

St. Mary's School of Medical Imaging Program

The St. Mary's School of Medical Imaging (SOMI) program is a hospital-based program, partnered with Marshall University (MU) to offer a Bachelor of Science in Medical Imaging. The program curriculum is designed to prepare students to practice Radiography and/or Sonography and give students the opportunity to specialize in an advanced imaging modality such as Cardiac Interventional Radiography, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Mammography, Management, Surgery/Trauma, and/or Vascular Interventional Radiography.

The Radiography curriculum consists of Year 1, Year 2, Year 3, and the advanced modality of choice in Year 4. The Sonography curriculum consists of Year 1, Year 2, and a deviation to Sonography for Year 3 and Year 4. The program can be completed in four years. Credentialed Radiographers may enter the professional portion of the program (Year 4) and obtain the degree.

All pre-requisite courses must be completed according to the MU/MW/SOMI published curriculum before entering the MI curriculum at St. Mary's School of Medical Imaging (SOMI). Applicants may apply to the program while enrolled in a pre-requisite course. Offers of admission will be contingent upon completing the course with a grade of C or better prior to the start of the St. Mary's School of Medical Imaging (SOMI) coursework. A letter grade of C or better must be obtained in each of the following Marshall University (MU) and/or Mountwest (MW) courses designated with an asterisk* (or equivalent courses from other institutions transferable to Marshall University (MU)).

Pre-Requisite Courses

Incoming <u>Marshall (MU)</u> Students		Incoming <u>Mountwest (MW)</u> Students	
Code	Course Name	Code	Course Name
BSC 227	Human Anatomy*	BIOL 260	Human Anatomy with Built in Lab *
BSC 227 L	Human Anatomy Lab*		
CLS 105	Medical-Lab Terminology (CT)	AH 151	Medical Terminology
MTH 121	Concepts and Applications (CT)	MAT 120	Applied Professional Math
ENG 101 or ENG 201 or CMM 103	Beginning Composition Advanced Composition Fund Speech-Communication	COM 112 or COM 125	Oral Communication Interpersonal Communication
BSC 228	Human Physiology*	BIOL 265	Human Physiology with Built in Lab *
BSC 228 L	Human Physiology Lab*		
PHY 101	Conceptual Physics*	SCI 110	Introductory Physics with Built in Lab*
PHY 101 L	Conceptual Physics Lab*		

Applicants who did not attend Marshall University (MU) and/or Mountwest (MW) should verify with the Marshall Registrar Office that all course work will be transferable as equivalent to Marshall University (MU) courses. Course work transferred as "unclassified" will not be acceptable as a pre-requisite course.

Contact Information: For further questions or more information, please contact the St. Mary's School of Medical Imaging (SOMI) Program Director, Deborah Moore, by phone at (304) 526-1259 or by email at Deborah.Moore@st-marys.org.

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Radiography Course Curriculum Plan

The St. Mary's School of Medical Imaging (SOMI) program is a hospital-based program, partnered with Marshall University (MU) to offer a Bachelor of Science in Medical Imaging. The program curriculum is designed to prepare students to practice Radiography and/or Sonography.

The Radiography Course Curriculum consists of Year 1, Year 2, Year 3, and the advanced modality of choice in Year 4. The Sonography curriculum consists of Year 1, Year 2, and a deviation to Sonography in Year 3 and Year 4.

The Radiography Course Curriculum Plan is below with the advanced modalities offered including Cardiac Interventional Radiography, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Mammography, Management, Surgery/Trauma, and/or Vascular Interventional Radiography.

Radiography Course Curriculum Plan (Advanced Modality of Choice in Year 4)

Year 1	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	BSC 227	Human Anatomy	3	_____	BSC 228	Human Physiology	3	_____
	BSC 227 L	Human Anatomy Lab	1	_____	BSC 228 L	Human Physiology Lab	1	_____
	CLS 105	Medical-Lab Terminology (CT)	3	_____	PHY 101	Conceptual Physics	3	_____
	MTH 121	Concepts and Applications (CT)	3	_____	PHY 101L	Conceptual Physics Lab	1	_____
	ENG 101	Beginning Composition	3	_____	ENG 201	Advanced Composition	3	_____
	CMM 103	Fund Speech-Communication	3	_____	_____	Core II Social Science	3	_____
	UNI 100	Freshman First Class	1	_____	FYS 100	First Yr Sem Critical Thinking	3	_____
	Total Hours		17		Total Hours		17	

