U. setting is also covered.</p>	RESP 100 RESP 101 RESP 102 RESP 102L RESP 201 RESP 202 RESP 203 RESP 206 RESP 207 RESP 209 RESP 210 RESP 212	RESP 214 RESP 216 RESP 220
RESP 216	Clinical Experience IV	2	<p>Respiratory care treatment procedures are continued with greater emphasis on functioning with minimal supervision and improving proficiency and refining the student's skills in adult general and critical care areas.</p> <p>Experience in non-acute health care settings is included.</p> <p>Specialty rotations are continued.</p>	RESP 100, RESP 101 RESP 102 RESP 102L RESP 201 RESP 202 RESP 203 RESP 206 RESP 207 RESP 209 RESP 210 RESP 212	RESP 214 RESP 215

FACULTY

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CFE Admissions Coordinator	Leah Chapman	304-399-7110

DISCLOSURE FORM

PROJECTED EXPENSES

The following projected expenses apply to School Of Respiratory Care courses only at the CFE.

School of Respiratory Care

Fall Semester Sophomore Year	Projected Cost	Spring Semester Sophomore Year	Projected Cost
Tuition – 10 Credit hours	\$3,400.00	Tuition – 10 Credit hours	\$3,400.00
Projected Books & Supplies	\$1,300.00	Projected Books & Supplies	\$500.00
Lab Kit & Lab Fee	\$300.00	Lab Fee	\$100.00
Uniform	\$300.00		
Background Check Drug Screen	\$100.00		
Total	\$5,400.00	Total	\$4,000.00

Fall Semester Junior Year	Projected Cost	Spring Semester Junior Year	Projected Cost
Tuition – 13 Credit hours	\$4,080.00	Tuition – 13 Credit hours	\$4,080.00
Projected Books/Supplies	\$500.00	Projected Books/Supplies	\$500.00
Lab Fee	\$100.00	Lab Fee	\$100.00
Total	\$4,680.00	Total	\$4,680.00

Fall Semester Senior Year	Projected Cost	Spring Semester Senior Year	Projected Cost
Tuition – 15 Credit hours	\$4,080.00	Tuition – 15 Credit hours	\$4,080.00
Projected Books/Supplies	\$1,000.00	Projected Books/Supplies	\$1,000.00
Lab Fee	\$100.00	Lab Fee	\$100.00
		Graduation Fee	\$100.00
Total	\$5,180.00	Total	\$5,280.00

The St. Mary's/Marshall University Co-Operative School of Respiratory Care is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com)

Program outcomes may be obtained by going to www.coarc.com and clicking on the link program outcomes

Commission on Accreditation for Respiratory Care
 264 Precision Road
 Telford, TN 37690
 (817) 283-2835

Despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, we will not:

- Prevent their enrollment.
- Assess a late penalty fee
- Require they secure alternative or additional funding
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified.
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

SCHOOL OF MEDICAL IMAGING

PROGRAM OVERVIEW

PROGRAM OVERVIEW

St. Mary's School of Medical Imaging (SOMI) was started in 1964. It is a hospital-based educational program consisting of 36 months of competency-based clinical and didactic instruction to prepare graduates for entry level employment as a radiographer or sonographer, and to sit for the American Registry of Radiologic Technologist (ARRT)/American Registry of Diagnostic Sonography (ARDMS) certification examination upon graduation. The School of Medical Imaging is a cooperative baccalaureate program with Marshall University.

Radiography is a multi-dimensional career that includes digital radiography, trauma radiography and fluoroscopy. Radiographers have many advanced imaging opportunities available including computed tomography, magnetic resonance imaging and cardiovascular intervention radiography. Sonography is also a multi-dimensional career that includes concentrations in General Sonography, Obstetrical/Gynecologic, Cardiac Echo (fetal and adult), and Vascular sonography.

The School of Medical Imaging (SOMI) is a thirty-six month program designed to prepare the student for entry and professional level employment as a radiographer/sonographer. The SOMI is accredited by the Joint Review Committee on Education in Radiography (JRCERT), and recognized by the West Virginia Board of Examiners of Radiologic Technologists. Radiography Graduates of the program are eligible to take the entry-level American Registry of Radiologic Technologists (ARRT) while Sonography Graduates will be eligible to take examinations through the American Registry of Diagnostic Medical Sonography (ARDMS) certification examinations. Radiography Students will also be didactically prepared for an advanced practice modality in imaging. Radiography Graduates will have three years after completing the program to sit for the Primary certification exam; however, post-primary certification exams (advanced imaging) clinical competency must be dated within 24 months of submitting an application. Since senior students will be documenting post-primary competencies, students who enter the program must complete all didactic and clinical requirements including general education requirements within four years (forty-eight months) of entering the SOMI portion of the program (sophomore MU year). Sonography Graduates require a CV for their specialty examinations. These will be provided upon completion of the program, however, the student must realize the CV forms are good for one year after graduation and if specialty exams are not taken within the first year of graduation they will be required to contact the ARDMS to meet the additional requirements.

The program is composed of two major components; a clinical component and an academic (classroom) component. Each component is designed to complement the other so that procedures taught in the classroom are performed under supervision in the clinical setting at that time. Each component is discussed separately in their respective sections.

SCHOOL OF MEDICAL IMAGING MISSION STATEMENT

The mission of St. Mary's School of Medical Imaging is to prepare qualified graduates in the area of imaging sciences through current educational methodologies. The faculty, in collaboration with internal and external groups, will foster the development of a learning environment that is responsive to local and national trends in health care to produce multi-competent medical imaging professionals.

Revised 5/13, Reviewed annually.

