

## WASHTENAW COMMUNITY COLLEGE

## PROGRAM ASSESSMENT PLAN CHANGE FORM

<b>Program Code: CPMRIP</b>	<b>Program Title: Magnetic Resonance Imaging</b>	<b>Effective Term: Fall 2022</b>
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**List the outcome(s) to be revised, and identify changes (add rows as needed):**

Learning outcomes to be assessed	Assessment tool	When assessment will take place	Course/other populations	Number of students to be assessed
1. Apply the theoretical and practical principles of magnetic resonance imaging (MRI) by passing the ARRT post-primary certification exam within one year of graduation.	1. ARRT exam (national certification exam)	After graduation; Spring/Summer 2024	All graduates	All program students
2. Demonstrate clinical competency in all mandatory and elective MRI procedures as required by the ARRT.	1. Audit of the ARRT application for the MRI certification exam.  2. ARRT audit of Magnetic Resonance Imaging (MRI) certification exam	At completion of program; Spring/Summer 2024	All program students	All program students

**Scoring and analysis of assessment:**

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally-developed rubric, answer key, checklist, other). Please attach rubric if available.

Pass rate from the ARRT will be evaluated. The clinical audit for the MRI application will be used.

2. Indicate the standard of success to be used for this assessment:

90% of graduates will pass the ARRT magnetic resonance imaging exam within one year of graduation.

100% of the students applying to take the ARRT MRI registry exam will have completed all mandatory and elective MRI procedures.


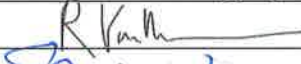

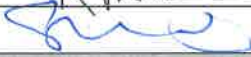
3. Indicate who will score and analyze the data:

Departmental faculty

**Signatures:**

Reviewer	Print Name	Signature	Date
Initiator	Cathy Blaesing	Catherine M. Blaesing	1/18/2022

PROGRAM ASSESSMENT PLAN CHANGE FORM

Department Chair	Kristina Sprague		1/19/22
Division Dean/Administrator	Shari Lambert	Shari Lee Lambert, DNP, RN Digitally signed by Shari Lee Lambert, DNP, RN Date: 2022.01.19 15:08:56 -05'00'	
<p><b>Please return completed form to the Office of Curriculum &amp; Assessment, SC 257 or by e-mail to curriculum.assessment@wccnet.edu</b></p> <p>Once reviewed by the appropriate faculty committees we will secure the appropriate signatures.</p>			
Curriculum Committee Chair	Randy Van Wagnen		2-11-22
Assessment Committee Chair			2-11-22
Do not write in shaded area. Entered in: Banner _____ C&A Database _____ Log File _____			

Reviewed by C&A Committees 2/3/22

**PROGRAM PROPOSAL FORM**

- Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- Final Approval** – Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

