



The mission of Merritt College is to enhance the quality of life in the communities we serve by helping students to attain knowledge, master skills, and develop the appreciation, attitudes and values needed to succeed and participate responsibly in a democratic society and a global economy

2020-2021

Annual Program Update

Radiologic Science

I. Introduction and Directions

The Peralta Community College District has an institutional effectiveness process which consists of the following components: a District-wide Strategic Plan which is updated every six years; Comprehensive Program Reviews which are completed every three years; and Annual Program Updates (APUs) which are completed in non-program review years. While there are individualized Program Review Handbooks for Instructional units, Counseling, CTE, Library Services, Student Services, Administrative units, and District Service Centers, there is one Annual Program Update template for use by everyone at the colleges which is completed in the Fall semester of non-program review years.

The Annual Program Update is intended to primarily focus upon planning and institutional effectiveness by requesting that everyone report upon the progress they are making in attaining the goals (outcomes) and program improvement objectives described in the most recent program review document. The Annual Program Update is therefore a document which reflects continuous quality improvement. The Annual Program Update serves a critical role in the Integrated Planning and Budgeting cycle of the college in that it provides a vehicle in which to identify and request additional resources that support reaching the stated goals (outcomes) and program improvement objectives in the unit's program review.

Throughout this document, the term "program" is used to refer to any of the following institutional structures: discipline, department, program, administrative unit, or unit.

If you have questions regarding data, please contact Nathan Pellegrin, Director of Research and Planning (npellegrin@peralta.edu).

If you have questions regarding SLOs, PLOs, SAOs or ILOs, please visit the [SLOAC webpage](#), or contact the SLOAC committee member for your division:

Division 1 - Evan Nichols (anichols@peralta.edu)

Division 2 – Laura Forlin (lforlin@peralta.edu)

Division 3 – Heather Casale (hcasale@peralta.edu).

If you have questions regarding the curriculum section, please contact Nghiem Thai (nthai@peralta.edu), chair of the [Curriculum Committee](#).

If you have questions regarding other material in the APU, please contact your Dean or Manager.

This document contains hyperlinks to external documents, spreadsheets, and data dashboards. Some of the links will not work unless you are signed in to Office 365 through the [Peralta Faculty & Staff Portal](#).

You will need the following items in order to complete the Annual Program Update document at the colleges:

- [Program Review or APU document](#) from AY 2019-20.
- [Budget Information](#) for the current and prior fiscal year.
- Any comments or feedback provided during the program review validation process.
- College Goals and Peralta District Goals (see below).
- [Institution Set Standards](#).
- [College 2018 Educational Master Plan Update](#).
- [Guided Pathways Plan](#)
- [Student Equity Plan](#).
- Data drawn from program review dashboards and/or other sources relevant to your department, service area or administrative unit (see below).

Merritt College Institution-Set Standards 2020-2021

Institution-set standards are used to evaluate the quality of the institution as to success with respect to student achievement in relation to the institution’s mission. The evaluation of student achievement performance may include different standards for different programs, as established by the institution.

Metric	Definition	Set Standard
Course Completion (Success)	the number of student completions with a grade of C or better divided by the number of student enrollments	66%
Certificates	Number of certificates earned in an academic year	222
Degrees	Number of associate degrees earned in an academic year	322
Transfer	Number of students who transfer to a 4- year college/university	187
Licensure (CE)	Examination pass rates in programs for which students must pass a licensure examination in order to work in their field of study	70%
Employment (CE)	The job placement rate of student completing a	Macro-Region

	degree or certificate in a CE program in the year after graduation.	Employment Rate, by Program SOC
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College Profile

Student Body Demographics

	2017-18	2018-19	2019-20
Annual Unduplicated Count of Students	12,336	12,861	12,130
Gender			
Female	64%	64%	63%
Male	34%	34%	34%
Decline to State/ Unknown	2%	2%	3%
Race/Ethnicity			
American Indian	< 1%	< 1%	< 1%
Asian	19%	20%	19%
Black / African American	23%	23%	22%
Hispanic / Latino	31%	32%	33%
Pacific Islander	1%	< 1%	< 1%
Two or More	5%	6%	5%
Unknown / NR	4%	4%	5%
White	16%	16%	15%
Age			
18 and Under	15%	15%	16%
19-24	35%	35%	35%
25-29	16%	17%	16%
30-34	11%	11%	11%
35-54	17%	17%	17%
55 and Over	6%	6%	5%

Course Success Rates

	2017-18	2018-19	2019-20*
Total Enrollment (Duplicated Count)	33,288	33,637	32,928
Overall Success Rate	70%	70%	68%
Gender			
Female	70%	70%	69%
Male	69%	69%	66%
Decline to State/ Unknown	77%	74%	64%
Race/Ethnicity			
Black/African-American	62%	62%	60%
Asian	81%	80%	81%
Hispanic	68%	68%	64%
Native American	66%	72%	53%
Pacific Islander	61%	71%	63%
Two or More	65%	67%	68%
Unknown	72%	73%	66%
White	78%	78%	75%
Age			
Under 16	83%	91%	84%
16-18	73%	75%	69%
19-24	65%	66%	64%
25-29	70%	69%	68%
30-34	73%	73%	73%
35-54	74%	73%	71%
55-64	74%	71%	66%
65 and Over	77%	77%	60%

*Includes 'EW' grades

II. Program Overview

Mission Statement

Please verify the mission statement for your program. If your program has not created a mission statement, provide details on how your program supports and contributes to the College mission.