PROGRAM PHILOSOPHY

The faculty of St. Mary's School of Medical Imaging believes that medical imaging is a unique combination of art and science based on the desire to meet specific health care needs of the community. The focus of medical imaging is to provide optimal results with the highest quality of patient care. The achievement of this goal requires the application of the physical and biological sciences coupled with effective communication and interaction skills.

We believe that learning is an end product of education. We believe that motivation, readiness, interest and perseverance are essential to effective learning. We also believe that learning occurs best in an atmosphere built on a cooperative teacher-student relationship.

We believe that medical imaging education is a planned program for the guidance of students in acquiring the knowledge and skills that will prepare them for entry level employment in the various fields of medical imaging. We believe that learning does not stop at graduation and the continuing education is an integral part of their professional development.

With this in mind, it is the responsibility of the faculty to select, plan, organize, implement and evaluate educational experiences for the students in a progressive manner that gives the students direction and allows for individual differences. In doing so, it is the responsibility of the student to cooperate with faculty in all programmatic policies and procedures and to fully cooperate in group activities. Only then can this educational program foster a cooperative environment that is conducive to student learning.
Revised 5/13, 7/14, Reviewed annually

SCHOOL OF MEDICAL IMAGING GOAL

To assure that St. Mary's Medical Center School of Medical Imaging is effective in providing the highest quality educational opportunities to students as set forth in the Standards of an Educational Program in Radiography by the Joint Review Committee on Education in Radiography, the SOMI has developed an Assessment Plan based on the following goals. The Assessment Plan and goals are evaluated on an annual basis and are published in an annual report to the Advisory Committee members. Applicants/Students interested in reviewing the program's Assessment Plan or Annual Report should contact the Chair.

Radiography Goals and Student Learning Outcomes

- I. The program will graduate clinically competent imaging professionals to meet community healthcare needs
 - a. Student will demonstrate technical proficiency
 - b. Students will practice ALARA principles
- II. Students/graduates will be effective communicators
 - a. Students will demonstrate communication fluency by engaging in diverse perspectives
 - b. Students will demonstrate written skills
- III. Students/graduate will model professionalism
 - a. Students will demonstrate a set of cognitive, affective and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts
 - b. Students will demonstrate professional behavior in the clinical arena
- IV. Students/graduates are effective at critical thinking.
 - a. Students will demonstrate analytical inquiry through practical approaches to problem solving
 - b. Students will demonstrate critical thinking skills in the use of information resources

Revised: 3/2004; 6/2005; 8/2007; 3/2010; 8/2012, 5/13, 1/14, 5/16, 7/17, 6/19, 7/21
Reviewed: 8/15, 5/16, 7/2017, 6/18, 6/20

APPLICATION PROCESS

Thank you for your interest in St. Mary's Medical Center/MU School of Medical Imaging. Radiography is a very exciting and dynamic field that offers a wonderful blend of technology and patient interaction. The field also offers many career advancement opportunities in the areas of CT, MRI, mammography, ultrasound, nuclear medicine, radiation oncology and cardiovascular imaging.

The SMMC SOMI radiography program is a four year program and is accredited by the Joint Review Committee on Education in Radiologic Technology. Please be advised that the radiography program is selective in its admission practices and can only offer a limited number of spaces to applicants each year. Acceptance into the program is contingent upon a negative drug screening and a clear background check before the start of the first semester. The program reserves the right to request random drug screenings after admittance. Note: students interested in the sonography track should also look at the sonography admission process link located on the program web page <https://www.st-marys.org/careers-and-education/school-of-medical-imaging/sonography/>

There is a \$30 non-refundable application fee. We accept applications from January 1 to May 5 of each year. The application process must be completed by May 5th of the year you are applying for admission. Again, thank you for your interest in the program.

Download Application <https://www.st-marys.org/assets/SMMC/Documents/SOMI/CFE-Application-Form-SOMI-1.pdf>

Technical Standards form <https://www.st-marys.org/assets/Documents/SMMC/School-of-Medical-Imaging/TechStandardsSOR.pdf>

Students must apply to and be accepted into the Marshall University College of Health Professions. Acceptance into the COHP does not guarantee acceptance into the SOMI. *Separate* application is made to SMMC SOMI between January 1 and May 5th of each year.

Applications along with a Technical Standards Declaration (see Technical Standards below) may be downloaded and submitted electronically to Deborah.Moore@st-marys.org. The application fee can be paid by credit card by contacting the St. Mary's Accounting Department at 304.526.8932. Alternatively, applications and the fee in the form of check or money order can be mailed to:

St Mary's Medical Center School of Medical Imaging
2900 First Avenue
Huntington, WV 25701

In addition to the application and technical standards form, we require a copy of high school transcripts and all college transcripts. Transcripts may be delivered electronically to Deborah.Moore@st-marys.org or mailed. We recommend requesting electronic delivery.

In addition to transcripts we require verification of ACT scores. A minimum ACT score of 19 on composite, math and science will improve an applicant's chances of being accepted into the program.

Minimum requirements for consideration are:

1. High school diploma or successful completion of the GED.
2. A minimum of 18 college credits (100 level courses or higher) from a regionally accredited institution must be completed or in progress prior to applying to the program.

