#### **BOARD OF HIGHER EDUCATION**

#### **REQUEST FOR COMMITTEE AND BOARD ACTION**

COMMITTEE:	Academic Affairs	NO.:	AAC 15-32
		COMMITTEE DATE:	June 9, 2015
		BOARD DATE:	June 16, 2015

# APPLICATION OF BUNKER HILL COMMUNITY COLLEGE TO OFFER THE SURGICAL TECHNOLOGY CERTIFICATE

MOVED: The Board of Higher Education hereby approves the Application of BUNKER HILL COMMUNITY COLLEGE to offer the CERTIFICATE in SURGICAL TECHNOLOGY.

> Upon graduating the first class for this program, the College shall submit to the Board a status report addressing its success in reaching program goals as stated in the application and in the areas of enrollment, curriculum, faculty resources, and program effectiveness.

Authority:Massachusetts General Laws Chapter 69, Section 30 et seq.Contact:Winifred M. Hagan, Ed.D., Assistant Commissioner for Academic and<br/>Educator Policy

#### **BOARD OF HIGHER EDUCATION**

#### June 2015

# Bunker Hill Community College Surgical Technology Certificate

#### **INTENT AND MISSION**

The proposed Surgical Technology Certificate (STC) reflects the Bunker Hill Community College (BHCC) intention to offer multi-disciplined programs in Allied Health and for the purpose of strengthening and coordinating public and private sector pathways and partnerships leading to college readiness, student internships, career opportunities, practica, civic engagement and learning communities. It is expected that the proposed STC program will meet this goal by preparing students in acquiring the skills to obtain employment in either the public or private sector upon successful completion of the course and passing a national certification examination.

The goal of this program is to develop entry-level employable surgical technologists who can successfully integrate and contribute to the health care team. This will be accomplished by developing competent graduates who can implement their education to provide care cognitively, skillfully and affectively as well as meet the benchmark set by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). It is intended that the proposed STC program will improve the existing one by providing a more in-depth curriculum with additional courses, laboratory experiences, case studies and certification exam preparation time; and better prepare students for internships and the national certification exam, qualifying graduates for rapid employment.

The proposed STC program has obtained all necessary governance approvals on campus and was approved by the Bunker Hill Community College Board of Trustees on March 16, 2015. The required letter of intent was circulated on March 17, 2015. No comments were received.

## NEED AND DEMAND

#### National and State Labor Market Outlook

BHCC has reported that surgical technology will continues to grow as one of the fastest and most desirable professions within allied health. Well-trained surgical technologists are described as currently in high demand in both hospitals and ambulatory surgical centers. The Bureau of Labor Statistics has indicated that employment is projected to increase 35% by 2022.<sup>1</sup>

#### Student Demand

It is anticipated that student demand will be the same for the proposed STC program as it has been for the existing one.

<sup>&</sup>lt;sup>1</sup> Retrieved 5/8/2015 <u>http://www.bls.gov/;</u> http://www.bls.gov/oes/current/oes292055.htm

### **OVERVIEW OF PROPOSED PROGRAM**

The existing STC program currently requires 29 credits for completion. These include 16 credits of surgical technology courses, 4 credits of a core science course, and 9 credits of general education courses. It is planned that the revised STC will require 40 credits for completion and include 24 credits of surgical technology courses. New courses planned include Pharmacology I - II, Medical Terminology, Asepsis, and Surgical Seminar. It is expected that the courses contain more in depth coverage of existing topics and significantly more classroom and laboratory time ensuring that students can be better prepared for the national certification exam. It also enables BHCC to meet the requirements of the Sixth Edition of the Core Curriculum for Surgical Technology.

#### Duplication

Current CAAHEP-accredited programs in Massachusetts are at Massachusetts Bay Community College, North Shore Community College, Quinsigamond Community College, Quincy College and Springfield College.