The purpose of the Radiologic Science Program at Merritt College is to prepare qualified practitioners for competency in the art and science of diagnostic medical imaging. The goals of the program are:

1. Students will be clinically competent.
2. Students will demonstrate effective communication skills.
3. Students will develop critical thinking and problem solving skills.
4. Students will demonstrate professionalism.

Faculty and Staff

List your Faculty and/or Staff. Indicate if they are part-time or full-time. (If names are already listed, they were imported from last year's APU/PR. Add or remove persons as needed to reflect current personnel).

Name	Faculty/Staff	PT/FT
Jennifer Yates	Faculty	Full-Time
Jerry Hollister	Faculty	Full-Time
Jacqueline Custard	Faculty	Full-Time
Melissa Ramirez	Faculty	Part-Time
Judy Phuong	Faculty	Part-Time
Gerald Palma	Faculty	Part-Time
Derek Tom	Faculty	Part-Time
Samera Woodford	Faculty	Part-Time

III. Program Goals

In this section, indicate programs goals, the status of each, and how they align with College and District strategic goals. Following are the strategic goals for Peralta CCD and Merritt College.

Peralta District Strategic Goals

- P1. Advance student access, equity, and success.
- P2. Engage and leverage partners.
- P3. Build programs of distinction.
- P4. Strengthen accountability, innovation, and collaboration.
- P5. Develop and manage resources to advance our mission.

Merritt College Strategic Goals

- M1. **Completion** - Increase number of degrees and certificates by 20% over the next 5 years.
- M2. **Transfer** - Increase transfers to CSU and UC by 6% annually. (Reach approx. 35% in 5 years).
- M3. **Time to Completion** - Reduce the number of excess units earned by students.
- M4. **Employment** - Maintain at least 82% of students attaining employment in the field of study.
- M5. **Equity** - Reduce the achievement gaps for African-American, multiethnic, and male students.

Below are your Program Goals from your most recent Program Review or APU, if available. Indicate whether the goal has been completed (C), is in progress (IP), no longer applicable (NA), or new (NEW). Be sure to state goals which are *measurable* and *time-based*. Indicate which College and District goal your program goal aligns to. If your goal has been completed, what evidence supports completion of this goal? How did you measure the achievement of this goal?

Program Goal	Status (C, IP, NA, NEW)	Applicable College Goal(s)	Applicable District Goal(s)	If completed, describe supporting evidence, including measurements of achievements.
Complete SLO and PLO assessment in Curricunet for the current cycle (assess every course SLO at least every three years, assess every PLO	IP	M4	P3	

every year.				
Develop new online fee-based course in Computed Tomography (for current second-year students and members of the medical imaging community)	NA			Course was not successful, students were too overwhelmed with program requirements to take an extra class. We have discontinued offering it at this time.
Hire 2 instructional aides from recent graduating class to assist with Positioning I, Patient Care I, and Physics I labs.	IP	M4	P3	The program did not take a new class this year due to Covid-19 restrictions at clinical sites and campus laboratories. We will next hire instructional aides when we accept a new class and Covid-19 restrictions have eased.
Continue to provide web-based preparation programs to ready students for the ARRT Certification Exam.	IP	M4	P3	We provided online support this year for graduating class, but were unable to conduct an in-person practice certification exam in the computer lab due to Covid-19 restrictions.
Purchase equipment to improve safety in the Positioning Laboratory, enhance learning by updating image receptors to current technology and purchasing test tools to improve QA laboratory	C	M4	P3	Equipment purchased and is currently in use.
Update, do preventive maintenance, repair, and upgrade existing laboratory equipment	IP	M4	P3	This is an ideal time to complete this work as it will not interrupt student work in the laboratory (laboratories not in use due to Covid-19 restrictions)
Buy new laptops and printers/copiers for program faculty. Laptops currently in use are many years old and are very slow.	IP	M4	P3	Printer/copier needed for program's storage area for use by part time instructors.

IV. Facilities Utilization

Describe your current utilization of facilities, including labs and other space.
Confirm previously reported content.

The program utilizes two dedicated classrooms, one that includes two Positioning practice units in laboratory bays at the back of the classroom. Between the two classrooms are the two "live" laboratories, one for radiography and one for radiography/fluoroscopy.

V. Program Update Data

In this section you will review and reflect upon the data for your program. Use data which measure performance on outcomes relevant to the mission and goals of your program, which will vary according to which area of the college your program is in.

In your response, refer to data applicable to your program obtained from the APU dashboards and/or other sources.

