

Doisy College of Health Sciences Program-Level Assessment: Annual Report

Program: Magnetic Resonance Imaging	Department: Clinical Health Sciences
Degree or Certificate Level: UG	College/School: Doisy College of Health Sciences
Date (Month/Year): September 25, 2020	Primary Assessment Contact: Marcey Kennedy/Amy Harkins
In what year/cycle was the data upon which this report is based collected? 2019-2020	
In what year/cycle was the program's assessment plan most recently reviewed/updated? 2017	

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle?

The Program Learning Outcomes assessed for the academic year 2019-2020 were #'s 2, 3, and 4.
PLO 2: Students will demonstrate effective communication skills when interacting in the MRI profession.
PLO 3: Students will apply critical reasoning as it relates to the MRI setting.
PLO 4 : Students will demonstrate application of professional knowledge

2. Assessment Methods: Student Artifacts

Which student artifacts were used to determine if students achieved this outcome? Please identify the course(s) in which these artifacts were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

PLO 2: **MRI-4350** Pt Care & MRI Safety, In-class MRI Screening/Assessment activity
MRI-4410 Clinical MRI Practicum I, Clinical MRI Practicum I Mid/ Final Clinical Rotation Evaluations
MRI-4910 Clinical MRI Practicum II, Clinical MRI Practicum II Mid/ Final Clinical Rotation Evaluations

PLO 3: **MRI-4410** Clinical MRI Practicum I, Critical Reflections
MRI-4910 Clinical MRI Practicum II, Critical Reflections

PLO 4: **MRI 4960** Capstone in MRI, Capstone Paper and Presentation

No Madrid artifacts were included, no courses were offered on-line, and no courses were at other Off-campus locations

3. Assessment Methods: Evaluation Process

What process was used to evaluate the student artifacts, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and include them in/with this report.

For all PLO's (2,3,4) for the 2019-2020 academic year, the Program Director gathered results and data for each respective artifact. The Program Director reviewed all information for each student. Note: The Program Director is the instructor for all MRI courses).

PLO 2:

1) MRI 4350 In-class MRI Screening/Assessment activity. The video was observed and reviewed to ensure inclusiveness of necessary patient information, appropriate communication with the patient, as well as appropriate audio and visual recording of the activity. The evaluation was completed utilizing the Patient Screening/Assessment Rubric (Assignment and Rubric included in the Assessment Plan)

2) MRI 4410 Practicum I Mid/ Final Clinical Rotation Evaluations. Data from the mid and final clinical rotations

evaluations was reviewed (evaluation tools included in the Assessment Plan). Specific attention was given to specific questions in the evaluation tools:

Mid Rotation Evaluation:

5. The student is responsive to feedback and constructive criticism from staff.
6. The students is demonstrating good patient care skills.

Final Rotation Evaluation:

5. Demonstrates empathy in professional interactions.
15. Helps technologist with patients when special needs arrive.
20. Refrains from violating patients' rights (confidentiality, privacy, etc.)
21. Takes initiative to converse with every patient who enters assigned area.
22. Becomes actively involved with the explanation given to patient before procedure.

3) MRI 4910 Practicum II, the same date was collected as in the Clinical Practicum I as this course is an extension of the clinical practice.

PLO 3:

- 1) MRI-4410 Clinical MRI Practicum I, critical reflections. Data from the critical reflection grading rubric (Assignment and Rubric included in the Assessment Plan) was reviewed for each student for each reflection. Review included expectations of improvement with writing skills and development of critical thinking.
- 2) MRI-4910 Clinical MRI Practicum II, the same date was collected as in the Clinical Practicum I as this course is an extension of the clinical practice.

PLO 4:

MRI 4970 Capstone in MRI. The papers and presentations, were reviewed and graded utilizing the respective rubric (Assignment and Rubric included in the Assessment Plan). The students' papers were evaluated by the Program Director as well as other faculty within the MIRT/CHS department. Evaluation included the students' ability to demonstrate effective written communication as well as application of knowledge in appropriate subject matter. The presentations were evaluated by the Program Director and other faculty in the MIRT/CHS department. Due to Covid restrictions, the advisory board members were not able to be present for the presentations.

4. Data/Results

What were the results of the assessment of the learning outcomes? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

PLO 2:

- 1) MRI-4350 Pt Care & MRI Safety: An average of 85% of students (2/2 or 100%) achieved a ranking of "synthesis" or above using the corresponding assessment rubrics. The goal was met for this PLO.
- 2) MRI-4410 Clinical MRI Practicum I: An average of 85% of students (2/2 or 100%) achieved a ranking of "synthesis" or above using the corresponding assessment rubrics. The goal was met for this PLO.
- 3) MRI-4910 Clinical MRI Practicum II: An average of 85% of students (2/2 or 100%) achieved a ranking of "synthesis" or above using the corresponding assessment rubrics. The goal was met for this PLO.