#### ACADEMIC AND RELATED MATTERS

#### Admission

BHCC expects to require students to apply to the proposed program through the Program Coordinator for the Allied Health Programs. In addition, it is expected that candidates will have earned a high school diploma or GED Certificate and attend an information session; complete Writing Skills II (ENG095) with a minimum grade of C or place into College Writing I (ENG111); complete Foundations of Mathematics (MAT093) with a minimum grade of C or place above Fundamentals of Mathematics (MAT093) on the college placement test; complete the college placement tests in reading, math, and English (10th grade reading level preferred).

	# of Students Year 1	# of Students Year 2	# of Students Year 3	# of Students Year 4
New Full-Time	24	24	24	24
Continuing Full-Time				
New Part-Time				
Continuing Part-Time				
Totals	24	24	24	24

Curriculum (Attachment A)

#### Internships or Field Studies

BHCC clinical affiliations agreements have already been established with area hospitals through existing allied health programs. These affiliations enable students to apply knowledge and skills obtained in the classroom by providing care to patients in a hospital. Affiliations include Massachusetts General Hospital, Beth Israel Deaconess, Brigham and Women's Boston, Faulkner and Foxboro, New England Baptist, Newton Wellesley, VA Jamaica Plain and West Roxbury, Boston Medical Center, Boston Children's Hospital, Metro West Medical Center Framingham Union and Leonard Morse, Massachusetts Eye and Ear, Lowell General Hospital, Metrospital, Melrose Wakefield Hospital, and Mount Auburn Hospital.

#### **RESOURCES AND BUDGET**

BHCC expects that because this is an existing program and there is no change in faculty or staff, there is no change in the program costs except for annual cost of living salary increases. The Surgical Technology program currently has 29 credits. At a cost of \$149/credit and an additional \$35 health fee for 19 of those credits, the cost per student is \$4,916. This proposal requests that an additional 11 credits be added to the curriculum. The new tuition will be \$6,576 per student. With a class of 24 students, it is planned that the revenue will be increased by \$39,336 per year.

#### Fiscal (Attachment B)

#### Faculty and Administration (Attachment C)

It is expected that existing faculty will teach new courses for the program. This is planned to include a Program Director who will have responsibility for program development and implementation as well as instructional responsibilities. BHCC anticipates the need for one part-time Lab Assistant/Clinical Instructor to help instruct and evaluate the students in the lab and on Clinical Placements each semester.

#### Facilities, Library and Information Technologies

BHCC has determined that equipment needs will be in place with the purchase of minimally invasive instrumentation, a new mannequin, and specialty surgical instrumentation already covered. It is expected that the classroom/lab for the proposed STC will contain two surgical technology kits, a back table, mayo stands, a light, a bed, and a ring stand. BHCC plans to purchase the specialty equipment and instrumentation, a laparoscopic tower, and minimally invasive instrumentation. The additional equipment and instrumentation will be used for Surgical Technology I, Surgical Technology II, and Surgical Asepsis.

#### Affiliations and Partnerships

The BHCC Surgical Technology Program Advisory Committee is comprised of individuals from private and public Hospital Providers, Registered Nurses, Physicians and Industry representatives, community representative, and graduates of the program. Their role is to provide feedback concerning, the program's curriculum and resources relative to the demands and expectations of the labor market; input concerning the effectiveness of the curriculum to address student needs and prepare students for employment; assistance in locating opportunities for student internships and employment; assist in securing material resources for the program, such as equipment and supplies; support the program in gaining and sustaining the support and involvement of the community; and assess the programs goals and objectives.

