



# GENERAL SONOGRAPHY, EMPHASIS

## Major


The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

| Code   | Title                                  | Credit Hours |
|--|--|--------------|
| <b>Core Curriculum</b>   |  |              |
| <i>Core 1: Critical Thinking</i>   |  |              |
| FYS 100  | First Yr Sem Critical Thinking         | 3            |
| MTH 121     | Concepts and Applications (CT)         | 3            |
| CLS 105     | Medical-Lab Terminology (CT)           | 3            |
| <i>Core 2</i>  |  |              |
| ENG 101     | Beginning Composition                  | 3            |
| ENG 201     | Advanced Composition                   | 3            |
| CMM 103     | Fund Speech-Communication              | 3            |
| MTH 121    | Concepts and Applications (CT)         | 3            |
| BSC 228   | Human Physiology                       | 4            |
| Core II Humanities   |  |              |
| Core II Social Science   |  |              |
| Core II Fine Arts  |  |              |
| <i>Additional University Requirements</i>  |  |              |
| Writing Intensive  |  |              |
| MI 403   | Adv Practice Medical Img (recommended) | 3            |
| Writing Intensive  |  |              |
| MI 411    | Transcultural Healthcare (recommended) | 3            |
| Multicultural or International   |  |              |
| MI 411    | Transcultural Healthcare (recommended) | 3            |
| MI 410   | Research Medical Imaging (Capstone)    | 3            |
| <b>Major-Specific</b>  |  |              |
| BSC 227  | Human Anatomy                          | 4            |
| BSC 228   | Human Physiology                       | 4            |
| PHY 101   | Conceptual Physics                     | 3            |
| PHY 101L  | Conceptual Physics Lab                 | 1            |
| CLS 105   | Medical-Lab Terminology (CT)           | 3            |
| MI 201   | Intro to Radiography                   | 3            |
| MI 202   | Patient Care Img Science               | 3            |
| MI 204   | Radiographic Anatomy                   | 3            |
| MI 205   | Imaging Procedures I                   | 4            |
| MI 206   | Clinical Practice I                    | 4            |
| MI 207   | Imaging Procedures II                  | 4            |
| MI 208   | Pharmacology for Imaging Sci           | 2            |
| MI 209   | Intro to Imaging Equip                 | 3            |
| MI 210   | Clinical Practice II                   | 4            |
| MI 211   | Seminar Imaging Science                | 1            |

|            |                             |   |
|------------|-----------------------------|---|
| MI 212     | Seminar Imaging Sciences II | 1 |
| Statistics |                             | 3 |

### Area of Emphasis-Specific

Additional courses will vary depending on advanced modality track in fourth year.

|  |                                   |   |
|--|-----------------------------------|---|
| MI 306   | Seminar Imaging Science           | 1 |
| MI 311   | Seminar Imaging Sciences III      | 1 |
| MI 312   | Abdominal Sonography I            | 4 |
| MI 313   | Ultrasound Physics I              | 3 |
| MI 314   | Clinical Practice I Sonography    | 4 |
| MI 315   | Small Parts Sonography            | 3 |
| MI 316   | Abdominal Sonography II           | 3 |
| MI 317   | Ultrasound Physics II             | 3 |
| MI 318   | Vascular Sonography I             | 4 |
| MI 319   | Clinical Prac II Sonography       | 4 |
| MI 401   | Seminar in Imaging Sci            | 1 |
| MI 403   | Adv Practice Medical Img (WI)     | 3 |
| MI 410   | Research Medical Imaging (C)      | 3 |
| MI 411  | Transcultural Healthcare (WI, MC) | 3 |
| MI 419   | Clinical Prac III Sonography      | 4 |
| MI 422   | Clinical Pract IV Sonography      | 4 |

### Advanced Modality Track

Beginning in Spring of Year 3, students in the sonography area of emphasis must choose one of the following two advanced modality tracks:

General/OB-GYN Sonography (10 hours)



Cardiovascular Sonography (12 hours)

## Major Information

- Students in the Medical Imaging Program must maintain a minimum GPA of 2.50 and receive a grade of C or better in all MI coursework.
- All applicants must meet the professional guidelines established by the ARRT to sit for particular certification examinations.
- By Year 3, students must choose to continue in the radiography area of emphasis or apply to the competitive sonography area of emphasis. This academic map outlines the curriculum for those who are accepted into the sonography area of emphasis.