3. A minimum overall GPA of 2.50 must be obtained on all college level courses. A minimum GPA of 2.50 must be obtained on all math and science courses.
4. A letter grade of "C" or better must be obtained in each of the following Marshall University courses designated with an asterisk * (or equivalent courses from other institutions).
 - a. MAT 121 or higher College Algebra*
 - b. PHY 101 Introductory Physics (or higher)*
 - c. PHY 101L Physics Lab*
 - d. BSC 227 & 227L Human Anatomy*
 - e. BSC 228 & 228L Human Physiology*
 - f. CLS 105 Medical Terminology (or other medical terminology course)
 - g. Communications (the communication skills requisite may be met by a variety of courses including English, speech, or composition)

** Any substitution or variation of pre-requisite course work requires special permission of Program Director **

5. Professional observation within a hospital radiography department is recommended, but not required. Please contact 304.526.8328 if you wish to do observation at SMMC. Observation depends upon hospital visitation policy which is subject to change pending Covid-19 parameters. It is highly recommended that interested applicants review information on the American Society of Radiologic Technologists web page about the field of medical imaging. www.asrt.org

ACCEPTANCE PROCESS

Applicants are scored and ranked based on overall college GPA, course grades in prerequisite courses and selected additional science course work (e.g., cell biology, general or organic chemistry) and high school GPA or GED scores. Applicants who submit ACT scores will receive extra points for scores of 19 or greater on the composite, math, science and verbal components. Students who took the SAT rather than the ACT will have the math and over all scores converted to ACT values.

Positions are offered to the top twenty-four applicants based on total points; however, the SOMI reserves the right to conduct personal interviews to assist in candidate selection. Remaining applicants comprise the alternate list for that year's admission. Alternates may be selected up to the beginning of the fall term.

Students accepted into the program that wish to pursue the sonography track, may make separate application to the sonography track at the conclusion of the sophomore year. The number of students accepted into sonography is limited. If the number of interested students exceeds the available slots, admission will be based first on MI coursework GPA. If there are ties then course grades in prerequisite sciences and MU GPA will be the determining factors. The deadline for application is April 1. *See the Sonography Link for additional information.*

Revised 3/04; 6/05; 8/07; 3/10, 9/12, 5/13, 6/15, 8/16, 7/21; 6/22

DISCLOSURE FORM – SOMI

	Class of 2022	Class of 2021	Class of 2020	Class of 2019	Class of 2018	Class of 2017
PERCENT PASSING BOARDS – SMMC	93.3%	100%	93%	100%	70.6%	100%
PERCENT PASSING BOARDS – NATIONAL	83.5%	83.8%	88%	89%	89.4%	89.3%
PROGRAM COMPLETION RATE	100%	100%	87%	93%	93%	92%
PROGRAM SATISFACTION RATE	89%	100%	100%	100%	100%	99%
PROGRAM JOB PLACEMENT	100%	100%	100%	100%	100%	90%

Revised: 7/21, 7/22, 6/23

FINANCIAL INFORMATION: FEES AND OTHER EXPENSES

Unless otherwise noted, all fees are due at the beginning of each academic year. There is no difference in tuition for West Virginia residents or out-of-state residents. All fees are subject to change without notice.

Tuition is paid directly to SMMC-SOMI. Students who receive financial aid from Marshall may receive fall aid by August, but must contact the Financial Aid office early in order to do so. Students may be granted a short-term extension in fee payment under extenuating circumstances.

PROJECTED EXPENSES

Projected expenses apply to SOMI courses only at the CFE. Students who take coursework at Marshall University may have additional fees or other expenses.

Year One Fall		Year One Spring	
Tuition	4120	Tuition	4120
Books	800 (estimate)	Books	100
Uniforms	200 (estimate)		
Drug/Screen/Background check	100		
Total	5220	Total	4220
Year Two Fall		Year Two Spring	
Tuition	4120	Tuition	4120
Books	200 (estimate)	Books	100
Total	4420	Total	4220
Year Three Fall		Year Three Spring	
Tuition	4120	Tuition	
Books	100	Books	100
Fees (graduation)	50		
Total	4270		4100

Despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, we will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

TECHNICAL STANDARDS

Technical standards are those standards or abilities that a student must possess to be successful in this profession. All applicants are required to sign a Technical Standards Review Declaration Form to be submitted with application form.

Part of the training in radiologic technology involves working one on one with patients. Student technologists are responsible for the safety and well-being of their patients while performing examinations. The students will also be manipulating equipment where the potential injury to the patient and student is present.

1. Motor Skills

- extend the hands and arms in any direction
- hold, grasp and turn with the hands
- safely lift, manipulate and use equipment
- reach up to six feet off the floor
- ability to coordinate eyes, hands and feet rapidly and accurately
- lift 30-35 lbs. waist high
- push and pull at least 100 lbs.

2. Visual Acuity

- sufficient far vision to see objects beyond 20 feet
- sufficient near vision to see objects within 20 inches
- depth perception
- see in all directions
- observe and evaluate changes in the patient or equipment

3. Communication Ability

- perceive the nature of sounds through hearing
- be able to speak, hear and observe patients
- express and exchange information through written and verbal communication

4. Behavioral Skills

- function effectively under stress
- establish sensitive and cooperative relations with patients and co-workers
- adapt to changing environments

** See Admission above regarding Declaration Form**

Credit Hour

One lecture credit hour is given for each 15 classroom contact hours, plus necessary outside preparation. For nursing courses, one laboratory credit hour requires at least 45 hours of laboratory work per credit hour, plus necessary outside preparation. Laboratory experiences are complements to classroom courses that focus on the theory and principles of the discipline.

Formulated: Prior to 5/2002

Revised: 6/02, 5/03, 5/04, 5/05, 5/06, 4/08, 3/10, 7/10, 9/12

Reviewed: 7/21

FACULTY

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Vice President of Schools of Nursing and Health Professions
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Marshall University, Huntington, WV
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STAFF

CFE Administrative Assistant	Paula Cremeans	304-526-1426
CFE Admissions Coordinator	Melba Curry	304-526-1423
CFE Admissions Coordinator	Leah Chapman	304-399-7110

PROCEDURE: Curriculum:

Students in the SOMI have several choices regarding curriculum tracks. All sophomore (year 2) students follow the same curriculum. At the end of the sophomore year, students may elect to continue in the radiography track or apply to the sonography track. Sonography will be limited enrollment and selection criteria are primarily based on MI coursework GPA. In the event of a tie, MU science courses and MU GPA will be used as the determining factor. Senior students (year 4) in either sonography or radiography have additional options. Radiography students will select from one of six advanced modality tracks. Sonography will select General/OB-GYN or Cardiovascular. A new option is available to students from the Marshall University Department of Physics whereby the student may obtain a double major in imaging and physics or a minor in either. See separate curriculum grid below. General Education requirements from Marshall University may change. Students should consult with the College of Health Professions at MU to determine any general education requirements. Students are required to complete both MU and SMMC graduation requirements prior to receiving their certificate from SMMC. Specific course sequences are subject to change.

