

COMPREHENSIVE PROGRAM REVIEW

2013-2016

MEDICAL LABORATORY TECHNICIAN PROGRAM

Mission Statement: Kapi‘olani Community College provides students from Hawai‘i’s diverse communities open access to higher education opportunities in pursuit of academic, career, and lifelong learning goals. The College, guided by shared vision and values, and commitment to engagement, learning, and achievement, offers high quality certificate, associate degree, and transfer programs that prepare students for productive futures.

Part I. Executive Summary of CPR and Response to previous ARPD recommendations

Since the last CPR report in 2012, the program has completed an accreditation self-study and site visit in 2015. The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) reported receiving the program Progress Report. The report was submitted to the Review Committee for Accredited Programs (RCAP) at its meeting on July 13-15, 2016. The outcome of the committee’s action, will be recommended to the NAACLS Board of Directors at its September 2016 meeting. NAACLS will convey the action of the Board of Directors to the College by early October 2016.

Part II. Program Description

Since 1972, the Medical Laboratory Technician (MLT) program has existed as one of seven allied health sciences program. Its curriculum is designed to prepare students to perform various laboratory procedures and to operate and maintain laboratory equipment. Graduates of this program will be eligible to challenge the national certification examination for MLT given by the American Society for Clinical Pathology (ASCP). When certified, the MLT graduate will meet the requirements to become licensed to work in the State of Hawai‘i as a Medical Laboratory Technician.

Admission to the Medical Laboratory Technician program is on a best-qualified, first-accepted basis. The prerequisite courses must be completed or in process of being completed prior to application to the program. First Aid and one rescuer CPR certification is required by January 1, prior to program entry. Courses transferred from accredited institutions are accepted if course descriptions and competencies are consistent with or at a higher level than KCC courses listed as prerequisites. The requirement for MLT 100 may be waived for individuals certified as phlebotomists with one year of clinical laboratory experience.

The newly updated Program Learning Outcomes are:

1. Perform routine clinical laboratory procedures within acceptable quality control parameters in Hematology, Chemistry, Immunohematology, Immunology/Serology, and Microbiology under the general supervision of a Medical Technologist/Medical Laboratory Scientist, or Pathologist.

2. Demonstrate technical skills, social behavior, and professional awareness incumbent upon a laboratory technician as defined by the American Society for Clinical Pathology and American Society for Clinical Laboratory Science.
3. Effect a transition of information and experiences learned in the MLT program to employment situations and performance on the certification examination conducted by the American Society for Clinical Pathology.
4. Apply systematized problem solving techniques to identify and correct procedural errors, identify instrument malfunctions and seek proper supervisory assistance, and verify the accuracy of laboratory results obtained.
5. Operate and maintain laboratory equipment, utilizing appropriate quality control and safety procedures
6. Perform within the guidelines of the code of ethics of the American Society for Clinical Pathology and the American Society for Clinical Laboratory Science, in addition to the restrictions established by local, state, and federal regulatory agencies.
7. Recognize and participate in activities which will provide current knowledge and continuing education in an effort to upgrade skills in clinical laboratory medicine.

The MLT Program has two full-time faculty members and one adjunct professor.

Resources to support the students and the administration of the program include a variety of student support services, including deaf and disability support services, state of the art library, and Science, Technology, Engineering, and Mathematics (STEM) tutoring services.

The MLT program has maintained articulation agreements with 14 clinical affiliates located on the islands of Oahu, Hawaii, Maui, and Kauai. Students train for 18 weeks at these clinical sites during the Spring semester and one week during Summer Session II.

During the first year of didactic experience, the students are introduced to various patient populations through coordination with the Blood Bank of Hawaii and the National Kidney Foundation – Hawaii.

Since 2010, the KCC MLT program has formed a 2 plus 2 partnership with the Medical Technology Department at University of Hawaii Mānoa. Both programs share an advisory committee comprised of laboratory professionals to include pathologists, laboratory managers, supervisory medical laboratory scientists, and clinical coordinators and educators. The Joint Advisory Committee provide feedback about strengths and opportunities for improvement (if any) for the students and graduates. Curriculum updates are initiated to address any concerns.

