

Bakersfield College 2018-2019 Program Review – Annual Update

Program Name: Radiologic Technology

Bakersfield College Mission: Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students' abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world

Describe how the program supports the Bakersfield College Mission: One of the three primary tenets of the Bakersfield College mission is to provide excellent learning opportunities in Career and Technical Education (CTE) for our community which permits students to thrive in our local workforce and KCCD service area. The Radiologic Technology Program meets this primary mission by providing an educational opportunity within the Health Services Career Pathway and by program completers earning the Associate in Science degree. The program meets the critical community need in Kern County for workforce training of entry-level licensed radiologic technologists and by providing two job skill certificates (JSC) in fluoroscopy and venipuncture. The college mission is reinforced in the Program's learning outcomes and goals.

Program Mission Statement:

The mission of the Bakersfield College Associate in Science Degree Radiologic Technology Program is to promote student success by providing quality instruction for graduates to competently practice radiography at the entry level.

Instructional Programs only:

- A. List the degrees and Certificates of Achievement the program offers:
 - A.S. Radiologic Technology
 - JSC: Venipuncture and Fluoroscopy
- B. If your program offers both an A.A. and an A.S. degree in the same subject, please explain the rationale for offering both and the difference between the two.
- C. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both.

Program Goals:

- A. List the program's current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two (2) goals, please duplicate this section. Please provide an action plan for each goal that gives the steps to completing the goal and the timeline.

1. Program Goal:

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)

Current Program Goals	Which institutional goals from the 2018-2019 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)	Progress on goal achievement (choose one)	Comments
1. Continue Programmatic Accreditation with JRCERT and State CDPH-RHB	<input checked="" type="checkbox"/> 1: Student Learning <input checked="" type="checkbox"/> 2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input checked="" type="checkbox"/> 5: Leadership and Engagement	<input type="checkbox"/> Completed: _____ (Date) <input type="checkbox"/> Revised: _____ (Date) <input checked="" type="checkbox"/> Ongoing: JRCERT site visit Nov 2016; State CDPH-RHB Equipment Inspection March 2018; continuing programmatic accreditation is an on-going goal of the program	JRCERT awarded the program a full 8-year, unrestricted, continuing accreditation award in spring 2017 which is the highest accreditation award given. CDPH-RHB equipment inspection yielded full compliance with no violations with CCR Title 17 State regulations.
2. Develop Learning Activities and Methodologies utilizing the new radiographic & fluoroscopic equipment installed in summer 2015	<input checked="" type="checkbox"/> 1: Student Learning <input checked="" type="checkbox"/> 2: Student Progression and Completion <input checked="" type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input type="checkbox"/> 5: Leadership and Engagement	<input type="checkbox"/> Completed: _____ (Date) <input type="checkbox"/> Revised: _____ (Date) <input checked="" type="checkbox"/> Ongoing: Fall 2017- Spring 2019	Lab activities were revised to include current technologies into the lab with digital equipment. As the faculty has/will have retirements from 2016 through 2018, this revision will continue with new faculty teaching lab courses. Revisions will be to include greater implementation of Canvas, use of electronic x-ray images for labs to reduce the use of x-ray film and advanced use of technology such as specific Apps for the discipline. Procure digital simulation imaging software.

B. List new or revised goals (if applicable)

Future Goals	Which institutional goals from the 2018-2019 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)	Action Plan	Timeline for Completion	Lead person for this goal

<p>1. Fully implement Trajecsys on-line clinical education reporting system which began in May 2017.</p>	<p><input checked="" type="checkbox"/> 1: Student Learning <input checked="" type="checkbox"/> 2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input type="checkbox"/> 5: Leadership and Engagement</p>	<p>Continue to streamline on-line system with inclusion of additional clinical evaluation tools, course and program surveys. Continue training of faculty with webinars, and training of Clinical Partners and students. Develop Trajecsys procedure and user manual for faculty, Clinical Instructors and Students.</p>	<p>Fall 2017 through Spring 2019</p>	<p>Jacy Hill and Kellie Smith</p>
<p>2. Implementation of new educational technologies/methodologies for student engagement in lecture and lab.</p>	<p><input type="checkbox"/> 1: Student Learning <input checked="" type="checkbox"/> 2: Student Progression and Completion <input type="checkbox"/> 3: Facilities <input type="checkbox"/> 4: Oversight and Accountability <input checked="" type="checkbox"/> 5: Leadership and Engagement</p>	<p>Shaderware: A simulated digital imaging software that can be applied across the curriculum. Canvas: Class discussion boards, quizzes, accessory study materials, improved planning through calendar use. Additional technologies to facilitate flipped classroom activities, virtual radiography software, interactive scenarios between nursing/radiologic technology and simulation.</p>	<p>Spring 2018 through 2020</p>	<p>All program faculty</p>

Program Analysis:

Take a look at your trend data (all programs should have some form of data that is used to look at changes over time). *All programs will answer the following questions unless otherwise indicated.*

1. 100% of our faculty are new to their positions. The Program Director has transitioned from a third-year faculty member to the new role. The full-time faculty are new. The changes are the result of retirements and previous faculty choosing to re-enter industry. This year's program goal is to acclimate and adhere to institutional and program requirements. Teaching strategies, assessment, curriculum planning and accreditation standards will be areas of interest.
2. How does your trend data (or other data your area collects) impact your decision making process for your program?
 The 5-year Mean Study, performed by American Registry of Radiologic Technologists (ARRT), demonstrates outstanding licensure exam performance. The ARRT exam provides national licensure to work as a Radiologic Technologist. The program curriculum has proven effective, at this time, faculty and program goals are to maintain outstanding performance and maintain accrediting standards.

