Washtenaw Community College Comprehensive Report

MRI 165 MRI Clinical Education III
Effective Term: Winter 2017

Course Cover

Division: Health Sciences
Department: Allied Health
Discipline: Magnetic Resonance Imaging
Course Number: 165
Org Number: 15600
Full Course Title: MRI Clinical Education III
Transcript Title: MRI Clinical Education III
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
Total Contact Hours
Rationale: Change MRI 165 from a 12 week course to a 10 week course so that the lecture and clinical courses will end same time.
Proposed Start Semester: Winter 2017
Course Description: This is the third clinical course for certified radiologic technologists ARRT (R), who are admitted to the Magnetic Resonance Imaging (MRI) program. Students are expected to independently perform patient care and MRI clinical procedures under indirect supervision. Students are required to complete all mandatory and elective clinical competency required by the ARRT. This course requires a 10 week, 32-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:** 320

Total Contact Hours: Instructor: 0 **Student:** 320
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

Prerequisite
MRI 145 - MRI Clinical Education III
Corequisite
MRI 160
Enrollment Restrictions
Admission to the Magnetic Resonance Imaging (MRI) program.

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Demonstrate clinical competency in performing magnetic resonance (MR) procedures of the musculoskeletal system.
   Assessment 1
   Assessment Tool: Departmental Clinical Evaluation Form
   Assessment Date: Spring/Summer 2019
   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 numerical data from the Clinical Evaluation Rubric
   Standard of success to be used for this assessment: 90% of the students will score 80% or higher on the Clinical Evaluation Rubric.
   Who will score and analyze the data: Departmental Faculty

2. Demonstrate clinical competency in performing magnetic resonance (MR) procedures of the abdomen.
   Assessment 1
   Assessment Tool: Departmental Clinical Evaluation Form
   Assessment Date: Spring/Summer 2019
   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 numerical data from the Clinical Evaluation Rubric
   Standard of success to be used for this assessment: 90% of the students will score 80% or higher on the Clinical Evaluation Rubric.
   Who will score and analyze the data: Departmental Faculty

3. Demonstrate clinical competency in performing magnetic resonance (MR) procedures of the pelvis.
   Assessment 1
   Assessment Tool: Departmental Clinical Evaluation Form

Assessment Date: Spring/Summer 2019
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 numerical data from the Clinical Evaluation Rubric
Standard of success to be used for this assessment: 90% of the students will score 80% or higher on the Clinical Evaluation Rubric.
Who will score and analyze the data: Departmental Faculty

Course Objectives

1. Utilize appropriate magnetic resonance (MR) pulse sequences in clinical imaging.
2. Manipulate magnetic resonance (MR) parameters to optimize image quality.
3. Properly select and use magnetic resonance (MR) coils to optimize image quality.
4. Work effectively with clinicians as a member of the healthcare team.
5. Evaluate the diagnostic quality of magnetic resonance (MR) images and identify the methods of correction, if necessary.
6. Setup magnetic resonance (MR) coils, equipment, table accessories and cushioning.
7. Determine the source of an artifact, and describe a change or changes to the acquisition parameters to reduce the appearance of the artifact.
8. Utilize critical thinking, problem-solving, and decision-making skills in performing diagnostic Magnetic Resonance Imaging (MRI) procedures.
9. Identify the probable cause of image quality problems and recommend an appropriate solution.
10. Maintain a clean, comfortable, and safe environment for the patient, self, and others.
11. Employ proper precautions to prevent disease transmission.
12. Speak with the patient in a professional and empathetic manner to alleviate any concerns regarding the magnetic resonance (MR) procedure.
13. Respond appropriately in emergency situations.
14. Demonstrate the appropriate corrective actions to improve inadequate image formation.
15. Demonstrate knowledge of scanning menus, archival procedures and display functions.
16. Identify common indications and common pathology for the musculoskeletal system, abdomen and pelvis.
17. Use DICOM to archive and send images.
18. Use the imaging plane and pulse sequence parameters that maximize the diagnostic value of an magnetic resonance (MR) scan of the upper extremity, lower extremity, shoulder girdle, and pelvic girdle.
19. Use the imaging plane and pulse sequence parameters that maximize the diagnostic value of an magnetic resonance (MR) scan of the pelvis, including the male and female reproductive systems.
20. Use the imaging plane and pulse sequence parameters that maximize the diagnostic value of an magnetic resonance (MR) scan of the abdomen.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Connie Foster	*Faculty Preparer*	*Jun 09, 2016*
Department Chair/Area Director:		
Connie Foster	*Recommend Approval*	*Jun 09, 2016*
Dean:		
Valerie Greaves	*Recommend Approval*	*Jul 02, 2016*
Curriculum Committee Chair:		
David Wooten	*Recommend Approval*	*Jul 25, 2016*
Assessment Committee Chair:		
Michelle Garey	*Recommend Approval*	*Jul 25, 2016*
Vice President for Instruction:		
Michael Nealon	*Approve*	*Jul 28, 2016*