

Washtenaw Community College Comprehensive Report

MRI 126 MRI Clinical Education I Effective Term: Fall 2022

Course Cover

College: Health Sciences

Division: Health Sciences

Department: Allied Health

Discipline: Magnetic Resonance Imaging

Course Number: 126

Org Number: 15600

Full Course Title: MRI Clinical Education I

Transcript Title: MRI Clinical Education I

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Consultation with all departments affected by this course is required.

Course description

Credit hours

Total Contact Hours

Pre-requisite, co-requisite, or enrollment restrictions

Rationale: Update syllabus to meet requirements for updated program. Course number changed due to change in credit hours.

Proposed Start Semester: Fall 2022

Course Description: This is the first clinical course for certified radiologic technologists ARRT (R), who are admitted to the Magnetic Resonance Imaging (MRI) program. Students will be introduced to the clinical practice of MRI with emphasis on basic magnetic resonance (MR) scan procedures, MRI safety and patient care. This course requires a 15 week, 32-hours/week clinical rotation under the supervision of a certified MRI technologist. This course was previously MRI 125.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 0 Student: 0

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 480 Student: 480

Total Contact Hours: Instructor: 480 Student: 480

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Enrollment Restrictions

Admission to Magnetic Resonance Imaging (MRI) program.

Corequisite

MRI 101

Corequisite

MRI 110

Corequisite

MRI 120

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Demonstrate proficiency in magnetic resonance (MR) safety and protective practices associated with MR procedures.

Assessment 1

Assessment Tool: Clinical evaluation rubric

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of outcome-related rubric criteria

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the clinical evaluation rubric.

Who will score and analyze the data: Departmental faculty

2. Demonstrate proficiency in operating magnetic resonance imaging (MRI) equipment and ancillary devices.

Assessment 1

Assessment Tool: Clinical evaluation rubric

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of outcome-related rubric criteria

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the clinical evaluation rubric.

Who will score and analyze the data: Departmental faculty

3. Demonstrate proficiency in performing routine MRI procedures.

Assessment 1

Assessment Tool: Clinical evaluation rubric

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of outcome-related rubric criteria

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the clinical evaluation rubric.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Communicate effectively with patients, visitors, clinicians as well as with occupational and ancillary personnel.
2. Maintain a safe work environment for patients, visitors, occupational and ancillary personnel.
3. Observe, assist, and perform basic MRI procedures.
4. Properly screen patients for contraindications to magnetic imaging MR procedures.
5. Prepare the oxygen system for use.
6. Adjust windowing for images.
7. Prepare the MR room and equipment for the examination.
8. Explain to the patient the nature of the examination and obtain a medical history.
9. Demonstrate correct venipuncture technique and contrast administration.
10. Adjust imaging parameters to obtain an optimum MR image.
11. Identify normal anatomy on coronal, sagittal, and transverse MR images.
12. Select the appropriate coil for each MR procedure.
13. Demonstrate how to change coils on the MR imager.
14. Properly adjust the control table position for each MR procedure.
15. Properly prepare the patient for the MR procedure.
16. Prepare contrast materials and use the MR injector.
17. Evaluate the diagnostic quality of MR images and identify the methods of correction, if necessary.
18. Enter all patient data to initiate scan.

New Resources for Course**Course Textbooks/Resources**

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Off-Campus Sites

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Catherine Blaesing</i>	<i>Faculty Preparer</i>	<i>Feb 15, 2022</i>
Department Chair/Area Director: <i>Kristina Sprague</i>	<i>Recommend Approval</i>	<i>Feb 15, 2022</i>
Dean: <i>Shari Lambert</i>	<i>Recommend Approval</i>	<i>Feb 15, 2022</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Feb 24, 2022</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Feb 24, 2022</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Mar 02, 2022</i>

Washtenaw Community College Comprehensive Report

MRI 125 MRI Clinical Education I

Effective Term: Fall 2015

Course Cover

Division: Math, Science and Health

Department: Allied Health

Discipline: Magnetic Resonance Imaging

Course Number: 125

Org Number: 15600

Full Course Title: MRI Clinical Education I

Transcript Title: MRI Clinical Education I

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: New Course

Change Information:

Rationale: This is a required course for the magnetic resonance imaging (MRI) program.