APU Data Dashboards:

- [Course Completion and Retention Rates Dashboard – Instruction](#)
- [Course Completion and Retention Rates Dashboard – Student Services](#)
- [Enrollment Trend and Productivity Dashboard](#)
- [Degrees and Certificates Dashboard](#)

For departments or programs in the Student Services area, refer to reports provided by institutional data systems (i.e., PeopleSoft or SARS), results of student surveys, or external reports (i.e. [IPEDS](#) or [Launchboard](#)). Include the number of students served over an academic year and summarize their demographics.

For departments in the Business and Operations areas, use data which track the key function provided to the College, such as facilities usage for events, tickets received and closed, the number of invoices process or the time to disbursement.

Use historical data (3 years is recommended, if available) to estimate a baseline, then use this to project activity and inform requests for the coming year.

Describe any significant changes and discuss what the changes mean to your program. Consider whether performance or service gaps exist for disproportionality impacted students. Focus upon the most recent year and/or the years since your last comprehensive program review. Cite data points from the program review dashboards or other data sources relevant to your service, business, operations or administrative area to support your answer. If you wish, you may include screenshots of the dashboard to show filtered results containing the relevant figures. Instructions on taking screenshots for [Windows](#) and [Mac](#))

The program's retention and completion data include a prerequisite course, RADSC 1A, which skews outcome data. The course serves to help students decide whether or not Radiography is a good career choice for them, so the decision NOT to continue is a valid and appropriate choice for some students. I have separated out program data here to include only students who applied to and entered the program. These data appear on our website and are reported to our accrediting agency, The Joint Review Committee on Education in Radiologic Technology [JRCERT]. Graduation for the Class of 2020 has been delayed due to Covid-19 restrictions at our clinical affiliates. Projected completion is December 2020 (from August 2020).

Merritt College Radiologic Science Program Effectiveness Data			
Class of:	Retention	ARRT Exam Pass Rate	Graduate Employment
2020	Pending	Pending	Pending
2019	80% (20/25)	100% (20/20)	100% (20/20)
2018	71% (22/31)	95% (21/22)	95% (20/21 at one year)
2017	70% (16/23)	94% (15/16)	100% (16/16 at one year)
2016	70% (16/23)	88% (14/16)	94% (15/16 at one year)
2015	61% (13/21)	100% (13/13)	100% (16/16 at one year)
5 Yr Avg	70.4%	95.4%	97.8%

The program has surpassed benchmarks for 2019, and met or surpassed benchmarks for the five-year average.

Describe the program's progress on Service Area Outcomes and/or Administrative Unit Outcomes (AUOs) since the last Program Review or APU. For instructional programs, describe the program's progress on Student Learning Outcomes (SLOs) and, if your discipline offers a degree or certificate, please describe the department's progress on Program Learning Outcomes (PLOs).

The program makes use of the SLO coordinator for our division (Healther Casale) to assist instructors with course SLO's. We are working on improving compliance for all course SLO's. This semester, Jerry Hollister is working on updates for RADSC 4B and 5B, Jacqueline Custard is working on RADSC 6. The SLO report will be added to the end of this report as Appendix A.

Program Learning Outcomes and Program Effectiveness data are tracked by the program director and evaluated annually. At each Fall Program Advisory Committee meeting, data sets are presented, examined, and discussed. Changes in curriculum and/or program policies are included in the final report, which has been added to the end of this APU as Appendix B.

Describe the **results of** your department/program/service assessment of student and Program Learning Outcomes/AUO/SAO. Indicate when and where dialogue is occurring. Discuss **changes/updates/resource requests** made to your program based on the assessment of outcomes of the SLOs/PLOs/SAOs/AUOs assessed in the past year and discuss their alignment with the [ILOs](#).

Please see Appendix B for PLO and Program Effectiveness Data Report. These data were discussed at the Program Advisory Committee meeting (Zoom) on Tuesday, September 29th. The final report was written by Jennifer Yates, Ed.D., Program Director. See the end of each section for Action Analysis and Report. For this cycle, data indicates that benchmarks were met or surpassed for all items except for PLO 7 (one student did not complete the assignment correctly). The Program's Advisory committee noted no items of concern and no changes needed in curriculum or program policy.

The following item is for instructional programs only

Discuss how your PLOs align with the [ILOs](#).

Program Learning Outcomes:

Upon completion of the program graduates will be able to:

1. Produce diagnostic quality medical images in a competent, safe, and compassionate manner for all basic radiography examinations in a hospital work environment. Aligns with ILO's: Communication, Critical Thinking, Cultural Awareness, Ethics, and Computer Literacy.
2. Communicate effectively with patients and family members by taking appropriate histories, giving clear instructions, and providing information as needed. Aligns with ILO's: Communication, Critical Thinking, and Cultural Awareness.
3. Communicate in a professional manner with hospital staff, instructors, and peers. Aligns with ILO's: Communication, Critical Thinking, and Cultural Awareness.
4. Exercise critical thinking and problem solving skills by adapting radiographic examinations to individual patient needs and conditions.