PLO 3:

- 1) MRI-4410 Clinical MRI Practicum I: An average of 85% of students (2/2 or 100%) achieved a ranking of "**knowledge**" or above using the corresponding assessment rubric. The goal was met for this PLO.
- 2) MRI-4910 Clinical MRI Practicum II: An average of 85% of students achieved a ranking of "**analysis**" or above using the corresponding assessment rubric. The expectation was for students to advance in their ability to convey and relate critical thinking from clinical experiences. The scores on the reflections showed this improvement over the period of

the entire clinical practicum (I and II). The goal was met for this PLO.

PLO 4:

MRI 4970 Capstone in MRI: An average of 85% of students (2/2 or 100%) achieved a ranking of “knowledge” or above using the corresponding assessment rubric. The goal was met for this PLO.

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

PLO 2:

1) MRI 4350 In-class MRI Screening/Assessment activity. The students enjoyed the activity. The practice with “talking” to a patient was helpful in preparation for actual patient discourse when they enter the clinical practicum. Possible limitations may be realized due to Covid restrictions and social distancing (consider zoom recordings?) Consideration may be given to add the in-class activity for patient screening, where students (as patients) are given a card with instructions on how to behave as a patient or with difficult implants they would need to assess. This is currently not a graded activity, but may change to participation points for how well the students “discover” findings.

2) MRI 4410 Practicum I Mid/ Final Clinical Rotation Evaluations. Clinical Preceptors are relied upon for their input on student communication skills. The Preceptors are very diligent and invested in the program. Consideration may be given to adding or changing some of the evaluation questions to more accurately assess the students comfort and knowledge when communicating with patients and professionals.

3) MRI 4910 Practicum II Mid/ Final Clinical Rotation Evaluations. Same as above.

PLO 3:

This was an additional PLO assessed for the 2019-2020 academic year (from 2017-2018). The students showed the expected improvement in their reflections, not only in their writing capabilities, but thinking more in-depth about issues, dilemmas and impact on the profession.

PLO 4:

Previous reporting for this PLO suggested adding the capstone presentations to this PLO. The presentations were added for this report. Typically, the advisory board would be available to grade the presentations – this was not possible due to Covid restrictions. Adaptation was made to at least record the student presentations so additional faculty could give input on the evaluation.

6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss these results and findings from this cycle of assessment?

Results were discussed and shared with faculty from other programs within the department. Course evaluations were discussed with other faculty, as well as the department chair. A plan for implementation, if necessary, will be evaluated with the chair and other faculty.

Data will be analyzed in the fall of 2020 is a dedicated assessment review meeting. Possible changes and/or additions will be discussed at that time. Assessments are also discussed with the MRI Advisory Board. This is typically a rich conversation with different insights and suggestions. The advisory meeting will be in December 2020.

B. How specifically have you decided to use findings to improve teaching and learning in your program? For example, perhaps you’ve initiated one or more of the following:

Changes to the Curriculum or Pedagogies

- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan

- Student learning outcomes
- Student artifacts collected
- Evaluation process

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of the findings.

PLO #3 was not previously evaluated, so was added for this assessment. Results on all all program activities are continuously monitored for improvement. Consideration for changes have been noted in this report and will be considered along with any ideas/concerns from other faculty and the advisory board.

If no changes are being made, please explain why.

A change is curriculum has been completed, which may alter our assessment cycle. These will not be in effect until academic year 2022-2023.

7. Closing the Loop: Review of Previous Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years as a result of assessment data?

Changes are being considered for additional or more specific evaluations questions in the clinical rotation evaluations.

The assignment for the capstone paper and presentation has been refined to aid students in understanding the project

B. How has this change/have these changes been assessed?

With only two students for this cycle, it was difficult to realize a difference from the first even year assessment. Covid restrictions has also changed our methodologies to some point, so comparison is limited.

C. What were the findings of the assessment?

The target was met with all PLO's. As with assessments, this may be due to class size, or may point to looking at different outcomes.

D. How do you plan to (continue to) use this information moving forward?

Outcomes will be continually reviewed, along with different outcomes required by the specific accrediting body of the MRI program. Currently, the program enjoys a 100% employment rate and a higher than average credentialing pass rate. To remain in competitive, review will be ongoing.

IMPORTANT: Please submit any assessment tools and/or revised/updated assessment plans along with this report.

All assignment instructions and rubrics are attached to the Assessment plan.