BS Medical Imaging Radiography

BS MI Core Curriculum: General Ed requirements in (red) Program prerequisites in (blue)			
Year 1 Fall		Year 1 Spring	
Course	Credit	Course	Credit
BSC 227 & 227L Human Anatomy	4	BSC 228 & 228L Human Physiology (Nat science)	4
Communication: Course	3	PHY 101 Conceptual Physics	3
Medical Terminology (CT)	3	PHY 101L Conceptual physics lab	1
ENG 101 English Composition I (or equivalent) (composition)	3	Social Science Course	3
MTH 121 or higher NOT MTH 125 (mathematics)	3	FYS 100 First Yr Sem Critical Thinking	3
		Composition: English 201	3
Total	16	Total	17
Admission to MI program between year 1 and 2			
Year 2 Fall		Year 2 Spring	
MI 201 Introduction to Medical Imaging	3	MI 207 Imaging Procedures II	4
MI 202 Patient Care in Imaging Science	3	MI 208 Pharmacology for Imaging Science	2
MI 204 Radiographic Anatomy	3	MI 209 Intro to Equipment	3

MI 205 Imaging Procedures I	4	MI 210 Clinical Practice II	4
MI 206 Clinical Practice I	4	MI 212 Seminar in Imaging Science	1
MI 211 Seminar Imaging Science	1	MI 304 Pathology	3
Total	18	Total	17
Summer (1st Intercession)			
MI 213 Elective Clinical Practicum I	4		
Total	4		
Year 3 Fall RADIOGRAPHY		Year 3 Spring	
MI 302 Principles of Rad Production	3	MI 308 Rad Image Analysis	2
MI 303 Image Acquisition	3	MI 309 Digital Image Acquisition	2
MI 305 Clinical Practice IV	4	MI 310 Clinical Practice V	4
MI 306 Seminar in Imaging Sciences	1	MI 311 Seminar Imaging Sciences	1
MI 307 Radiobiology	3	MI 322 Radiation Safety	3
MI 321 Procedures III	3	Statistics	3
Total	17	Total	15
Summer (1st intercession)			
MI 320 (Elective)	4		
Total	4		
Year 4 Radiography Professional Level: Students will select one of the following areas of emphasis			
Computed Tomography/Magnetic Resonance Imaging, Cardiovascular/Interventional, Mammography or Management			
MRI Elective Track			
Year 4 Fall		Year 4 Spring	
MI 401 Seminar in Imaging Sci	1	MI 410 Research Medical Imaging (Capstone) * Requires Statistics as a prerequisite	3
MI 402 Quality Management	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 426 Adv Clinical Practice II	4
MI 404 Advanced Sectional Anatomy	3	MI 432 Advanced MRI Theory	3
MI 406 MRI Equip and Proc	4	MI 435 Seminar ARRT Review II	1
MI 409 Adv Clinic I	4		
Fine arts	3		
Total	16-22	Total	14
CT Elective Track			
Year 4 Fall		Year 4 Spring	
MI 401 Seminar in Imaging Science	1	MI 405 CT Equipment and Proc	3
MI 402 Quality Management	3	MI 410 Research Methods (Capstone)*Requires Statistics as a prerequisite	3

MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 404 Advanced Sectional Anatomy	3	MI 426 Adv Clinical Practice II	4
MI 409 Adv Clinic	4	MI 435 Seminar ARRT Review II	1
Fine arts	3		
Total	14-20		14
Vascular Interventional Radiology Track			
Fall		Spring	
MI 401 Seminar in Img Sci	1	MI 407 Cardiovascular Anatomy	3
MI 402 Quality Management	3	MI 410 Research Medical Imaging (Capstone)*Requires Statistics as a prerequisite	3
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 408 Vascular Interventional	3	MI 426 Adv Clinical Practice II	4
MI 409 Adv Clinical Practice I	4	MI 435 Seminar ARRT Review II	1
Fine arts	3		
Total	20-23	Total	14
Cardiovascular Track			
Fall		Spring	
MI 401 Seminar in Img Science	1	MI 407 Cardiovascular Anatomy	3
MI 402 Quality Management	3	MI 410 Research Medical Imaging (Capstone)*Requires Statistics as a prerequisite	3
MI 403 Advanced Practice Med Img (Writing Intensive)	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 409 Adv Clinic	4	MI 426 Adv Clinical Practice II	4
MI 434 Cardiovascular Imaging	3		
Fine Arts	3		
Total	20-23		14
Mammography Track			
Fall		Spring	
MI 401 Seminar in Imag Sci	1	MI 410 Research Medical Imaging (Capstone)*Requires Statistics as a prerequisite	3
MI 402 Quality Management	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 426 Adv Clinical Practice II	4
MI 409 Adv Clinical Practice I	3	MI 430 Mammography II	3