Aligns with ILO's: Critical Thinking, Cultural Awareness, Ethics, Quantitative Reasoning.

5. Establish and maintain satisfactory professional relationships with other members of the health care team. Aligns with ILO's: Communication, Critical Thinking, and Cultural Awareness.
6. Function as an effective health care team member by providing services in a manner that complements those performed by other team members. Aligns with ILO's: Communication, Critical Thinking, and Cultural Awareness.
7. Demonstrate a commitment to professional development. Aligns with ILO's: Civic Engagement and Ethics.

VI. Curriculum

Note: If your department, program, or unit does not have a curricular component, please skip to the Section VII.

Curriculum review is an integral part of the program review process. Instructional departments and programs must consider the state of their curricula (i.e., courses, certificates, and degrees) in order to engage in meaningful assessment, planning, and continuous quality improvement.

In accordance with the [State Chancellor's Office Program and Course Approval Handbook \(7th Edition\)](#), California community college curricula must meet five criteria:

1. Appropriateness to the mission of the California Community Colleges (as established in [California Education Code § 66010.4](#))
2. Community, service area, or student need
3. Adherence to accreditation and higher education standards
4. Availability of adequate resources to maintain the course or program (including offering all required courses for a program at least once every two years)
5. Compliance with federal and state statutes and regulations (notably Title 5 of the California Code of Regulations)

PCCD [Board Policy 4020](#) and [Administrative Procedure 4020](#) require that curricula be evaluated regularly through program review and annual program updates on a three-year cycle. For Career Education programs, however, this policy is superseded by [California Education Code § 78016\(a\)](#), which requires reviews every two years.

This section of the APU requests information about the status of course and program updates, improvement plans based on curriculum review, and prospective curriculum development. The Curriculum Committee shall evaluate the responses as part of the validation of APU completion and the prioritization of resource requests.

Curriculum Review

Consult [CurriQunet](#) and the [Course Curriculum Review Status](#) or [Program Curriculum Review Status](#) spreadsheets to determine when a course or program was last updated or deactivated.

Courses that have not been offered in the past three years should be deactivated to ensure that the college catalog presents a current and accurate inventory of actual course offerings at Merritt. Likewise, if certificates and degrees have not been awarded in recent years, or the required courses have not been offered regularly enough for students to complete, consider the relevance and viability of those programs for potential deactivation.

Modifications

Indicate courses reviewed/updated in the past academic year (2019-2020), following the example in red. Add additional rows as needed in the table below.

Course Number	Course Title	Reviewer
RADSC 1A	Survey of Radiologic Science	Jennifer Yates
RADSC 1C	Introduction to Medical Imaging Clinic	Jennifer Yates
RADSC 2B	Radiographic Physics 2B	Jennifer Yates
RADSC 3A	Positioning I	Jennifer Yates
RADSC 4B	Radiation Biology	Jennifer Yates
RADSC 5A	Patient Care I	Jennifer Yates
RADSC 6	Quality Management	Jennifer Yates
RADSC 8	Sectional Anatomy	Jennifer Yates
RADSC 9A	Clinical Experience I	Jennifer Yates
RADSC 9B	Clinical Experience II	Jennifer Yates
RADSC 9C	Clinical Experience III	Jennifer Yates
RADSC 252	Clinical Experience for the Returning Student	Jennifer Yates
RADSC 2C	Digital Imaging	Jennifer Yates

Deactivations

Indicate courses deactivated in the past academic year (2019-2020), following the example in red. Add additional rows as needed in the table below.

Course Number	Course Title	Reviewer
N/A		

Indicate programs deactivated in the past academic year (2019-2020), following the example in red. Add additional rows as needed in the table below.

Program Title	Program Type	Reviewer
N/A		

Curriculum Improvement

Based on ongoing curriculum review, describe plans for **program-level** improvement in terms of any of the following considerations:

- Advancing **student equity and achievement** for disproportionately impacted students.
- Fostering **intersegmental alignment** and **guided pathways** through articulation, course sequencing, and program mapping.
- Implementing innovative **pedagogies, delivery methods/modalities**, or **educational resources and technologies**.

Continue to provide support for program students by offering formalized peer tutors and Instructional Aides for laboratory classes. Adapt to Covid-19 restrictions by modifying clinical education as needed and converting lecture courses to DE education via Canvas courses and Zoom meetings.

Curriculum Development

Indicate new courses to be proposed and/or historical courses to be reactivated within the next academic year (2021-2022), following the example in red. Add additional rows as needed in the table below.

Title	Description	Justification	Anticipated Effective Term
N/A			

Indicate new programs slated for development within the next academic year (2021-2022), following the example in red. Add additional rows as needed in the table below.

Title	Description	Justification	Anticipated Effective Term
N/A			

The Curriculum Committee shall prioritize the review and approval of new courses and programs that are identified in this section of the APU.

VII. Funded Resources

For each resource allocation request from previous year's APU, indicate whether it was funded. Describe the outcomes and accomplishments for any requests which were funded.