Part III. Curriculum Revision and Review

All 15 courses were submitted for a curriculum review and update in October 2015. An additional course in clinical immunology/serology has been reactivated as of Spring 2013 and is also undergoing curriculum review and update since October 2015.

Part IV. Survey results

Upon graduation from the MLT program, the students pursue employment in clinical laboratories as well as research labs, physician offices, fertility clinics, molecular diagnostic labs, wildlife parks, and dairy production facilities. A small percentage seeks a baccalaureate degree in Medical Technology/Medical Laboratory Science/Clinical Laboratory Science in traditional settings or various accredited online programs.

Employers express great satisfaction with the knowledge the students present upon initial employment.

Part V. Quantitative Indicators for Program Review

Listing of most recent three years of ARPD data for demand, efficiency and effectiveness are available at <http://www.hawaii.edu/offices/cc/arpd/instructional.php?action=analysis&college=KAP&year=2015&program=72>

Kapi‘olani Community College
2015 Instructional Annual Report of Program Data
Medical Laboratory Technician

Part I: Program Quantitative Indicators

Overall Program Health: Healthy

Majors Included: MLT Program CIP: 51.1004

Demand Indicators		Program Year			Demand Health Call
		12-13	13-14	14-15	
1	New & Replacement Positions (State)	21	37	42	Cautionary
2	*New & Replacement Positions (County Prorated)	17	31	28	
3	*Number of Majors	25	26	24	
3a	Number of Majors Native Hawaiian	5	3	1	
3b	Fall Full-Time	35%	15%	38%	
3c	Fall Part-Time	65%	85%	63%	
3d	Fall Part-Time who are Full-Time in System	0%	0%	0%	

3e	Spring Full-Time	70%	59%	58%	
3f	Spring Part-Time	30%	41%	42%	
3g	Spring Part-Time who are Full-Time in System	0%	3%	0%	
4	SSH Program Majors in Program Classes	563	585	582	
5	SSH Non-Majors in Program Classes	143	128	117	
6	SSH in All Program Classes	706	713	699	
7	FTE Enrollment in Program Classes	24	24	23	
8	Total Number of Classes Taught	19	18	18	
Efficiency Indicators		Program Year			Efficiency Health Call
		12-13	13-14	14-15	
9	Average Class Size	14.5	14.8	14.3	Healthy
10	*Fill Rate	82.1%	95.6%	90.4	
11	FTE BOR Appointed Faculty	1	1	1	
12	*Majors to FTE BOR Appointed Faculty	25	26	23.5	
13	Majors to Analytic FTE Faculty	13.8	14.6	13.2	
13a	Analytic FTE Faculty	1.8	1.8	1.8	
14	Overall Program Budget Allocation	\$134,442	\$174,843	\$200,529	
14a	General Funded Budget Allocation	\$82,752	\$148,460	\$200,529	
14b	Special/Federal Budget Allocation	\$0	\$0	\$0	
14c	Tuition and Fees	\$51,690	\$26,383		
15	Cost per SSH	\$190	\$245	\$287	
16	Number of Low-Enrolled (<10) Classes	1	0	0	
Effectiveness Indicators		Program Year			Effectiveness Health Call
		11-12	12-13	13-14	

17	Successful Completion (Equivalent C or Higher)	93%	92%	92%	Healthy
18	Withdrawals (Grade = W)	13	7	9	
19	*Persistence Fall to Spring	94.7%	100%	80%	
19a	Persistence Fall to Fall		66.6%	25%	
20	*Unduplicated Degrees/Certificates Awarded	17	11	13	
20a	Degrees Awarded	17	11	13	
20b	Certificates of Achievement Awarded	0	0	0	
20c	Advanced Professional Certificates Awarded	0	0	0	
20d	Other Certificates Awarded	0	0	0	
21	External Licensing Exams Passed	100%	100%	100%	
22	Transfers to UH 4-yr	5	2	2	
22a	Transfers with credential from program	3	2	2	
22b	Transfers without credential from program	2	0	0	
Perkins IV Core Indicators 2012-2013		Goal	Actual	Met	
29	1P1 Technical Skills Attainment	90.00	100.00	Met	
30	2P1 Completion	55.00	91.67	Met	
31	3P1 Student Retention or Transfer	74.50	100.00	Met	
32	4P1 Student Placement	65.00	50.00	Not Met	
33	5P1 Nontraditional Participation	17.25	30.30	Met	
34	5P2 Nontraditional Completion	15.55	53.85	Met	
Performance Funding		Program Year			
		11-12	12-13	13-14	
35	Number of Degrees and Certificates		11	13	