Proposed Start Semester: Fall 2015

Course Description: This is the first clinical course for certified radiologic technologists ARRT (R), who are admitted to the Magnetic Resonance Imaging (MRI) program. Students will be introduced to the clinical practice of MRI with emphasis on basic magnetic resonance (MR) scan procedures, MRI safety and patient care. This course requires a 15 week, 24-hours/week clinical rotation under the supervision of a certified MRI technologist.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 0 Student: 0

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 0 Student: 360

Total Contact Hours: Instructor: 0 Student: 360

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Enrollment Restrictions

Admission to the Magnetic Resonance Imaging (MRI) program.

Corequisite

MRI 101

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Demonstrate proficiency in magnetic resonance (MR) safety and protective practices associated with MR procedures.

Assessment 1

Assessment Tool: Clinical Evaluation Rubric

Assessment Date: Fall 2018

Assessment Cycle: Every Three Years

Course section(s)/other population: All course sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of numerical data from the Clinical Evaluation Rubric

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the Clinical Evaluation Rubric.

Who will score and analyze the data: Departmental Faculty

2. Demonstrate proficiency in operating Magnetic Resonance Imaging (MRI) equipment and ancillary devices.

Assessment 1

Assessment Tool: Clinical Evaluation Rubric

Assessment Date: Fall 2018

Assessment Cycle: Every Three Years

Course section(s)/other population: All course sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of numerical data from the Clinical Evaluation Rubric

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the Clinical Evaluation Rubric.

Who will score and analyze the data: Departmental Faculty

3. Demonstrate proficiency in performing routine Magnetic Resonance Imaging (MRI) procedures.

Assessment 1

Assessment Tool: Clinical Evaluation Rubric

Assessment Date: Fall 2018

Assessment Cycle: Every Three Years

Course section(s)/other population: All course sections

Number students to be assessed: All students

How the assessment will be scored: Item analysis of numerical data from the Clinical Evaluation Rubric

Standard of success to be used for this assessment: 90% of students will score 80% or higher on the Clinical Evaluation Rubric.

Who will score and analyze the data: Departmental Faculty

Course Objectives

1. Communicate effectively with patients, visitors, clinicians, and occupational and ancillary personnel.

Matched Outcomes

2. Maintain a safe work environment for patients, visitors, occupational and ancillary personnel.

Matched Outcomes

3. Observe, assist, and perform basic Magnetic Resonance Imaging (MRI) procedures.

Matched Outcomes

4. Properly screen patients for contraindications to magnetic imaging (MR) procedures.

Matched Outcomes

5. Prepare the oxygen system for use.

Matched Outcomes

6. Adjust windowing for images.
Matched Outcomes
7. Prepare the magnetic resonance (MR) room and equipment for the examination.
Matched Outcomes
8. Explain to the patient the nature of the examination and obtain a history.
Matched Outcomes
9. Demonstrate correct venipuncture technique and contrast administration.
Matched Outcomes
10. Adjust imaging parameters to obtain an optimum magnetic resonance (MR) image.
Matched Outcomes
11. Identify normal anatomy on coronal, sagittal, and transverse magnetic resonance (MR) images.
Matched Outcomes
12. Select the appropriate coil for each magnetic resonance (MR) procedure.
Matched Outcomes
13. Demonstrate how to change coils on the magnetic resonance (MR) imager.
Matched Outcomes
14. Properly adjust the control table position for each magnetic resonance (MR) procedure.
Matched Outcomes
15. Properly prepare the patient for the magnetic resonance (MR) procedure.
Matched Outcomes
16. Prepare contrast materials and use magnetic resonance (MR) injector.
Matched Outcomes
17. Evaluate the diagnostic quality of magnetic resonance (MR) images and identify the methods of correction, if necessary.
Matched Outcomes
18. Enter all patient data to initiate scan.
Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Connie Foster</i>	<i>Faculty Preparer</i>	<i>Nov 18, 2014</i>
Department Chair/Area Director: <i>Connie Foster</i>	<i>Recommend Approval</i>	<i>Nov 18, 2014</i>
Dean: <i>Kristin Brandemuehl</i>	<i>Recommend Approval</i>	<i>Nov 19, 2014</i>
Vice President for Instruction: <i>Bill Abernethy</i>	<i>Approve</i>	<i>Jan 05, 2015</i>