ARRT EXAM	2018	2017	2016	2015	2014
A. Number of Examinees (first attempt)	18	21	20	17	23
B. Number/Percentage of Students Passed (first attempt)	18 (100.0%)	19 (90.5%)	17 (85%)	16 (94.1%)	21 (91.3%)
5 Year Mean		99 graduate examinees 91 graduate examinees passed exam on 1 st attempt 91.9% average pass rate on 1 st attempt			

3. Evidence of Department Dialog of data

- Faculty Meetings

4. Were there any changes to student demographics (age, gender, or ethnicity) for the past cycle?

7 out of 18 (38.8%) graduating students were male in the graduating class of 2018. The male demographic has been shown to have lower enrollment in the Radiologic Program. The previous Program Review, 2017, reports male enrollments averaged 24-40% from 2011-2012 to 2015-16. 8 out of 18 (44.4%) 2018 graduates were aged 18-25 years of age with 7 out of 17 (38.8%) 26-35 years of age. These statistics are on trend compared to the previous Program Review reporting 47% of the program's students being aged 20-29 years old. 9 out of 18 (50%) graduates identify as Hispanic/Latino and 6 out 18 (33.3%) graduates identify as White/Caucasian. 0 Veterans were represented in the 2018 graduating class. 14 out of 18 (77.7%) of students maintained employment while enrolled in the Radiologic Program.

5. Were there any changes to student success and retention rates for face-to-face and online courses? (instructional only)

Class attrition was higher for the graduating class of 2018. The cohort graduated 18 out of 24 students (75%). 1 student left the program due to academic failure, however 2 left the program due to changes in medical status. 1 of the 2 students re-entered the program after recovery and is expected to graduate May 2019. 3 students voluntarily withdrew from the program for various reasons: a change in major and 2 students withdrew due to financial reasons.

6. Equity gaps

At this time, no gaps are identified in student retention. However, 77.7% of the graduating class were employed while enrolled in a demanding program that included clinical and classroom education. Furthermore, 50% of the graduates reported a Hispanic/Latino ethnicity. To improve performance in these two populations Program Orientation will look to integrate Extended Opportunity Programs and Services (EOP&S) and Cooperative Agencies Resources for Education (CARE).

7. Please describe any recent achievements of your department, including but not limited to faculty who have won awards or distinctions, new projects your department has implemented, professional development work, professional conference presentations or recently published work.

The first cooperative Allied Health and Nursing Simulation was held April 2018. With the leadership of Ronnie Knabe, RN, and assistance from Jacy Hill, RT-R, senior-level cohorts from Nursing and Radiologic Technology collaborated on a patient simulation held in the Nursing Skills lab, utilizing the SIM Man Technology. The collaboration was the first of its kind, promoting inter-discipline cooperation, communication and team-work from both disciplines. Over 35 students from both programs completed assignments in preparation for the simulation, all students participated either directly or remotely by live-feed video, all students debriefed together immediately following the simulation.

The previous Program Director retired after 39 years of leadership and 2 new faculty have also been hired fall 2018.

8. The college has embarked on significant efforts such as **Guided Pathways, affinity groups** and **completion coaching communities** to improve the success and completion rates of our students. Please describe what your program/department/office is doing to contribute to these efforts. In cooperation with the Allied Health Educational Advisor, Venessa Reyes and Radiologic Technology Counselor, Dinorah Castro, a Pre-Enrollment Orientation was provided to interested students. Over 75 perspective students, spouses, parents and other supportive members attended the session. Presenters included Reyes, Castro, the Program Director, current faculty and currently enrolled students.

9. Explain your role if you are involved in Dual Enrollment, Inmate Education, or Rural Initiatives.

Not applicable at this time.

Analysis of Received Resources from Previous Cycle

Discuss the type of resources you received and their Impact on program effectiveness?

Facilities:

If your program received a building remodel or renovation, additional furniture or beyond routine maintenance, please explain how this request or requests impacts your program and helps contribute to student success.

- 1: Space Allocation
- 2: Renovation
- 3: Furniture
- 4: Other
- 5: Beyond Routine Maintenance

Technology:

If your program received technology (audio/visual – projectors, TV's, document cameras) and computers, how does the technology impact your program and help contribute to student success?

- 1: Replacement Technology
- 2: New Technology

3: Software

4: Other _____

Other Equipment

If your program received equipment that is not considered audio/visual or computer equipment technology, please explain how these resources impact your program and help contribute to student success.

Conclusion:

Present any conclusions and findings about the program. This is an opportunity to provide a brief abstract or synopsis of your program's current circumstances and needs. Consider this a snapshot of your program if someone were to only read this portion of your annual program review.

The Radiologic Technology Program is a highly successful Associate in Science Degree program at the college which continues to meet one of the primary missions of the California Community College Core Mission through Career and Technical Education. The career of radiography is a high demand, high wage career that serves the Kern Community College District service area by providing well qualified x-ray technologists that continue to meet community needs every year. The program also meets the core values of the college by fostering critical thinking, developing ethical standards for the safe use of radiation with patients, fostering diversity in the care of patients and a strong commitment and partnership with our Kern County medical community in training competently trained individuals for the local workforce.

Program outcomes remain excellent with both success and course retention exceeding college-wide performance. The program has continued to maintain the highest educational standards by meeting outside programmatic agency regulations both at the State and national level. In addition, outstanding licensure exam results for national radiography and state fluoroscopy licenses has been excellent which enables the graduates to gain a higher than basic living wage employment. To continue to maintain this excellence, the highest program priority is to provide program administrative support and accessory teaching resources to the new faculty.