36	Number of Degrees and Certificates Native Hawaiian		3	0	
37	Number of Degrees and Certificates STEM		11	13	
38	Number of Pell Recipients		8	9	
39	Number of Transfers to UH 4-yr		2	2	

*Data element used in health call calculation

Part VI. Analysis of the Program based on prior three years

The MLT program is aligned with the College’s mission in that students of culturally and ethnically diverse backgrounds are admitted and graduate from the program. The graduation rate is nearly 14 out of 16 students in each cohort are successful in graduating and 100% pass the national certification examination and obtain Hawaii state laboratory licensure. The graduates are provided the highest quality education and training for the Hawaii population.

Upon successful completion of the Associate Degree in Medical Laboratory Technician, the students are prepared to meet the rigorous requirements for a baccalaureate degree in a multiplicity of science majors. Those students who elect to enter into the workplace readily meet the rigorous employment standards and fulfill critical workforce shortages in an effort to eliminate immediate and contribute to the satisfaction of long-term needs within the clinical laboratory community.

Through their interaction with multiple clinical educators through the clinical rotations, the students are inspired to pursue lifelong learning through international and national organizations such as the American Society for Clinical Pathology, American Society of Clinical Laboratory Science and the National Accrediting Agency for Clinical Laboratory Sciences.

There appears to be a disconnect with the Perkins Core Indicators that allude to student placement rates. There tend to be more positions available than actual MLT program graduates. The successful completers of the program have experienced no difficulties in securing employment upon graduation and just prior to receiving their national certification and state licensure. The population of students entering the program over the last few years had dwindled as the economy has improved. This leads to less individuals seeking to further their education. Despite the upturn in the economy, there still is a healthy demand for the MLT program.

Part VII. Tactical Action Plan (projections for the next three years)

The action plan outlines the steps the program will take to improve the results of assessment and or the health indicators, aligned with the College’s Strategic Plan.

In order to enhance the efficiency, efficacy and success of the MLT program, the following actions will be taken:

1. Two full-time instructors will increase the engagement in clinical experiences for the students. The students will benefit from having another faculty member with very recent clinical laboratory experience.
2. Procure the instrumentation outlined in the resource allocation section for each major area of clinical laboratory sciences. Purchasing more instrumentation will give the students greater exposure to instrumentation and maintenance of laboratory equipment prior to entering into the clinical phase of their studies. Additionally, during the didactic portion of the program when students are interacting with laboratory professionals and patients through the Blood Bank of Hawaii and the National Kidney Foundation, they will have had previous exposure to automation and not require as much training on site. The MLT Program faculty will be responsible for this.
3. Follow up on the clinical affiliation agreements with Wahiawa General Hospital and Hickam Field Clinical Laboratory: Having more clinical training sites will allow more students to enter the program in the Spring semester. Currently, 16 students enter each January and nearly 14 matriculate to the clinical training phase of the program. The MLT Program Director will be responsible for this.

Part VIII. Resources and Budget Implications*

1. Identify the human, physical and fiscal resources required to implement strategies and indicate the appropriate funding sources: existing appropriated funds, tuition and other special fees, grants, etc.

No additional staff, physical, or other fiscal resources are needed to implement this strategy.

Procure the instrumentation outlined in the resource allocation section for each major area of clinical laboratory sciences: Fiscal resources are required to implement this strategy if instrumentation is not donated by a clinical affiliate. The funds can be garnered through a Perkins Grant or donation from an instrument manufacturer.

Time is required to initiate the approval for additional clinical agreements.

2. Identify the technology resources required to implement strategies and indicate the appropriate funding sources: existing appropriated funds, tuition and other special fees, grants, etc.

For the three strategies listed above no technology resources will be required. Adequate three technological resources are already in place to support the new faculty member. The instrumentation and clinical affiliation agreements will not require additional technology resources either.