## Four Year Plan

St. Mary's School of Medical Imaging (SOMI) is a hospital-based program, partnered with Marshall University to offer a Bachelor of Science in Medical Imaging. The program curriculum is designed to prepare students to practice radiography/sonography and introduce students to related specialized imaging modalities. The program can be completed in four years. Credentialed Radiographers may enter the professional portion of the program (fourth year) and also obtain the degree.

| Course  | Title                     | Credit Hours |
|---|---------------------------|--------------|
| <b>First Year</b>   |                           |              |
| <b>First Semester</b>   |                           |              |
| CMM 103  | Fund Speech-Communication | 3            |
| ENG 101  | Beginning Composition     | 3            |

|              |                                |    |
|--------------|--------------------------------|----|
| MTH 121 🌱    | Concepts and Applications (CT) | 3  |
| BSC 227      | Human Anatomy                  | 4  |
| CLS 105 🌱    | Medical-Lab Terminology (CT)   | 3  |
| UNI 100      | Freshman First Class           | 1  |
| Credit Hours |                                | 17 |

**Second Semester**

|                        |                                |    |
|------------------------|--------------------------------|----|
| BSC 228 🌱              | Human Physiology               | 4  |
| ENG 201 🌱              | Advanced Composition           | 3  |
| FYS 100                | First Yr Sem Critical Thinking | 3  |
| Core II Social Science |                                | 3  |
| PHY 101 🌱              | Conceptual Physics             | 3  |
| PHY 101L 🌱             | Conceptual Physics Lab         | 1  |
| Credit Hours           |                                | 17 |

**Second Year****First Semester**

|              |                          |    |
|--------------|--------------------------|----|
| MI 201       | Intro to Radiography     | 3  |
| MI 202       | Patient Care Img Science | 3  |
| MI 204       | Radiographic Anatomy     | 3  |
| MI 205       | Imaging Procedures I     | 4  |
| MI 206       | Clinical Practice I      | 4  |
| MI 211       | Seminar Imaging Science  | 1  |
| Credit Hours |                          | 18 |

**Second Semester**

|                    |                              |    |
|--------------------|------------------------------|----|
| Core II Humanities |                              | 3  |
| MI 207             | Imaging Procedures II        | 4  |
| MI 208             | Pharmacology for Imaging Sci | 2  |
| MI 209             | Intro to Imaging Equip       | 3  |
| MI 210             | Clinical Practice II         | 4  |
| MI 212             | Seminar Imaging Sciences II  | 1  |
| Credit Hours       |                              | 17 |

**Third Year****First Semester**

|              |                                |    |
|--------------|--------------------------------|----|
| MI 312       | Abdominal Sonography I         | 4  |
| MI 313       | Ultrasound Physics I           | 3  |
| MI 314       | Clinical Practice I Sonography | 4  |
| MI 318       | Vascular Sonography I          | 4  |
| MI 306       | Seminar Imaging Science        | 1  |
| MI 315       | Small Parts Sonography         | 3  |
| Credit Hours |                                | 19 |

**Second Semester**

|                             |                              |    |
|-----------------------------|------------------------------|----|
| MI 316                      | Abdominal Sonography II      | 3  |
| MI 317                      | Ultrasound Physics II        | 3  |
| MI 319                      | Clinical Prac II Sonography  | 4  |
| MI 311                      | Seminar Imaging Sciences III | 1  |
| Statistics                  |                              | 3  |
| See Advanced Modality Track |                              | 3  |
| Credit Hours                |                              | 17 |

**Fourth Year****First Semester**

|        |                               |   |
|--------|-------------------------------|---|
| MI 403 | Adv Practice Medical Img (WI) | 3 |
| MI 419 | Clinical Prac III Sonography  | 4 |

|                             |       |
|-----------------------------|-------|
| Core II Fine Arts           | 3     |
| See Advanced Modality Track | 3-5   |
| Credit Hours                | 13-15 |

**Second Semester**

|                             |                                   |   |
|-----------------------------|-----------------------------------|---|
| MI 410                      | Research Medical Imaging (C)      | 3 |
| MI 411 🌱                    | Transcultural Healthcare (WI, MC) | 3 |
| MI 422                      | Clinical Pract IV Sonography      | 4 |
| MI 401                      | Seminar in Imaging Sci            | 1 |
| See Advanced Modality Track | 2-6                               |   |
| Credit Hours                | 13-17                             |   |
| Total Credit Hours          | 131-137                           |   |