## PROGRAM EFFECTIVENESS

Goal	Measurable Objective	Strategy for Achievement	Timetable
Number of students that receive passing grade and are eligible to take the National Certification examination	Each student is assessed for identified Surgical Technology terminal competency for skills through attendance, skills demonstration, quizzes, exams, and final grade	Comparison of number of students that receive passing grade for the Program and are eligible to take the National Certification examination.	End of Program
Number of students that sit for and pass the National Certification examination	List of students who passed the examination	Comparison of number of students that passed the examination vs. those students who took the examination.	Three (3) months after completion of the of Program
Effectiveness of curriculum	Student evaluation Retention rate Passing scores on the National certification examination	Feedback from students Improved retention Pass rate/Semester	End of each semester
Use of Surgical Technology training to obtain employment	Six (6) month analysis to ascertain how many students are currently employed as Surgical Technologists.	Development of a data base to track use of Surgical Technology training for student employment.	Six (6) months after completion of Program
Training equipment	All equipment must be in good working condition	Instructor Coordinator will test all equipment and supplies prior to commencement of each semester and either replace or repair defective equipment.	One (1) month prior to the commencement of classes
Medical Library	BHCC maintains a health and medical reference section. BHCC is a member of NOBLE. Students have access to all consortium materials	Program Director will review selections for current and updated materials	Annually
Audio-visual and software materials	Program has complete sets of audio-visual equipment pertinent to Surgical Technology instruction	Program Director will review selections relevancy to provide for a variety of presentation modalities.	Annually
Computer Resources	BHCC Academic Computing Center (ACC) has in excess of 250 personal computers. All students may use the center's resources	Instructor Coordinator of the Program will provide students with information on location of the ACC and use of computers.	First Semester
Text book	Reviewed for appropriate reading level and content	Program Director will review & compare texts	Annually
Faculty evaluation	Dean's evaluation of	Review of faculty to assess	Each semester

	teaching methods Student's evaluation Student retention Success rate	teaching effectiveness. Feedback from students. Improved retention rate/ pass rate Percentage of students who pass the national certification examination	
Student's ability to function as a competent entry- level surgical Technologist	National certification pass rate Graduate survey Job placement rate	Review outcomes to assess effectiveness of Program	Annually

### EXTERNAL REVIEW AND INSTITUTIONAL RESPONSE

The STC proposal was reviewed by Thomas Lescarbeau, Associate Professor and Director of Surgical Technology at Lone Star College, Tomball Texas; and Rebecca Hall, Surgical Technology Program Coordinator at Delta College, University Center, Michigan. The reviewers found the proposed STC program to have strong leadership with a clear vision and mission. The increased number of credits was underscored as a means to improve student learning outcomes and prepare the students for entry-level as surgical technologists. As well, the additional courses were noted to relieve the pressure of condensed content coverage and serve instructors in developing more meaningful lesson plans and increased student learning. Recommendations included multiple suggestions regarding course contents, specific increases in lab instrumentation inventory, and a mock operating room (O.R.) or access to a real one for authentic experience in a clinical setting. In addition, reviewers recommended at least one student observation in an O.R. near the beginning of the program.

BHCC responded that curricular adjustments have been made to the proposal and funding sources have been identified to acquire instrumentation.

#### STAFF ANALYSIS AND RECOMMENDATION

Staff thoroughly reviewed all documentation submitted by Bunker Hill Community College and external reviewers. Staff recommendation is for approval of the proposed **Surgical Technology Certificate**.