Brief description of resource request	Was request funded? (Yes or No)	Funding Source (Specify Fund or Grant)	Total Award Amount	Outcome/Accomplishment
TYPE: Personnel - Classified Staff AMOUNT: \$8,000 JUSTIFICATION: Instructional Aides for lab classes	No		\$0	We did not start a new class this year due to Covid-19 restrictions, so we do not have a need for Instructional Aides for this school year.
TYPE: Technology and Equipment - Replacement AMOUNT: \$20,000 JUSTIFICATION: Preventive Maintenance and repair of tubes	No		\$0	We are asking again so we can complete repairs and preventive maintenance while labs are not being used
TYPE: Technology and Equipment - New AMOUNT: \$3,500 JUSTIFICATION: Web based test prep tools	Yes		\$2000	Students utilized practice tests to increase success on licensing exam.
TYPE: Technology and Equipment - Replacement AMOUNT: \$10,000 JUSTIFICATION: Laptop refresh for faculty	No		0\$	We are asking again for this resource as instructors still need laptop and printer refresh.

VIII. Resource Requests

In the tables below, please add resource requests for your program for the **2021-22 fiscal year**. Indicate if the request is being made as part of the response to the COVID-19 pandemic. If you are submitting multiple requests under the same category, prioritize them by assigning a rank to each request ('1' indicating the highest priority request). Include only one request per row; if additional rows are needed, insert new rows in the table ([how to add rows](#)).

Personnel Resource Requests

Personnel Sub-Category (Full-Time or Part-Time Faculty, Classified, Student Worker)	Description/Justification	Percent Time	Estimated Annual Salary Costs	Estimated Annual Benefits Costs	Total Estimated Cost	Priority Rank (1=Highest priority)	COVID-19 Related (Yes/No)
N/A							

Resource Requests (Non-Personnel)

Resource Categories

- Professional Development (Department wide)
- Professional Development (Personal/Individual)
- Required Reasonable Accommodation
- Service Contract
- Supplies: Software
- Supplies: Books, Magazines, and/or Periodicals
- Supplies: Instructional Supplies
- Supplies: Non-Instructional Supplies
- Supplies: Library Collections
- Technology & Equipment: New
- Technology & Equipment: Replacement
- Other

Resource Category (select from above list)	Description/Justification	Total Estimated Cost	Priority Rank (1=Highest Priority)	COVID-19 Related (Yes/No)
Technology and Equipment : Replacement	Laptop and printer refresh for instructors. Current laptops in use are about 10 years old.	\$8000	1	Partly: need increased due to conversion to online classes
Other: Technology repair and maintenance	Positioning practice labs and energized labs have broken locks, making the use of equipment with students on the table hazardous. PM has never been done on equipment since the move to the Science Building.	\$20,000	1	Yes, best time to complete is now when labs are not in use
Other: Web-based certification examination support for second-year students	Continue to provide web-based preparation programs to ready students for the ARRT Certification Exam.	\$3000	2	Yes: Students can complete practice exams in the

Resource Category (select from above list)	Description/Justification	Total Estimated Cost	Priority Rank (1=Highest Priority)	COVID-19 Related (Yes/No)
				computer labs on campus or anywhere using their own laptops
Other: Web-based support for students in lieu of working in practice labs on campus	RADTECH Boot Camp is an extensive support system with videos, practice tests, and other resources for students to use to review and improve their clinical skills and prepare for the national certification exam.	\$7000	2	Yes
Instructional Supplies	IV supplies, other lab supplies	\$5000	1	No
Other: Web-based Clinical Management System	Trajecsys is a web-based clinical management system for tracking student attendance , performance assessments, competency records, image evaluations, clinical grades. System also facilitates program assessment required by JRCERT and Merritt College.	\$5000	1	No
Other: Web-based SurveyMonkey	SurveyMonkey is used for Instructor Evaluations, Alumni Surveys, Graduate Exit Surveys, and Employer Surveys. Other uses as needed. We used it to survey conditions at clinical sites to prepare for students' re-entry into clinical sites following removal due to Covid-19 restrictions. Account is shared with the Nutrition and Dietetics Program.	\$300	1	Yes and No

IX. Participants

Please provide the list of members who participated in completing this program review.

Jennifer Yates, Ed.D, RT(R)(M)(BD)

Thank you for your time and effort in completing the Annual Program Update!

Appendix B: Program Learning Outcome and Program Effectiveness Data Report

Merritt College Radiologic Science Program
Program Assessment Plan/Report for Fall 2020: Student Learning Outcomes
Report Date: 9-30-20

Mission Statement

The purpose of the Radiologic Science Program at Merritt College is to prepare qualified practitioners for competency in the art and science of diagnostic medical imaging. The goals of the program are:

1. Students will be clinically competent.
2. Students will demonstrate effective communication skills.
3. Students will develop critical thinking and problem solving skills.
4. Students will demonstrate professionalism.

Goal 1: Students will be clinically competent.

Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
<p>1. Produce diagnostic quality medical images in a competent, safe, and compassionate manner for all basic radiography examinations in a hospital work environment.</p> <p>a. Students will competently position patients.</p> <p>b. Students will select appropriate technical factors.</p> <p>c. Students will practice good patient care.</p>	1.Clinical Performance Evaluation	<p>1.Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)</p> <p>Each item on the evaluation will also be averaged separately, to get a “snapshot” of class scores for each to determine problem areas that need to be addressed. For example, Item #3 addresses Positioning, Item # 5 addresses technique factors, Item # 8 addresses Patient Care.</p>	1. Clinical Performance Evaluation Data for each class will be entered and analyzed using Trajecsys at the end of each Spring Semester.	<p>1.Clinical Coordinator and Program Director.</p> <p>Data collected end of Spring Semester 2020</p>	<p>1st Year Students: Avg. overall score = 2.97/3.0</p> <p>Range = 2.92 – 3.0</p> <p>Positioning Score: 2.92</p> <p>Technical Factors: 3.0</p> <p>Patient Care: 3.0</p> <p>2nd Year Students: Avg. overall score = 2.98/3.0</p> <p>Range: 2.91 – 3.0</p> <p>Positioning Score: 3.0</p> <p>Technical Factors: 3.0</p> <p>Patient Care: 3.0</p> <p>Benchmark met for each item for both classes</p>

Goal 1: Students will be clinically competent.

Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
1.Produce diagnostic quality medical images in a competent, safe, and	2.Clinical Competency	2.Average overall score of 80% (out of	2. Evaluations for each class will be	Clinical Coordinator and	First Year Students Avg.: 99%

<p>compassionate manner for all basic radiography examinations in a hospital work environment.</p> <ol style="list-style-type: none"> a. Students will competently position patients. b. Students will select appropriate technical factors. c. Students will practice good patient care. 	<p>Evaluation</p>	<p>100%) or higher for each class.</p>	<p>averaged at the end of Spring Semester.</p>	<p>Program Director</p> <p>Data collected end of Spring Semester 2020</p>	<p>Second Year Students Avg.: 99%</p> <p>Benchmark met for each class</p>
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Goal 2: Students will demonstrate effective communication skills.

Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
<p>2.Communicate effectively with patients and family members by taking appropriate histories, giving clear instructions, and providing information as needed.</p>	<p>1.Clinical Performance Evaluation-Patient Communication Item #1</p> <p>2. Communications Practicals for Radsci 1B course</p>	<p>1.Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)</p> <p>2. Average score of at least 75% on both Communications Practical Exams</p>	<p>Clinical Performance Evaluation Data for each class will be entered and analyzed using Trajecsys at the end of Spring Semester.</p> <p>2. Communications practicals take place at the end of the Radsci 1B course (September) prior to students moving to the clinical phase of the program.</p>	<p>1.Clinical Coordinator and Program Director</p> <p>Data collected Spring 2020</p> <p>2. Instructor for the Radsc 1B course</p> <p>Data collected end of Sept. 2019 (We did not start a new class in Fall 2020 due to Covid-19 Restrictions)</p>	<p>1. First Year Students Avg. Score on this item: 3.0</p> <p>Second Year Students Avg. Score on this item: 2.91 Benchmark met for both classes.</p> <p>2. Fall 2019 class average = 100%</p> <p>All students progressed to the clinical phase of the program. No new class for Fall 2020.</p>

<p>3. Communicate in a professional manner with hospital staff, instructors, and peers.</p>	<p>1. Clinical Performance Evaluation-Staff and Peer Communication Item # 2</p> <p>2. Image Evaluation Oral Presentation and Written Assignment</p>	<p>1. Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)</p> <p>2. Average score of 80% for first and second year students on both Oral Presentation and Written Assignment.</p>	<p>1. Clinical Performance Evaluation Data for each class will be entered and analyzed using Trajecsys at the end of Spring Semester.</p> <p>2. Evaluations for each class will be averaged at the end of each Spring Semester.</p>	<p>1. Clinical Coordinator and Program Director Spring 2020</p> <p>2. Clinical Coordinator and Program Director Spring 2020</p>	<p>First Years Students Avg. Score on this item: 3.0</p> <p>Second Years Students Avg. Score on this item: 3.0</p> <p>Benchmark met for both classes</p> <p>First-year: Oral: 94.74% Written: 89.47%</p> <p>Second-year: Oral: 100% Written: 100%</p> <p>Benchmark met for both classes</p>
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Goal 3: Students will develop critical thinking and problem solving skills.					
Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
4.Exercise critical thinking and problem solving skills by adapting radiographic examinations to individual patient needs and conditions.	1.Clinical Performance Evaluation-Critical Thinking Skills (Section C, Items 15-18)	1.Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)	1. Clinical Performance Evaluation Data for each class will be entered and analyzed using Trajecsys at the end of Spring Semester.	1.Clinical Coordinator and Program Director Data Collected end of Spring Semester 2020	First Year Students Average Scores: 15: 2.92 16: 3.0 17: 3.0 18: 2.92 For Section C 2.96 Second Year Students Average Scores: 15: 3.0 16: 3.0 17: 3.0 18: 3.0 For Section C 2.98 Benchmark met for both classes
	2. Employer Survey, Critical Thinking Skills Section (Items 6-13)	2. 80% of respondents will indicate a 4 or 5 for these items on a 5-point Likert Scale. 4 is “usually” and 5 is “Always”	2. Survey will be administered and analyzed via SurveyMonkey in August each year for the class having graduated in August of the previous year.	2.Program Director Data collected August 2020	Q6: 4 = 62.5% 5 = 37.5% Q7: 4 = 50% 5 = 50% Q8: 4 = 25% 5 = 75% Q9: 4 = 25% 5 = 75% Q10: 4 =37.5% 5 = 62.5% Q11: 4 = 50% 5 = 50% Q12: 3 = 12.5% 4 = 50% 5 = 37.5% Q13: 4 = 25% 5 = 75% Benchmark met on all items

