

## 2021 CSUN RADIOLOGIC SCIENCES OUTCOME ASSESSMENT PLAN

Data collection January 2021 – December 2021

### MISSION STATEMENT

The mission of the California State University, Northridge baccalaureate Radiologic Sciences Program is to provide the community with a competent, professional Radiologic Technologist who possesses additional advanced medical imaging skills in Magnetic Resonance Imaging (MRI), Computed Tomography (CT), and Interventional Radiography (IR) that meet the needs of the medical imaging community through a highly integrated and advanced level clinical and academic curriculum.

### Program's Goals (overall Student Learning Outcomes)

Graduates of the Radiologic Sciences Program at California State University, Northridge will:

1. Demonstrate a mastery of basic radiographic and advanced medical-imaging skills in MRI, CT, and IR.
2. Demonstrate effective communication skills that provide compassionate, culturally competent and age-appropriate patient care.
3. Demonstrate problem-solving/critical thinking skills that provide ethical and safe patient care.
4. Demonstrate the value of professional development for patient care and medical imaging that meets the needs of the medical imaging community.
5. Maintain program effectiveness through continual assessment.

**(GOAL) 1. Demonstrate a mastery of basic radiographic and advanced medical-imaging skills in MRI, CT, and IR.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<p><b>Graduates will produce diagnostic quality Radiographic, CT, MRI and Angiographic images.</b></p>	<p>Clinical Competency Assessment form (CCA) is used to assess the students in obtaining diagnostic quality radiographic, CT, MR and Interventional Radiography images.  <i>(The CCA is used for each student to attain competency for procedures and to attain proficiency through re-competency assessment beginning in their senior year and for terminal competency assessment in their graduating senior clinical education. The following components of the CCA are used for outcome assessment.)*</i></p> <p>CCA-Section II                      (Technical Requirements/Patient Positioning and Radiation Protection)                      Items 1-15</p>	<p>Each semester for every competency</p>	<p>Section II ≥ 27 pts for Juniors                      Section II ≥ 30 pts for Seniors &amp; Graduating Seniors</p>	<p><b>Clinical Coordinators</b></p>
	<p>Exit Interview Questionnaire Item # 9</p>	<p>Annually</p>	<p>75% of graduates respond that they are prepared or somewhat prepared in advanced imaging areas of CT, MR and IR</p>	<p><b>Program Faculty</b></p>
	<p>Exit Interview Questionnaire Item #8                      Do you feel prepared clinically to enter the Radiologic Sciences field?</p>	<p>Annually</p>	<p>85% of graduates will report they are prepared or very prepared to enter the Radiologic Sciences field.</p>	<p><b>Program Faculty</b></p>

<p><b>Graduates provide appropriate radiation protection during imaging procedures.</b></p>	<p>Clinical Competency Assessment form (CCA) is used to assess the students' ability to provide appropriate radiation protection during imaging procedures.</p> <p>CCA-Section IV (Radiation Protection) Items 1 – 4</p>	<p>Each semester for every competency</p>	<p>Section IV ≥ 8 pts for Juniors Section IV ≥ 8 pts for Seniors &amp; Graduating Seniors</p>	<p>Clinical Coordinators</p>
	<p>HSCI 285 and HSCI 286 Radiographic Anatomy &amp; Positioning I and II, students are assessed on radiation protection as part of their final practical exam.</p>	<p>Junior year Fall and Spring semester</p>	<p>85% of students will practice proper radiation protection. Passing score of 75% or better on the radiation protection section of the final practical exam.</p>	<p>Program Faculty</p>

**GOAL 2.** Demonstrate effective communication skills that provide compassionate, culturally competent and age-appropriate patient care.

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<b>Graduates will communicate effectively with patients in an age appropriate, culturally diverse and compassionate manner.</b>	Clinical Competency Assessment form (CCA) is used to assess the student's ability to communicate with patients in an age appropriate manner during imaging procedures.  CCA-Section I (Patient care and Communication) Items 1 to 10	Each semester for every competency	Section I $\geq$ 18 pts for Juniors Section I $\geq$ 20 pts for Seniors & Graduating Seniors	Clinical Coordinators
	Affective assessment items # 14, 18, 19	Each clinical rotation	Item 14, 18, 19 $\geq$ 6 pts for Juniors  Item 14, 18, 19 $\geq$ 7 pts for Seniors & Graduating Seniors	Clinical Coordinators
	HSCI 285 & 286: RAP I and II, assess the cultural diversity skills during lab practical exams. (New for 2021)*	Junior year Fall and Spring semester	Average score of 80% on the assessment items on the final practical examination	Program Faculty
<b>Graduates will demonstrate effective professional communication.</b>	HSCI 487: Professional Development of the Radiographer, professional presentation to the class on a topic related to Radiologic Sciences.	Senior year Spring semester	Average score of 80% on the assessment item	Program Faculty
	HSCI 486A Seminar: Advances in Radiologic Imaging I - Each student independently develops a topic related to radiologic sciences in either a scientific display or research paper assignment.	Junior year Spring semester	Average score of 80% on the assessment item	Program Faculty