# ATTACHMENT A: CURRICULUM

		ourses required = 12		
Course Number	Course Title	Credit Hours		
SGT 105	Surgical Technology I	Surgical Technology I		
NHP180	Medical Terminology	3		
SGT115	Surgical Asepsis	Surgical Asepsis		
PMTXXX	Pharmacology for Surgical Technology I	1		
SGT 106	Surgical Technology II		8	
PMTXXX	Pharmacology for Surgical Technology II		1	
SGT 107	Surgical Technology III		3	
SGT 116	Surgical Seminar		4	
ENG 111	College Writing I		3	
PSY 101	Principles of Psychology		3	
PSY 213	Human Growth and Development		3	
BIO 108	Human Biology/Lab	4		
Distribution of G	eneral Education Requirements	o Total Elective Credits		
Attach List of Gene	eral Education Offerings (Course Numbers, Titles, and	Credits)		
			# of Gen Ed Credits	
Arts and Humanitie	es, including Literature and Foreign Languages			
College Writing			Credits	
College Writing ENG111: College Mathematics and th	writing I, (3 credits) Ne Natural and Physical Sciences		Credits 0	
College Writing ENG111: College Mathematics and th BIO108: Human Bi	es, including Literature and Foreign Languages Writing I, (3 credits)		Credits 0 3	
College Writing ENG111: College Mathematics and th	Writing I, (3 credits) ne Natural and Physical Sciences ology & Lab (4 credits)	neral Education Credits	Credits 0 3 4 6	
College Writing ENG111: College Mathematics and th BIO108: Human Bi	writing I, (3 credits) Ne Natural and Physical Sciences ology & Lab (4 credits) Sub Total Ger	neral Education Credits	Credits 0 3 4	
College Writing ENG111: College Mathematics and th BIO108: Human Bi	writing I, (3 credits) ne Natural and Physical Sciences ology & Lab (4 credits) Sub Total Ger Curriculum Summary		Credits 0 3 4 6	
College Writing ENG111: College Mathematics and th BIO108: Human Bi	writing I, (3 credits) Ne Natural and Physical Sciences ology & Lab (4 credits) Sub Total Ger	neral Education Credits	Credits 0 3 4 6	

# ATTACHMENT B: BUDGET

One Time/ Start Up Costs		Annual Expenses				
-	Cost Categories	Year 1	Year 2	Year 3	Year 4	
	Full Time Faculty (Salary & Fringe)	\$123,733	\$128,063	\$132,545	\$137,184	
	Part Time/Adjunct Faculty (Salary & Fringe)	\$14,000	\$14,000	\$14,000	\$14,000	
	Staff					
	General Administrative Costs					
	Instructional Materials, Library Acquisitions	\$8,767	\$8,767	\$8,767	\$8,767	
	Facilities/Space/Equipment					
	Field & Clinical Resources					
	Marketing					
	Other (Specify)					
	TOTALS					

One Time/Start- Up Support		Annual Income			
	Revenue Sources	Year 1	Year 2	Year 3	Year 4
	Grants				
	Tuition	\$157,824	\$157,824	\$157,824	\$157,824
	Fees				
	Departmental				
	Reallocated Funds				
	Other (specify)				
	TOTALS				

# ATTACHMENT C: FACULTY

Please list full-time faculty first, alphabetically by last name. Add additional rows as necessary.							
Name of faculty member (Name, Degree and Field, Title)	Check if Tenured	Courses Taught Put (C) to indicate core course. Put (OL) next to any course currently taught online.	Number of sections	Department of Emergency Medical Studies	Full- or Part- time in Program	Full- or part- time in other department or program (Please specify)	Sites where individual will teach program courses
Jayne MacPherson CST PhD Professor		• Surgical Technology I (C)	1	Day	Full-Time	No	Chelsea Campus
Jayne MacPherson CST PhD Professor		<ul> <li>Surgical Technology II (C)</li> </ul>	1	Day	Full-Time	No	Chelsea Campus
Jayne MacPherson CST PhD Professor		Surgical Asepsis     (C)	1	Day	Full-Time	No	Chelsea Campus
Jayne MacPherson CST PhD Professor		Surgical Technology III (C)	1	Day	Full-Time	No	Chelsea Campus
Jayne MacPherson CST PhD Professor		Surgical Seminar     (C)	1	Day	Full-time	No	Chelsea Campus
ris Restrepo CST BS Assistant Professor		Medical     Terminology (C)	2	Day	Full-Time	No	Chelsea Campus
Deborah Latina RN BS, NHA Assistant Professor		<ul> <li>Medical Terminology</li> </ul>	1	Day	Full-time	Yes Medical Assistant, Patient Care Technician, and Certified Nursing Assistant	Chelsea Campus
Dr. Rosana Durang Adjunct Faculty		Medical     Terminology (C)	2	Evening and Web	Part-time	No	Chelsea Campus