Goal 3: Students will develop critical thinking and problem solving skills.

Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
4a.Critique images and take corrective action when images are not of diagnostic quality.	1. Image Evaluation Oral Presentation and Written Assignment	1.Average score of 80% for first and second year students on both the Oral Presentation and Written Assignment.	1.Evaluations for first and second year students will be averaged at the end of Spring Semester. Data will be entered into Trajecsys for analysis.	1.Clinical Coordinator and Program Director Data collected end of Spring Semester 2020	First-year: Oral: 94.74% Written: 89.47% Second-year: Oral: 100% Written: 100% Benchmark met for both classes

Goal 4: Students will demonstrate professionalism.

Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
<p>5.Establish and maintain satisfactory professional relationships with other members of the health care team.</p>	<p>1.Clinical Performance Evaluation- Professionalism and Teamwork (Section B, Items 10-14)</p> <p>2. Employer Survey, Questions 16-17 (Professional Communications, Conflict Resolution)</p>	<p>1.Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)</p> <p>2. 80% of respondents will indicate a 4 or 5 for these items on a 5-point Likert Scale. 4 is “usually” and 5 is “Always”</p>	<p>1. Clinical Performance Evaluation Data for each class will be entered and analyzed using Trajecsys at the end of Spring Semester.</p> <p>2. Survey will be administered and analyzed via Survey Monkey in August each year for the class having graduated in August of the previous year.</p>	<p>1.Clinical Coordinator and Program Director</p> <p>Data collected end of Spring Semester 2020</p> <p>2. Program Director</p> <p>Data collected August 2020</p>	<p>First Year Students: Q10: 3.0 Q11: 3.0 Q12: 2.92 Q13: 2.92 Q14: 3.0 For Section B 2.97</p> <p>Second Year Students: Q10: 3.0 Q11: 2.91 Q12: 2.91 Q13: 3.0 Q14: 3.0 For Section B 2.96</p> <p>Benchmark met for both classes</p> <p>Q16: 5 = 100% Q17: 4 = 12.5% 5 = 87.5%</p> <p>Benchmark met</p>

Goal 4: Students will demonstrate professionalism.					
Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
6.Function as an effective health care team member by providing services in a manner that complements those performed by other team members.	1.Clinical Performance Evaluation- Professionalism and Teamwork (Section B, items 10-13)	1.Students will pass Clinical Performance Evaluation with an overall average score of 2.63 for first-year students, and 2.7 for second-year students on a scale of 0-2 (0=Unsatisfactory, 1=Needs Improvement, 2=Satisfactory, 3=Exceeds)	1.Clinical performance evaluations for first and second year students will be averaged at the end of Spring Semester.	1.Clinical Coordinator and Program Director Data collected end of Spring Semester 2020	First Year Students: Q10: 3.0 Q11: 3.0 Q12: 2.92 Q13: 2.92 Q14: 3.0 For Section B 2.97 Second Year Students: Q10: 3.0 Q11: 2.91 Q12: 2.91 Q13: 3.0 Q14: 3.0 For Section B 2.96 Benchmark met for both classes
	2. Employer Survey, Question 19 (Healthcare Team Member)	2. 80% of respondents will indicate a 3 or 4 for this item on a 4-point Likert Scale. 3 is “slightly superior” and 4 is “far superior”	2. Survey will be administered and analyzed via Survey Monkey in August each year for the class having graduated in August of the previous year.	2. Program Director Data Collected August 2020	Q19: 3 = 28.57% 4 = 71.43% Benchmark met

Goal 4: Students will demonstrate professionalism.					
Outcome	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
7. Demonstrate a commitment to professional development.	Four-Year Plans	All students will identify a career path and goals for the four years following graduation. 4-year plans will be scored utilizing a rubric, students must achieve a score of at least 80%.	Advanced Imaging Course Radsci 7, 5 th Semester.	Course Instructor Data collected May 2020	93% of students in Radsci 7 course completed the final exam assignment satisfactorily. All students except one met benchmark

Assessment results were presented and discussed at Program Advisory Committee Meeting on 9-29-20

Student Learning Outcomes Action/Analysis: Benchmarks were met for each assessment tool used to measure each Program Goal and Outcome except for Outcome 7 (one student did not satisfactorily complete the assignment). Advisory Committee agreed that no action is needed.