MI 414 Mammography I	4	MI 435 Seminar ARRT Review II	1
		MI 437 Breast Sonography (Elective)	3
Fine arts	3		
Total	17-20	Total	17
Adv Diagnostic Rad Fall		Spring	
MI 401 Seminar in Imaging Sci	1	MI 410 Research Medical Imaging (Capstone)*Requires Statistics as a prerequisite	3
MI 402 Quality Management	3	MI 411 Transcultural Healthcare (Writing intensive, multicultural)	3
MI 403 Adv Practice Medical Img (Writing intensive)	3	MI 426 Adv Clinical Practice II	4
MI 409 Adv Clinical Practice	4	MI 429 Geriatric/Pediatric Radiography	3
MI 427 Adv Trauma-Surgical Radiography	3	MI 435 Seminar ARRT Review II	1
Fine arts	3		
Total	17-20		14

BS Medical Imaging: Sonography

YEAR Three SONOGRAPHY Students may select General Sonography or Cardiovascular Sonography area of emphasis by the spring semester of the junior year

Summer Intercession			
MI 214 Intro to Sonography	3		
Total	3		
Fall (General/OB GYN Sonography)		Spring (General/OB/GYN Sonography)	
MI 306 Seminar Imaging Science	1	MI 311 Seminar Imaging Science	1
MI 312 Abdominal Sonography I	4	MI 316 Abdominal Sonography II	3
MI 313 Ultrasound Physics I	3	MI 317 Ultrasound Physics II	3
MI 314 Clinical Practice I Sonography	4	MI 319 Clinical Practice II Sonography	4
MI 315 Small Parts	3	MI 416 Obstetrical sonography I	3
MI 318 Vascular I	3	MI 437 Breast Sonography (elective)	3
		Statistics	3
Total	18	Total	17-20
Summer (1st intercession)			
MI 320 Required	4		
Total	4		

Cardiovascular Sonography Track

Summer Intercession			
MI 214 Intro to Sonography	3		
Total	3		

Year Three Cardiovascular Fall		Spring (Cardiovascular)	
MI 306 Seminar Imaging Science	1	MI 311 Seminar Imaging Science	1
MI 312 Abdominal Sonography I	4	MI 316 Abdominal Sonography II	3
MI 313 Ultrasound Physics I	3	MI 317 Ultrasound Physics II	3
MI 314 Clinical Practice I Sonography	4	MI 319 Clinical Practice II Sonography	4
MI 315 Small Parts Sonography	3	MI 407 Cardiovascular anatomy	3
MI 318 Vascular I	3	MI 424 Vascular II	3
		Statistics	3
Total	18		17-20
Summer (1st intercession)			
MI 320 Clinic II	3		
Total	3		
Year Four			
General Sonography Track Fall		Spring	
MI 403 Adv Practice Med Imaging (WAC)	3	MI 410 Research Medical Imag (Capstone)*Requires Statistics as a prerequisite	3
MI 417 Gynecological Sonography I	3	MI 411 Transcultural Healthcare (WAC/MC)	3
MI 418 Registry Review	1	MI 421 Gynecological Sonography II	2
MI 419 Clinical Practice III	4		
MI 420 Obstetrical Sonography II	2	MI 422 Clinical Practice IV Sonography	4
Fine arts	3	MI 436 Registry Review	1
Total	18	Total	13
Cardiovascular Sonography Track Fall		Spring	
MI 403 Adv Practice Med Imaging (WAC)	3	MI 410 Research Medical Imag (Capstone)*Requires Statistics as a prerequisite	3
MI 418 Registry Review	1	MI 411 Transcultural Healthcare (WAC/MC)	3
MI 419 Clinical Practice III Sonography	4	MI 422 Clinical Practice IV Sonography	4
MI 423 Echsonography I	3	MI 425 Echsonography II	
Fine arts	3	MI 436 Registry Review	1
Total	13-16	Total	18
Summer Clinical Elective for radiography or sonography			
MI 431	4		
Total	4		
SONOGRAPHY ELECTIVES As offered			
FALL		SPRING	
		MI 437 Breast Sonography	3
MI 439 Pediatric Echo I	3	MI 438 Fetal Echo	3
MI 441 Advanced Echo I	3	MI 440 Pediatric Echo II	3
		MI 442 Advanced Echo II	3

COURSE DESCRIPTIONS

MI 201 Intro to Radiography (3hrs) Fall

Content is designed to provide an overview of the foundations in radiography and the practitioner's role in the health care delivery system. Principles, practices and policies of the health care organization(s) are examined and discussed in addition to the professional responsibilities of the radiographer. Students will become BCLS certified and undergo orientation required by JACHO prior to entering clinical practice. Students will be introduced to the concept of radiation protection for occupational workers, patients, family and visitors. PR: MTH 121, PHY 101, PHY 101L

MI 202 Patient Care in Imaging Science (3 Hrs) Fall

Content is designed to provide the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are described, as well as infection control procedures using standard precautions. The role of the radiographer in patient education is identified.

MI 204 – Radiographic Anatomy (3 Hrs) Fall

Content is designed to introduce the student to radiographic anatomy. The student will identify anatomical structures depicted on radiographs including film radiography and digital imaging. The student will be introduced to sectional anatomy as demonstrated with computed tomography, magnetic resonance imaging and sonography. Emphasis is placed on identifying structures visible on correctly performed radiographic procedures.

PR: BSC 227 & 227L, BSC 228 & 228L : CR : MI 205

MI 205 Imaging Procedures I (4 Hrs) Fall

Content is designed to provide the knowledge base necessary to perform standard imaging procedures. Consideration is given to the evaluation of optimal diagnostic images. Includes a laboratory component. Students will practice imaging procedures in the laboratory prior to performing the procedure on patients. PR: BSC 227& 227L, BSC 228& 228L, MI 201: CR: MI 204, MI 206

MI 206 – Clinical Practice I Radiography (4 Hrs) Fall

Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during and following the radiologic procedure. Students will be assigned a number of mandatory and elective competencies to be completed during each clinical practice course.