<p><b>Program Name:</b></p> <p><b>Division and Department:</b></p> <p><b>Type of Award:</b></p> <p><b>Effective Term/Year:</b></p> <p><b>Initiator:</b></p>	<p><u>CPMRI Magnetic Resonance Imaging</u></p> <p><u>Math, Science &amp; Health: Allied Health Dept.</u></p> <p> <input type="checkbox"/> AA   <input type="checkbox"/> AS   <input type="checkbox"/> AAS  <input type="checkbox"/> Cert.   <input type="checkbox"/> Adv. Cert.   <input checked="" type="checkbox"/> Post-Assoc. Cert.   <input type="checkbox"/> Cert. of Comp.         </p> <p><u>Fall 2015</u></p> <p><u>Connie Foster</u></p>
<p><b>Program Features</b> Program's purpose and its goals.</p> <p>Criteria for entry into the program, along with projected enrollment figures.</p> <p>Connection to other WCC programs, as well as accrediting agencies or professional organizations.</p> <p>Special features of the program.</p>	<p>The purpose of the program is to offer a 12-month post-associate certificate program in Magnetic Resonance Imaging (MRI). Goals:</p> <ol style="list-style-type: none"> <li>1. Offer a series of didactic and clinical courses that will prepare students for the post-primary registry certification examination administered by the American Registry of Radiologic Technologists (ARRT).</li> <li>2. Prepare students entry-level positions in Magnetic Resonance Imaging (MRI).</li> </ol> <p>Criteria for Admission into the Magnetic Resonance Imaging (MRI) program:</p> <ul style="list-style-type: none"> <li>• Registered radiologic technologist with primary certification in Radiography, Sonography, Nuclear Medicine or Radiation Therapy</li> <li>• Graduate of a JRCERT accredited program</li> <li>• Minimum GPA of 3.0</li> <li>• Current CPR certification</li> <li>• Completed college physical form by licensed physician</li> <li>• Crime-free criminal background check</li> <li>• Complete RAD 223 Sectional Anatomy or equivalent course with a grade of B+ or better</li> </ul> <p>The projected enrollment is 12 students per year.</p> <p>The Magnetic Resonance Imaging (MRI) program will provide graduates of the Washtenaw Community College Radiography Program with an opportunity to obtain advanced certification in MRI.</p> <p>Registered radiological technologists who complete the MRI program will also satisfy the ARRT continuing education requirements for a 2-year period.</p>
<p><b>Need</b> Need for the program with evidence to support the stated need.</p>	<p>The career outlook for MRI technicians is excellent, with demand increasing at a faster rate than average. The U.S. Bureau of Labor Statistics (BLS) predicted a 17% rise in job opportunities for MRI technicians and other radiologic technicians and technologists between 2008 and 2018 (<i>www.bls.gov</i>). As MRIs become cheaper, they will become a more common component of treatment for various medical conditions and will also be applied to a greater variety of conditions. A growing and aging population will also require an increasing use of this procedure.</p> <p>Hospitals, private physicians and diagnostic imaging centers employ most MRI technicians. The BLS reported the mean salary for medical technicians at \$54,180 in 2009 and estimated that the middle 50% of radiologic technologists earned between \$43,510 and \$64,070 per year.</p>

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<p><b>Program Outcomes/Assessment</b></p> <p>State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program.</p> <p>Include assessment methods that will be used to determine the effectiveness of the program.</p>	<p><u>Outcomes</u></p> <ol style="list-style-type: none"> <li>1. Apply the theoretical and practical principles of magnetic resonance imaging (MRI) by passing the ARRT post-primary certification exam within 1-year of graduation.</li> <li>2. Demonstrate clinical competency in all mandatory and elective magnetic resonance imaging (MRI) procedures as required by the ARRT.</li> </ol>	<p><u>Assessment method</u></p> <ol style="list-style-type: none"> <li>1. ARRT exam (national certification exam)</li> <li>2. ARRT audit for Magnetic Resonance Imaging (MRI) certification exam</li> </ol>
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<p><b>Curriculum</b></p> <p>List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.</p>	<p><u>Fall Semester:</u> 4</p> <p>MRI 101 Safety (30 contact hrs/2 credits)</p> <p>MRI 110 Physics I (45 contact hrs/3 credits)</p> <p>MRI 120 Procedures I (45 contact hrs/3 credits)</p> <p>MRI 125 Clinical Education I (24 hrs/week x 15 weeks = 360 clinical hrs/4 credits)</p> <p><u>Winter Semester:</u> 10</p> <p>MRI 130 Physics II (45 contact hours/3 credits)</p> <p>MRI 135 Quality Assurance (15 contact hrs/1 credits)</p> <p>MRI 140 Procedures II (45 contact hours/3 credits)</p> <p>MRI 145 Clinical Education II (24 hrs/week x 15 weeks = 360 clinical hrs/3 credits)</p> <p><u>Spring/Summer:</u> 7</p> <p>MRI 160 Advanced Imaging Procedures (45 contract hours/3 credits)</p> <p>MRI 162 Pulsed Sequence, Imaging Options, &amp; Parameters (30 contact hrs/2 credits)</p> <p>MRI 165 Clinical Education III (32 hrs/week x 12 weeks = 384 clinical hrs/3 credits)</p> <p><u>Major Area Requirements:</u> 2</p> <p>RAD 223 Sectional Anatomy (30 contact hrs/2 credits) <span style="float: right;"><i>3 credits</i></span></p>
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<p><b>Budget</b></p> <p>Specify program costs in the following areas, per academic year:</p>	<table border="1" style="width: 100%;"> <tr> <th style="width: 50%;"></th> <th style="width: 25%;">START-UP COSTS</th> <th style="width: 25%;">ONGOING COSTS</th> </tr> </table>			START-UP COSTS	ONGOING COSTS
		START-UP COSTS	ONGOING COSTS		
	Faculty	\$ .	5000.00 <sup>?</sup>		
	Training/Travel	.	.		
	Materials/Resources	.	.		
	Facilities/Equipment	.	.		
	Other (Program Coordinator)	.	.		
<b>TOTALS:</b>	<b>\$ 0 .</b>	<b>\$ 0 5000.00</b>			
<p>Part time faculty will be used to teach the didactic courses (teaching rate: \$54.87/hr) and clinical courses (non-teaching rate \$33.56/hr).  A registered Magnetic Resonance Imaging (MRI) technologist will be paid 3-hr/week (non-teaching rate \$33.56/hr) to serve as the program coordinator. <sup>o</sup></p>					