Clinical Performance Evaluations 2019 - 2020 Comparison Item-by- Item Summaries by Class: Clinical Competency Scores comparison for first and second year students (data collected Spring Semester 2020, compared with previous cohort collected Spring Semester 2019). Yates cautioned that Spring 2020 semester was cut short due to Covid-19, so data set was incomplete. Both comparison documents showed only very small changes in scores, some increased, some decreased, some unchanged. No changes were significant enough to cause concern. Group was in agreement that no action was needed.

Surveys: Graduate Exit Survey was not included as current “3rd-year students” have not yet completed the program. Survey will be conducted at the end of Fall Semester 2020. Alumni and Employer Surveys were discussed. Results were very favorable, all benchmarks were met and all comments expressed satisfaction with the program. Group was in agreement that no action was needed.

Merritt College Radiologic Science Program
Program Assessment Plan/Report: Program Effectiveness
Report Date: 9-30-20

Item	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
ARRT Examination Pass Rate	ARRT Exam Score Report	At least 80% of program graduates will pass the ARRT credentialing exam on the first attempt within 6 months of graduation	Annually in January	Program Director <i>Note: Class of 2020 has not yet taken ARRT exam by date of report. Will complete program December 2020.</i>	2015-100% 2016-88% 2017-94% 2018-95% 2019-100% Five Year Average: 95.4% Benchmark met for 5-yr avg.
California Fluoroscopy Examination	RHB Exam Score Report	At least 80% of program graduates will pass the California Fluoroscopy Examination on the first attempt	Annually in April	Program Director	2019 ??? Benchmark met.

Item	Assessment Tools	Benchmark	Timeframe	Person Responsible	
Graduate Employment Rate	Alumni Survey followed up by individual e-mails or verification with employers	At least 75% of surveys returned by alumni will indicate that they were employed within 12 months of graduating from the program.	12 months after graduation, in August	Program Director (Administered via Survey Monkey, followed up with individual e-mails/phone calls)	2015-100% 2016-94% 2017-100% 2018-95% 2019-100% Five Year Average: 97.8% Benchmark met for yr and 5-yr avg.
Item	Assessment Tools	Benchmark	Timeframe	Person Responsible	Results
Program Completion.	Class rosters for first and last program semesters are compared for each class. Completion rate calculated based on difference in class size.	At least 70% of students who begin the program successfully complete it.	Annually in August	Program Director <i>Data for Class of 2020 not available as of report date. Due to Covid-19 restrictions, class will not complete until December 2020.</i>	<i>2015-61%</i> <i>2016-70%</i> <i>2017-70%</i> <i>2018-71%</i> <i>2019-80%</i> Five year Avg. = 70.4% Benchmark met for 2019, 5-year avg. also meets benchmark.

Item	Assessment Tools	Benchmark	Timeframe	Person Responsible	
Graduate Satisfaction	Alumni Survey	Of surveys returned by alumni, at least 80% of respondents will select 5 (“Satisfied”) or 6 (“Very Satisfied”) on item #11 “Overall satisfaction with the Merritt College Radiologic Science Program”	Annually in August.	Program Director (Administered via Survey Monkey)	Class of 2019 Q11 4 = 25% 5 = 75.% Benchmark met
	Graduate Exit Survey	Of surveys returned by graduates, at least 80% of respondents will select 4 (“Satisfied”) or 5 (“Very Satisfied”) on item #30 “Overall satisfaction with the Merritt College Radiologic Science Program”	Annually in August	Program Director (Administered via Survey Monkey) Data for Class of 2020 not available until December 2020. Completion delayed due to Covid-19 restrictions.	Class of 2019 Q30: 4 = 46.67% 5 = 53.33% Benchmark met, 100% of respondents selected 4(Satisfied) or 5 (Very Satisfied)

Item	Assessment Tools	Benchmark	Timeframe	Person Responsible	
Employer Satisfaction	Employer Survey	Of returned Employer Surveys, at least 80% of respondents will select a 4 or 5 (on a scale of 0-5) on item #20, "Overall satisfaction with graduates of the Merritt College Radiologic Science Program"	Annually in August	Program Director (administered via Survey Monkey)	2019 #20 4=20% 5=80% 2020 #20 5 = 100% Trending up Benchmark met, 100% of respondents were Satisfied or Very Satisfied with performance of Merritt Graduates

Assessment results were presented and discussed at Program Advisory Committee Meeting on 9-29-20

Program Effectiveness Action/Analysis: Surpassing benchmarks on retention, ARRT pass rate, and employment for 2019. All 2019 graduates are employed and all passed the ARRT exam on the first try. Five year averages meet benchmarks for all three metrics. Data for Class of 2020 pending, expected completion date December 18th, 2020. Advisory Committee agreed that no action was needed.