PR: MI 201: CR: MI 202, MI 203, MI 205

MI 207 – Imaging Procedures II (3 Hrs) Spring

Content is designed to provide the knowledge base necessary to perform standard imaging procedures, including basic computed tomography (CT) and special studies. Consideration is given to the evaluation of optimal diagnostic images. Includes a laboratory component. Students will practice imaging procedures in the laboratory prior to performing the procedure on patients. PR: BSC 227 & 227L, BSC 228 & 228L, MI 204, MI 205, MI 206: CR: MI 210

MI 208 – Pharmacology and Drug Administration (2 Hr) Spring

Content is designed to provide basic concepts of pharmacology. The theory and practice of basic techniques of venipuncture and administration of diagnostic contrast agents and/or intravenous medications is included. The appropriate delivery of patient care during these procedures is emphasized. Though regulations regarding the administration of contrast media and intravenous medications vary in different states and institutions, the official position of the American Society of Radiologic Technologists is that venipuncture falls within the profession's general scope of practice and practice standards. Therefore, it should be included in the didactic and clinical curriculum with demonstrated competencies of all appropriate disciplines regardless of the state or institution where the curriculum is taught.

PR: BSC 227 & 227L, MI 202, MI 203, MI 204, proof of BCLS certification.

MI 209 – Introduction to Imaging Equipment (3 Hr) Fall

Content is designed to establish a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. The content also provides a basic knowledge of quality control and to provide entry-level radiography students with principles related to computed tomography (CT) imaging.

PR: MTH 121, PHY 101, PHY 101L

MI 210 – Clinical Practice II Radiography (4 Hrs) Spring

Students will begin clinical practice rotations in computed tomography, radiation oncology, nuclear medicine and cardiovascular procedures as well as diagnostic radiography. Emphasis is placed on achieving competency in mandatory and elective clinical procedures as required for ARRT certification.

PR: MI 206: CR: MI 207, MI 209

MI 211 – Seminar in Imaging Science (1Hr) Fall

Students will research and make short presentations on new developments in imaging science. Emphasis is placed on developing the student's oral communication skills, research skills, and introducing the student to the concept of continuing education as mandated by the ASRT.

MI 212-Seminar in Imaging Science (1 Hr) Spring

MI 213-Elective Clinical Practicum 1 (4 Hr) Summer Intercession

Elective clinical practicum in radiography or sonography

MI 214 – Intro to Sonography (3Hr) Summer Intercession

Introduction to the principles of sonography.

MI 302 – Principles of Radiation Physics (3 Hr) Spring

Content is designed to establish a basic knowledge of the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. The student will be introduced to the concepts of radioactivity including half-life and radioactive decay. This course will provide basic knowledge of principles associated with diagnostic radiography, nuclear medicine imaging and radiation oncology.

PR: PHY 101, PHY 101L, MTH 121, MI 209.

MI 303 – Image Acquisition and Processing (3 Hr) Fall

Content is designed to establish a knowledge base in factors that govern the image production process. Film imaging with related accessories is emphasized. There is a laboratory component to this course. The student will be able to experimentally alter image acquisition factors and evaluate the effects without unnecessary exposure to the patient.

PR: MTH 121, MI 210

MI 304 – Radiographic Pathology (3 Hr) Spring

Content is designed to introduce concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection.

PR: BSC 227, & 227L BSC 228 & 228L, MI 204: CR: MI 303

MI 305 – Clinical Practice IV Radiography (4 Hr) Fall

Students will continue clinical practice rotations in diagnostic radiography, computed tomography, radiation oncology, nuclear medicine and cardiovascular procedures. Emphasis is placed on achieving competency in mandatory and elective clinical procedures as required for ARRT certification including venipuncture.

PR: MI 301.

MI 306 – Seminar in Imaging Science (1 Hr) Fall

Students will research and make short presentations on advanced practice methodologies in imaging science. Emphasis is placed on developing the student's oral communication skills, research skills, and introducing the student to the concept of continuing education as mandated by the ASRT.

MI 307 – Rad(3 Hr) Fall

Content is designed to present an overview of the principles of radiation biology. The student will be introduced to the principles of the interaction of radiation with living systems. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation. PR: BSC 227 & 227L, BSC 228 & 228L, CHM 203,.

MI 308 – Radiographic Image Analysis (2 Hr) Spring

Content is designed to provide a basis for analyzing radiographic images. Included are the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Actual images will be included for analysis.

PR: MI 204, MI 205, MI 208, MI 303, MI 304

MI 309 – Digital Image Acquisition and Display (2 Hr) Spring

Content is designed to impart an understanding of the components, principles and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving and retrieval are discussed. Guidelines for selecting exposure factors and evaluating images within a digital system assist students to bridge between film-based and digital imaging systems. Principles of digital system quality assurance and maintenance are presented. PR: IT 101, MI 303

MI 310 – Clinical Practice V Radiography (4 Hr) Spring

Students will continue clinical practice rotations in diagnostic radiography, computed tomography, radiation oncology, nuclear medicine and cardiovascular procedures. Emphasis is placed on achieving competency in mandatory and elective clinical procedures as required for ARRT certification including venipuncture. Special emphasis is placed on surgical, mobile and emergency radiography.

PR: MI 305

MI 311-Seminar in Imaging Science (1 Hr) Spring

Seminar on new and emerging techniques in imaging sciences

MI 312- Abdominal Sonography I (4 Hr) Fall

This course covers basic abdominal sonographic positioning and scanning protocols as it relates to normal anatomy of the abdomen. Laboratory included.

MI 313-Ultrasound Physics I (3 Hr) Fall

The focus of this course is to educate students about the physics of sound waves and their interaction with tissue enabling the display of diagnostic imaging.