Year 2	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 202	Patient Care Img Science	3	_____	MI 208	Pharmacology for Imaging Sci	2	_____
	MI 201	Intro to Radiography	3	_____	MI 209	Intro to Imaging Equip	3	_____
	MI 204	Radiographic Anatomy	3	_____	MI 304	Radiographic Pathology	3	_____
	MI 205	Imaging Procedures I	4	_____	MI 207	Imaging Procedures II	4	_____
	MI 206	Clinical Practice I	4	_____	MI 210	Clinical Practice II	4	_____
	MI 211	Seminar Imaging Science	1	_____	MI 212	Seminar Imaging Sciences II	1	_____
	Total Hours		18		Total Hours		17	

Year 3	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 302	Princ of Radiation Physics	3	_____	MI 322	Radiation Safety	3	_____
	MI 307	Radiobiology	3	_____	MI 308	Rad Image Analysis	2	_____
	MI 303	Image Acquisition	3	_____	MI 309	Digital Image Acquisition	2	_____
	MI 321	Imaging Procedures III	4	_____	STA 225	Introductory Statistics (CT)	3	_____
	MI 305	Clinical Practice IV	4	_____	MI 310	Clinical Practice V	4	_____
	MI 306	Seminar Imaging Science	1	_____	MI 311	Seminar Imaging Sciences III	1	_____
	Total Hours		18		Total Hours		15	

Year 4 Cardiac Interventional Radiography	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 434	Cardiovascular Imaging	3	_____	MI 407	Cardiovascular Anatomy	3	_____
	_____	Core II Fine Arts	3	_____	_____	Core II Humanities	3	_____
	MI 409	Adv Clinical Practice	4	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		17	

Year 4 Computed Tomography (CT)	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 404	Adv Sectional Anatomy	3	_____	MI 405	CT Procedures	3	_____
	_____	Core II Fine Arts	3	_____	_____	Core II Humanities	3	_____
	MI 409	Adv Clinical Practice	4	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		17	

Year 4 Magnetic Resonance Imaging (MRI)	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 404	Adv Sectional Anatomy	3	_____	MI 432	Advanced MRI Theory	3	_____
	MI 406	MRI Procedures	3	_____	_____	Core II Humanities	3	_____
	_____	Core II Fine Arts	3	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 409	Adv Clinical Practice	4	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	MI 401	Seminar in Imaging Sci	1	_____				
	Total Hours		20		Total Hours		17	

Year 4 Mammography	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 414	Mammography	3	_____	MI 430	Mammography II	3	_____
	_____	Core II Fine Arts	3	_____	_____	Core II Humanities	3	_____
	MI 409	Adv Clinical Practice	4	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		17	

Year 4 Management	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 412	Radiography Management I	3	_____	MI 413	Radiography Management II	3	_____
	_____	Core II Fine Arts	3	_____	MI 415	RIS and PACS Principles	3	_____
	MI 409	Adv Clinical Practice	4	_____	_____	Core II Humanities	3	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 426	Advanced Clinical Practice II	4	_____
					MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		20	

Year 4 Surgery/Trauma	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 427	Adv Trauma and Surgical Rad	3	_____	MI 429	Geriatric and Pediatric Rad	3	_____
	_____	Core II Fine Arts	3	_____	_____	Core II Humanities	3	_____
	MI 409	Adv Clinical Practice	4	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		17	

Year 4 Vascular Interventional Radiography	Fall Semester				Spring Semester			
	Code	Course Name	Hours	Grade	Code	Course Name	Hours	Grade
	MI 402	Quality Management	3	_____	MI 410	Research Medical Imaging (Capstone)	3	_____
	MI 403	Adv Practice Medical Img (WI)	3	_____	MI 411	Transcultural Healthcare (WI, MC)	3	_____
	MI 408	Vascular Interventional Img	3	_____	MI 407	Cardiovascular Anatomy	3	_____
	_____	Core II Fine Arts	3	_____	_____	Core II Humanities	3	_____
	MI 409	Adv Clinical Practice	4	_____	MI 426	Advanced Clinical Practice II	4	_____
	MI 401	Seminar in Imaging Sci	1	_____	MI 435	Seminar ARRT Exam Review II	1	_____
	Total Hours		17		Total Hours		17	

(CT) Critical Thinking
(MC) Multicultural
(WI) Writing Intensive