- Updated Assessment tool #3 for SLO#1 in 2021, added in scenario's into the RAP practical exam to include a diverse patient population

**GOAL 3. Demonstrate problem-solving/critical-thinking skills that provide ethical and safe patient care.**

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<p><b>Graduates will demonstrate problem-solving/critical-thinking skills appropriate to medical imaging.</b></p>	<p>HSCI 285 and HSCI 286 - Critical Thinking Scenarios in Radiographic Anatomy and Positioning courses.</p>	<p>Junior Year Fall and Spring Semesters</p>	<p>80% successfully analyze and solve the scenarios presented</p>	<p>Program Faculty</p>
	<p>HSCI 281 – Clinical II. Critical Thinking Portfolio, students reflect on best and poor/repeatable images taken in clinical or in the lab. (New for 2021)</p>	<p>Junior year Spring semester</p>	<p>80% total score on assessment</p>	<p>Clinical Coordinators</p>
	<p>HSCI 181 and 182 – Critical Thinking questions/scenarios in the Medical Imaging courses. (New for 2021)</p>	<p>Junior Year Fall and Spring Semesters</p>	<p>80% successfully analyze and solve the scenarios presented</p>	<p>Program Faculty</p>
<p><b>Graduates will demonstrate problem-solving/critical-thinking skills appropriate to ethical and safe patient care.</b></p>	<p>HSCI 285: RAP I and RAP II - Quiz questions related to safe patient care, safe transfer of patients, emergency responses, acute care situations, etc. (New for 2021)</p>	<p>Junior Year Fall and Spring Semesters</p>	<p>Average score of 80% on the assessment items on the examinations/assignments</p>	<p>Program Faculty</p>
	<p>HSCI 487: Professionalism – Exam questions related to ethical patient care on midterm and final (New for 2021)</p>	<p>Senior Year Spring Semester</p>	<p>Average score of 80% on the assessment items on the examinations/assignments</p>	<p>Program Faculty</p>

	<p>HSCI 483A: Medical Imaging Pathology – Exam critical thinking and scenario questions related to contrast administration, appropriateness of exam, patient history, infiltrate, etc.</p>	<p>Grad Senior Year Fall semester</p>	<p>Average score of 80% on the assessment items on the examinations/assignments</p>	<p>Program Faculty</p>
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- Updated SLO's and Assessment tools in 2021, added critical thinking portfolio back in to the assessment tools for SLO#1, added HSCI 181/182 critical thinking questions into SLO #1, added in questions from both RAP and Professionalism into the safe and ethical care in SLO#2.

**GOAL 4.** Demonstrate the value of professional development for patient care and medical imaging that meet the needs of the medical imaging community.

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<b>Graduates will demonstrate professional development that meet the needs of the imaging community (New for 2021)</b>	Students in the professional program participate in at least one professional conference.	Annually	20% of students who participate via submissions, publications, scientific displays, oral presentations	Program Faculty
	HSCI 487: Professional Development - Students will develop a Lesson Plan on a topic related to medical imaging (New for 2021)	Senior year Spring semester	80% total score on assessment	Program Faculty
	HSCI 487: Professional Development - students will develop a professional resume (New for 2021)	Senior year Spring semester	80% total score on assessment	Program Faculty
<b>Graduates will demonstrate involvement with advanced imaging within 1 year (New for 2021)</b>  (needs some tweaking if we like this as a SLO)	ARRT credentialing database indicating advanced imaging credentials from the graduated cohort (New for 2021)	Annually	30% will have advance certification within one year after program completion	Program Faculty
	One-year post graduate survey identifying graduates who obtained work in advanced imaging.	Annually	35% will be employed in an advanced imaging modality within one year after program completion	Program Faculty

- Removed “life-long learning” from this Goal in 2021
- Updated SLO’s and Assessment Tools in 2021

**GOAL 5.** The Radiologic Sciences Program at CSUN shall maintain program effectiveness through continued assessment.

Outcomes Measured	Assessment Tool(s)	Timetable	Benchmark	Person / Group Responsible
<b>Students will complete all program requirements within 150% of the professional program length.</b>	Student transcripts	Annually	80% of the students starting the program will complete the program	Program Faculty
<b>Each cohort of graduates will pass the national ARRT exam the first time.</b>	ARRT exam report	Annually	100% pass rate	Program Faculty
<b>Each cohort of Graduates will have averaged a score or 85% per class for the national ARRT exam.</b>	ARRT exam report	Annually	85% average per class	Program Faculty
<b>Graduates' employers will report that they were ready to perform in the medical imaging environment after one year of employment.</b>	One-year employer assessment tool <ul style="list-style-type: none"> <li>▪ Likert Scale of 10</li> </ul>	Annually	8 out of 10	Program Faculty
<b>Graduates who are actually seeking employment in medical imaging upon graduation will have ≥75% employment rate within 12 months of graduation.</b>	One-year post graduate survey and web base electronic survey, Survey Monkey	Annually	75%	Program Faculty
<b>Graduate Satisfaction</b>	Exit Interview Question #2	Annually	90% of students satisfied with their education.	Program Faculty