MI 314-Clinical Practice I Sonography (4 Hr) Fall

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of sonographic procedures.

MI 315-Small Parts Sonography (3 Hr) Fall

This course covers anatomy, positioning and scanning protocol of the superficial structures.

MI 316-Abdominal Sonography II (3 Hr) Spring

This course covers basic abdominal sonographic positioning and scanning protocols as it relates to normal anatomy, anatomical variants, physiology to include the retroperitoneum, associated abdominal vasculature identified.

MI 317-Ultrasound Physics II (3 Hr) Spring

The focus of this course is to educate students about the physics of sound waves and their interaction with tissue enabling the display of diagnostic imaging. This is a continuation of MI 313 Ultrasound Physics I

MI 318-Vascular Sonography I (4 Hr) Spring

Discussion of vascular disease, duplex examinations with comparison to arteriography as it pertains to venous and visceral vascular examinations. Laboratory included.

MI 319-Clinical Practice II Sonography (4 Hr) Spring

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of sonographic procedures.

MI 320-Elective Clinical Practicum II (4 Hr) Summer Intercession

Elective clinical practicum in radiography or sonography.

MI 321 Imaging Procedures III (4 Hr) Fall

Content is designed to provide the knowledge necessary for advanced diagnostic radiographic imaging procedures.

MI 322 Radiation Safety (3 Hr) Spring

PR: MI 302, MI 307

MI 401 – Seminar in Imaging Science (1 Hr) Spring

This course introduces the student to ARRT exam taking skills, mock examinations of the ARRT matrix, and self-evaluation studies. Study methods and application are also covered. A study of realistic clinical problems and situations, with emphasis on analyzing and evaluating these problems to formulate acceptable imaging modalities is included. Upon successful completion of the course, including a mock ARRT exit exam, the student will be awarded the Certificate from St. Mary's Medical Center School of Medical Imaging that will allow the student to sit for the ARRT Primary exam in Radiography

MI 402 – Quality Management (3 Hr) Fall

This course is a core requirement for all students regardless of the Advanced Practice track. Quality management is important to ensure the proper functioning of equipment and compliance with government and accreditation standards. Thus, technologists should have an understanding of the activities and their role in the quality management (QM) process. This content is designed to expand the

QM skills of the technologist to include digital imaging systems and the application of QM principles in an imaging department. Course will include review of the ARRT Post-primary exam in QM. Students who select the management track will be expected to initiate procedures outlined in the QM exam content. Candidates for the ARRT Advanced Practice exam are required to perform the required number of repetitions for each procedure. Repetitions must be performed within the 24 month period immediately before submitting the application for certification. Repetitions may be completed in less than 24 months.

PR: ARRT

MI 403 – Advanced Practice in Medical Imaging (3 Hr) Fall Meets Writing Across the Curriculum general education requirement for Marshall University

This course is a core requirement for all students regardless of the Advanced Practice track. The focus of the course will include advanced discussion of communication, human diversity including the political context of health care, health care policy formation, health care law and compliance, patient information management and teamwork.

PR: ARRT

MI 404 – Advanced Sectional Anatomy (3 Hr) Fall

The ability to locate and identify structures in the axial (transverse), sagittal, coronal and orthogonal (oblique) planes is critical in all imaging modalities. Volumetric data sets and three-dimensional reconstruction of the body structures are increasingly important to the critical diagnosis and treatment of diseases. To enhance patient care and assist physicians with the prognosis, radiologic science professionals must understand cross-sectional anatomy in each of the imaging modalities. Content will include discussion of advanced pathophysiology.

PR: ARRT: CR: MI 405, MI 407

MI 405 – CT procedures and equipment (3 Hr) Spring

This course will focus on advanced patient care skills including ACLS, imaging procedures and equipment in computed tomography.

PR: ARRT: CR: MI 404, MI 408

MI 406 – MRI procedures and equipment (3 Hr) Fall

This course will focus on advanced patient care skills including ACLS, imaging procedures and equipment in magnetic resonance imaging.

PR: ARRT: CR: MI 404, MI 408

MI 407 – Cardiovascular Anatomy and Physiology (3 Hr) Spring

This course will focus on cardiovascular anatomy and physiology including the heart anatomy and coronary, systemic, pulmonary, peripheral and cerebral circulation. Content will include discussion of advanced pathophysiology relating to the vascular system including cardiac physiology.

PR: ARRT: CR: MI 407, MI 408

MI 408 – Vascular Interventional Imaging (3 Hr) Fall

This course will focus on advanced patient care skills including ACLS, procedures and equipment utilized in cardiovascular and vascular/interventional imaging.

PR: ARRT: CR: MI 406, MI 408

MI 409 – Advanced Clinical Practice (4 Hr) Fall

Students in advanced clinical practice tracks will be required to complete ACLS certification. Students will be responsible for arranging clinical experience in an approved clinical facility in computed

tomography, magnetic resonance imaging, vascular/interventional imaging or cardiac imaging. ARRT advanced practice exams in CT, MRI, VI and CV require that all recorded clinical procedures be completed within 24 months of the exam. Students will be advised of specific exam content.

PR: ARRT, ACLS

MI 410– Research in Medical Imaging (3 Hr) Capstone Course Spring

This course is a core requirement for all students regardless of the Advanced Practice Track. Research methods and information literacy are important because the health care profession is continually changing, which requires the radiologic technologist to possess new knowledge to function competently. The radiologic technologist should contribute to the body of knowledge and be able to effectively analyze resources to promote growth in the profession. The attitude of lifelong learning enables the radiologic technologist to stay in step with the current health care environment and be prepared to help foster the future and increase awareness of the profession in the global community. This content is geared to increase and disseminate intellectual inquiry, information literacy and the use of scholarly research methods.