<p><b>Program Description for Catalog and Web site</b></p>	<p>The Magnetic Resonance Imaging (MRI) Program is a post-associate advanced certificate program that is designed for registered radiologic technologists (ARRT), radiation therapists (ARRT), Sonographers (ARRT or ARDMS), and nuclear medicine technologists (ARRT or NMTCB). This program offers the didactic and clinical experience that will provide students with the knowledge, skills, and attitudes that are required to become an entry-level magnetic resonance imaging technologist. The curriculum is based on the recommended American Society of Radiologic Technology (ASRT) magnetic resonance imaging guidelines. Upon successful completion of the MRI program, students are eligible to take the ARRT post-primary certification examination in magnetic resonance imaging.</p>
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<b>Program Information</b>	<b>Accreditation/Licensure</b> – No Accreditation is required at this time.  <b>Advisors</b> – Connie Foster  <b>Advisory Committee</b> - TBA  <b>Admission requirements</b> - See Program Features: Criteria for entry into the program  <b>Articulation agreements</b> - None  <b>Continuing eligibility requirements</b> - Pass all first semester courses with a C or better
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**Assessment plan:**

Program outcomes to be assessed	Assessment tool	When assessment will take place	Courses/other populations	Number students to be assessed
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Demonstrate clinical competency in all mandatory and elective magnetic resonance imaging (MRI) procedures as required by the ARRT.	ARRT application	At completion of program	All program students	All program students

**Scoring and analysis plan:**

- Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric.  
  
Pass rate from the ARRT will be evaluated. The clinical audit for the MRI application will be used.
- Indicate the standard of success to be used for this assessment.  
  
90% of graduates will pass the ARRT magnetic resonance imaging exam within 1-year of graduation.  
100% of the students will complete all mandatory and elective MRI procedures.
- Indicate who will score and analyze the data. Department Faculty
- Explain how and when the assessment results will be used for program improvement. The assessment results will be reviewed by the faculty and clinical instructors to revise and update the MRI curriculum.

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair/Area Director	Connie Foster	<i>Connie Foster</i>	11/17/14
Dean	Kris Brandemuehl	<i>Kris Brandemuehl</i>	11/17/14
Vice President for Instruction <input type="checkbox"/> Approved for Development <input checked="" type="checkbox"/> Final Approval	William Abernethy	<i>William Abernethy</i>	01/05/15
President	Rose Bellanca	<i>RBellanca</i>	2/23/15
Board Approval			3/24/15