PR: ARRT, Statistics, MI 402, MI 403. This course will satisfy the Writing Across the Curriculum Requirement.

MI 411-Transcultural Healthcare (3 Hr) Spring meets Multicultural and Writing Across the Curriculum general education requirements for Marshall University

This course is intended to provide an introduction to a culturally comparative analysis of health and healing. Readings provide both comparative ethnographic details and a theoretical framework for organizing and interpreting information about health. Class will meet weekly to discuss assigned readings. It is important that healthcare workers understand the concept of culture as a fluid, permeable, changeable set of collective beliefs, values, and behaviors that inform, shape and constrain the worldviews and personal choices of individuals in healthcare decision making. The course emphasizes a multidisciplinary approach to healthcare that will promote cultural sensitivity toward patients, physicians and healthcare professionals.

MI 414 – Mammography (3 Hr) Fall

Introduction to medical imaging of the breast. Focus is to prepare student for advanced certification exam in Mammography.

MI 415-RIS and PACS Principles (3 Hr) Spring

Course content provides basic knowledge of digital storage systems, computer networking, radiology information systems (RIS), and picture archiving and communication systems (PACS).

MI 416-Obstetrical Sonography I (3 Hr) Fall

This course covers basic obstetrical sonographic positioning and scanning protocols as it relates to the normal anatomy of the fetus.

MI 417-Gynecological Sonography I (3 Hr) Fall

This course presents a study of anatomy and physiology of the nongravid and first trimester pelvis

MI 418-Registry Review Sonography (1 Hr) Fall

This course introduces the student to ARDMS exam taking skills, mock examinations of the ARDMS matrix, and self-evaluation studies. Study methods and application are also covered. A study of realistic clinical problems and situations, with emphasis on analyzing and evaluating these problems to formulate acceptable imaging modalities is included. Upon successful completion of the course, including a mock

ARDMS exit exam, the student will be awarded the Certificate from St. Mary's Medical Center School of Medical Imaging that will allow the student to sit for the appropriate ARDMS exam.

MI 419-Clinical Practice III Sonography (4 Hr) Fall

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of sonographic procedures.

MI 420-Obstetrical Sonography II (2 Hr) Spring

This course focuses on sonographic techniques in high risk pregnancies and fetal abnormalities.

MI 421-Gynological Sonography II (2 Hr) Spring

This course presents a study of the pathology of the nonpregnant pelvis and first trimester.

MI 422-Clinical Practice IV Sonography (4 Hr) Spring

Clinical practice experiences are designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of sonographic procedures

MI 423-Echocardiography I (3 Hr) Fall

This course covers basic adult heart sonographic positioning and scanning protocols, as it relates to normal anatomy, anatomical variants and physiology of the adult heart.

MI 424-Vascular Sonography II (3 Hr) Fall

Discussion of vascular pathology and the use of plethysmography techniques in sonography

MI 425-Echocardiography II (3 Hr) Spring

This course is a continuation of MI 423 and covers basic adult heart sonographic positioning and scanning protocols as it relates to anatomical variants and physiology of the adult heart.

MI 426-Advanced Clinical Practice II (4 hr) Spring

Students will arrange clinical experience in selected imaging modality to gain competency in clinical procedures required to sit for post-primary ARRT certification exams.

MI 427-Advanced Trauma-Surgical Radiography (3 hr) Fall

Advanced practice course in trauma and surgical radiography for imaging sciences.

MI 429-Geriatric and Pediatric Radiography (3 hr) Spring

This course will focus on advanced diagnostic imaging in the geriatric and pediatric population including mobile radiography.

MI 430-Mammography II (3 hr) Spring

Advanced medical imaging of the breast.

MI 431-Advanced Clinical Practice III (4 hr) Summer Intercession

Elective advanced clinical practicum in radiography or sonography.

MI 432-Advanced MRI Theory (3 hr) Spring

Advanced Magnetic Resonance Imaging Equipment and Procedures

MI 434-Cardiovascular Imaging (3hr) Fall

This course will focus on diagnostic and interventional procedures of the cardiovascular system.

MI 435-Seminar ARRT Exam Review II (1 hr) Spring

This is a review course for the ARRT primary exam certification

MI 436-Seminar Sonography Registry Review II (1hr) Spring

This course is designed to prepare the sonography student for their second specialty exam through the ARDMS

MI 437- Breast Sonography (3 Hr) Spring Elective

This course covers anatomy, positioning and scanning protocol for the breast as well as an introduction to ultrasound physics.

PR MI 414, or permission of instructor.

MI 438 Fetal Echocardiography (3 Hr) Spring Elective

This course focuses on sonographic techniques in high risk pregnancies and fetal heart abnormalities.

MI 439 Pediatric Echocardiography I (3 Hr) Fall Elective

This course focuses on sonographic techniques in pediatric cardiac abnormalities

MI 440 Pediatric Echocardiography II (3Hr) Spring Elective

This course is a continuation of MI 439 and focuses on sonographic techniques in pediatric echocardiography.

PR MI 439

MI 441 Advanced Echo I (3 Hr) Fall

This course focuses on sonographic techniques in pediatric echocardiography and is designed for the credentialed echocardiographer training in the area of pediatric echo.

PR: ARDMS credentials

MI 442 Advanced Echo II (3 Hr) Spring

This course is a continuation of MI 441 advanced sonographic techniques in pediatric echocardiography and is designed for the credentialed echocardiographer training in the area of pediatric echo.

PR: ARDMS credentials.

MI 480 – 483 Special Topics (1-4 Hr) Fall, Spring

Course will cover special topics in medical imaging.

MI 485 – 488 Independent Study (1-4 Hr) Fall, Spring

Course will provide imaging student the opportunity to pursue independent study.

Reviewed: 7/21; 6/22; 7/23